City of Sandy Downtown Parking Management Study

Findings and Recommendations of:
Downtown Sandy Parking Steering Committee

Prepared by:

City of Sandy Planning
39250 Pioneer Boulevard
Sandy, OR 97055

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Acknowledgements

Downtown Sandy Parking Steering Committee

Laura Allen	Chamber of Commerce Board Chair
Ernie Brache	Downtown Property and Business Owner
Barbara Clare	Downtown Business Owner
Lois Coleman	Downtown Property Owner and City Councilor
Carl Exner	Real Estate Agent and City Councilor
Scott Lazenby	City Manager
Kevin Moody	City Code Enforcement Officer
Andreanne Rode	Downtown Business Owner
Beth Scarth	City Library Director

Project Staff (City of Sandy)

Fran Berteau	Planning Assistant
Tracy Brown	Planning and Development Director
Kelly O'Neill Jr.	Associate Planner (Project Lead)
David Snider	Management Intern
Mike Walker	Public Works Director

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Introduction

This report was produced to address the City Council 2011-13 Goal that states: "Build the City's tax base by supporting and expanding the business community, by designing and implementing a strategy to better manage downtown parking."

The study was guided by a Downtown Parking Steering Committee (Parking Committee) comprised of representatives of downtown commercial businesses, the development community and City staff. The Parking Committee was established to provide oversight, guidance and review of the study process. The Parking Committee also assisted in the identification of issues and prioritization of recommendations to be addressed, and met three times during the development of the project.

This report documents the process and results of an extensive study effort. The primary objective of the study was to identify key issues regarding parking in the downtown core and their impact on the continuing economic vitality of the downtown. The recommendations and strategies contained in this report provide recommendations for the City to adopt and implement a comprehensive parking management strategy.

Key elements of the study work scope called for development of a parking management plan that is:

- Grounded in a set of themes that provide a lasting framework for decision making (see **Section I: Guiding Themes**);

- Rooted in extensive background research that identified the built environment (see **Section II: Parking Inventory Analysis**);

- Correlated to the thoughts and experiences of downtown Sandy users (see **Section III: Survey Analysis**);

- Based on an accurate and objective understanding of downtown parking usage (see **Section IV: Parking Demand Analysis**); and

- Comprised of both near-term and on-going strategies for parking management that allows for effective responses to the needs of the downtown (see **Section V: Summary and Conclusions, and Section VI: Recommendations**).

Section I: Guiding Themes

Creating orderly and efficient parking is just one of many tools that are used when creating a successful downtown. People often times come downtown to experience an urban environment that is active, and spatially and architecturally distinct from other areas of Sandy. Parking needs to be managed to assure that priority land uses are supported with an effective and efficient system for the priority downtown user, while maintaining parking availability for downtown employees. The priority downtown user is the person who shops, eats, drinks and recreates downtown Sandy on a frequent basis.

Understanding Parking

This study was carefully crafted through City staff research of best management practices in the field of parking management and from extensive review of other municipal parking studies. While the availability of parking may be viewed by some people as inadequate, it is often the case that parking is in fact plentiful, but more distant from destinations than most people would prefer.

Contrary to common perception, parking areas are typically not considered congested until they reach 90 percent occupancy.[1] When parking areas exceed higher percentages of occupancy the vehicular driver is more likely to get frustrated while searching for parking and will typically avoid such areas where frustrating experiences are prevalent. For this study it was determined that parking was at capacity when at or above 85 percent occupancy. While lower occupancy rates may seem problematic at times, research has shown that only about 15 out of every 100 parking lot sites are fully occupied during peak business periods.[2] Understanding capacity nuances is an important element in defining if a parking problem exists.

Downtown Sandy Market Analysis and Business Development Strategy

The Downtown Sandy Market Analysis and Business Development Strategy was completed in August of 2009. This market analysis detailed that an existing lack of parking was defined as a disadvantage[3] and that the downtown business owners claimed that downtown has a lack of parking.[4] In addition, a survey conducted as part of the Market Analysis indicated that parking was the third largest hurdle facing the downtown.[5]

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[1] Oregon Department of Transportation (ODOT), & Oregon Department of Land Conservation and Development (DLCD), *Parking Management Made Easy: A Guide to Taming the Downtown Parking Beast* (2001) page 7.
[2] Litman, *Parking Management Best Practices: Making Efficient Use of Parking Resources* (June 2009) page 2.
[3] Marketek, *Downtown Sandy Market Analysis & Business Development Strategy* (August 2009) page 53.
[4] Ibid. page 66.
[5] Ibid. page 72.

On-street Parking

While all user groups are important to the downtown core, having on-street parking available to customers that visit the downtown for shorter periods of time is desirable. As such, individuals with longer term parking needs, such as downtown employees and business owners, are encouraged to use off-street parking facilities. The prioritization of on-street parking towards customers assure that on-street parking supports existing retail and further serves to attract new business growth to the downtown.

Off-street Parking

Off-street parking fulfills the needs of both short term and long term customer needs, as well as downtown employees and business owners which often have longer term parking needs. Employees and business owners that use on-street parking and/or choose to park in valued off-street parking areas diminish the downtown's ability to succeed by occupying areas that are intended for customer parking. Identifying and effectively using off-street parking areas that are not essential for customer parking is a task for employees and business owners.

Parking Requirement Calculation

Minimum parking space requirements are typical in most zoning and development codes as they represent the number of off-street parking spaces required for efficient occupancy of a site. Parking requirements are typically calculated by using the square footage of a structure and dividing that by a per square foot basis based on a particular use (i.e. retail, personal services, eating establishments, residential, etc.). Fixed seat numbers, number of dwelling units and the number of employees are also common figures used to determine parking requirement calculations.

Accessible (ADA) Parking

Accessible parking is necessary to provide convenient and safe access for people with a physical disability. Providing for accessible parking spaces in off-street parking lots is not only legally required, but should be of interest to business owners who want to provide ease of access to customers with disabilities.

Bicycle Parking

Providing bicycle parking is important for encouraging alternative modes of transportation. Installing adequate bicycle parking facilities allows bicyclists a relatively safe and convenient location for securely storing their bicycles. The importance of providing adequate bicycle parking facilities is highlighted on page 25 of the Sandy Comprehensive Plan.

Parking Reduction

Section 17.98.30(B) of the Sandy Development Code allows required off-street parking for commercial uses within the Central Business District to be reduced by 25 percent in recognition of available on-street parking spaces.

Modes of Travel

A primary mode of access to downtown is the single occupant vehicle. The City of Sandy offers fareless public transportation to all riders on Sandy Area Metro (SAM). In addition, dial-a-ride service is also offered through Sandy Transit Area Rides (STAR) which provides low cost curb-to-curb rides in Sandy. STAR is used through reservation for a fare of $0.50 to point of destination and fareless for people with special needs. Other modes of transportation for accessing downtown include bicycling and walking. The city of Sandy is not served by light rail or any other mode of alternative transportation.

Section II: Parking Inventory Analysis

At the heart of downtown Sandy's long-term success is its ability to offer customers and employees a welcoming environment and a shopping, dining and entertainment experience unlike what they might find elsewhere in Sandy. One of the primary components of a successful downtown is making parking easily accessible and plentiful for residents, visitors and employees. Before conducting parking counts, the City staff inventoried all on-street parking, off-street public and private parking lots, accessible (ADA) parking and bicycle parking. Other items were also inventoried, including driveway location and width, and time limited parking signage.

Study Area

The parking inventory area was identified to include the same area as the Central Business District (C1) zoning district (See Figure 1). The C1 zoning district is considered downtown Sandy where commercial uses are predominant. The area generally consists of east bound Pioneer Boulevard and west bound Proctor Boulevard and is bounded by Bluff Road on the west and Ten Eyck Road/Wolf Drive on the east. The district extends about one block south of Pioneer Boulevard and one block north of Proctor Boulevard.

To aid in the analysis, the study area was assigned block numbers 1 through 32, with Blocks 3 and 26 divided into an A and B component due to their length (See Figure 1). Block numbers were designated in a serpentine fashion, starting in the northwestern corner of the study area.

Parking Inventory

The parking inventory area contains approximately 2,460 parking spaces. Of these spaces, 1,627 spaces (66.2 percent) were determined to be off-street parking spaces (58 of which are residential garage spaces), 773 (31.4 percent) on-street parking spaces and 60 (2.4 percent) accessible parking spaces. All off-street parking spaces, other than 30 off-street overflow parking spaces at the Sandy Funeral Home, were either determined by counting painted spaces or calculated by measuring 9 foot by 18 foot standard spaces. On-street parking spaces were assumed to be 22 feet in length; however, after staff discussion the calculations were derived using the following methodology:

16 feet to 39 feet = 1 parking space
40 feet to 59 feet = 2 parking spaces
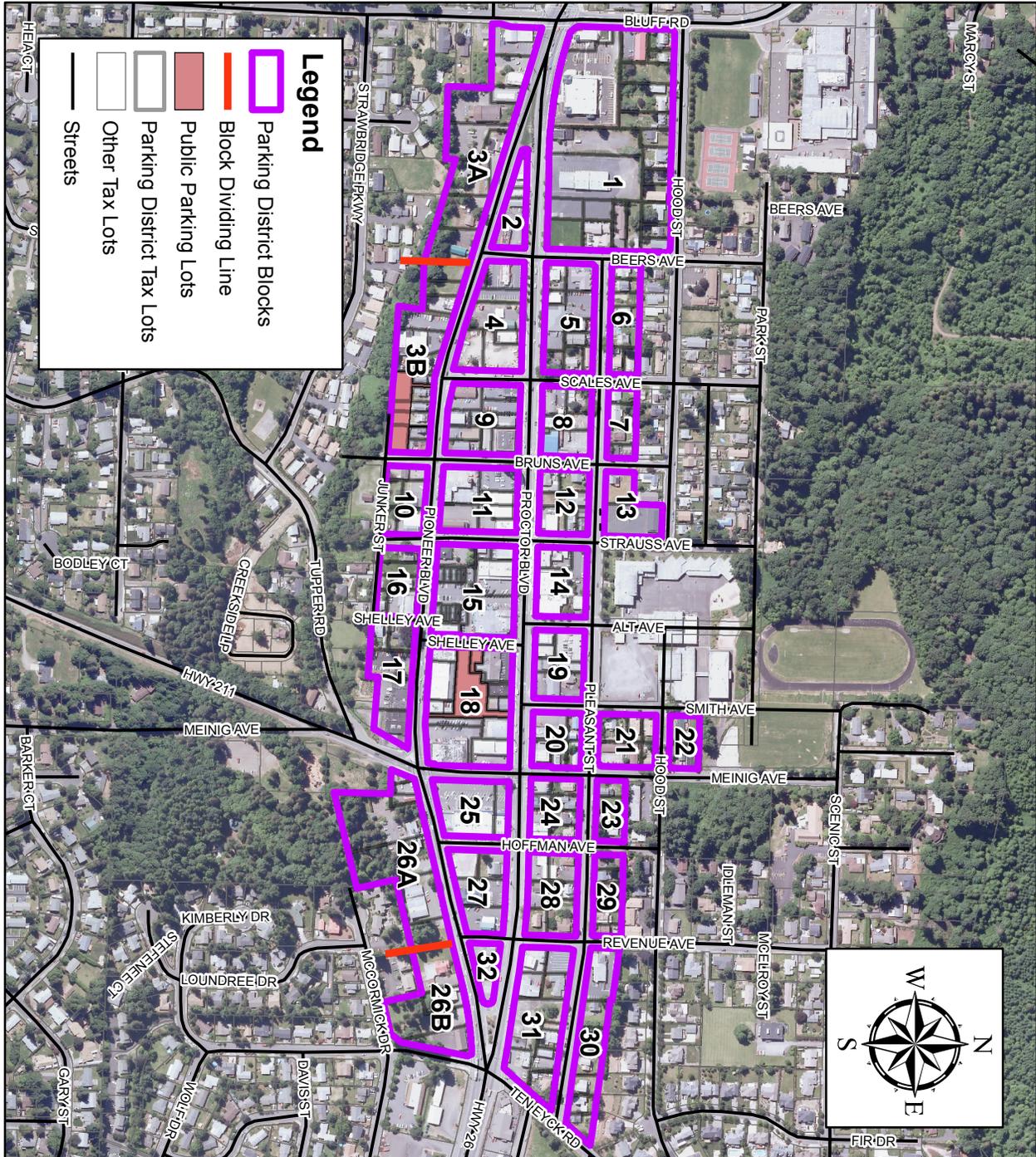60 feet to 79 feet = 3 parking spaces
80 feet to 99 feet = 4 parking spaces
100 feet and above = when the sum of the parking space distance is a fraction of a space (0.5 of more of a space) a full space is then allowed

Example: 100 feet/22 feet = 4.54 spaces; round up to 5 spaces
Example: 120 feet/22 feet = 5.45 spaces, round down to 5 spaces

Figure 1: Block Identification Map

Of the 2,460 parking spaces, 59 parking spaces are designated for off-street ADA parking and 1 is an on-street ADA parking space. Of the 1,627 off-street parking spaces, 58 of the spaces are covered (either by garage or carport) residential parking spaces and 211 are non-covered residential parking spaces. Of the off-street parking spaces, 1,055 are commercial marked (with paint) parking spaces, 273 are unmarked parking spaces and 30 are unmarked overflow parking spaces. See Appendix A for detailed parking inventory area maps.

Due to construction of the library in Block 15, 19 standard off-street parking spaces, 2 ADA off-street parking spaces and 4 bicycle parking spaces were not available for use during this study. However, these parking spaces are included within the calculations throughout this study. Undeveloped lots without structures or parking surface, and the unused and fenced property at 38600 Proctor Boulevard in Block 4 were not included during parking counts in this management study. All other lots with structures, regardless of occupancy, were included in this analysis. Table 1 provides a breakdown of the inventory.

Table 1: Parking Inventory Analysis Overview

Block	On-Street Maximum Capacity	On-Street 22 foot Capacity	On-Street Parking Feet	Off-Street Marked Spaces	Off-Street Unmarked Spaces	Off-Street Residential Spaces	Off-Street Covered Residential	Off-Street Capacity	On-Street ADA	Off-Street ADA	Total Capacity	Bike
1	48	42	1,111	94	0	35	13	142	0	4	194	8
2	20	19	317	21	0	0	0	21	0	1	42	0
3A	23	21	536	56	32	4	0	92	0	5	120	2
3B	23	22	459	85	18	0	0	103	0	2	128	0
4	36	32	821	37	0	0	0	37	0	2	75	6
5	32	28	794	40	6	10	2	58	0	3	93	0
6	18	16	396	0	5	17	2	24	0	0	42	0
7	17	14	382	0	0	11	4	15	0	0	32	0
8	29	26	645	10	7	7	0	24	0	1	54	8
9	29	25	684	60	12	0	0	72	0	3	104	8
10	12	12	318	0	7	4	2	13	0	0	25	0
11	27	24	570	40	32	0	0	72	0	2	101	0
12	21	18	505	2	10	9	3	24	0	0	45	0
13	18	18	463	0	46	0	0	46	0	0	64	0
14	26	22	562	18	0	3	2	23	1	0	50	4
15	48	45	861	79	7	0	0	86	0	6	140	16
16	8	7	194	10	0	6	2	18	0	0	26	3
17	13	13	287	30	31	6	2	69	0	2	84	0
18	35	30	762	105	6	0	0	111	0	6	152	12
19	20	15	423	66	1	0	0	67	0	2	89	4
20	18	17	450	18	1	4	3	26	0	1	45	0
21	21	17	468	0	0	15	4	19	0	1	41	0
22	8	6	180	0	0	9	4	13	0	0	21	0
23	11	9	242	0	0	8	0	8	0	0	19	0
24	23	21	584	7	12	12	2	33	0	0	56	0
25	26	25	405	70	0	0	0	70	0	3	99	4
26A	17	15	335	63	5	0	0	68	0	4	89	6
26B	13	12	296	38	9	0	0	47	0	3	63	2
27	19	15	419	42	1	0	0	43	0	2	64	4
28	30	28	692	16	15	8	2	41	0	1	72	8
29	12	11	318	0	0	14	3	17	0	0	29	0
30	24	22	624	21	0	19	5	45	0	2	71	0
31	38	30	781	24	39	10	3	76	0	2	116	0
32	10	9	239	3	1	0	0	4	0	1	15	0
Totals	773	686	17,123	1055	303	211	58	1627	1	59	2460	95

Public Parking

All streets within the parking inventory area are public streets and therefore have on-street public parking. Within the parking inventory area there are currently two off-street public parking lots which are located in Block 3B and 18 as shown in Figure 1. The off-street public parking lot in Block 3B has 55 standard parking spaces and 2 ADA spaces. The off-street public parking lot in Block 18 has 56 standard parking spaces and 4 ADA spaces.

Accessible (ADA) Parking

The parking inventory identified 59 off-street ADA parking spaces spread throughout downtown and 1 on-street ADA parking space on Alt Avenue adjacent to Clackamas Bank. There are 98 off-street parking lots within the downtown that according to ORS 447.233 require ADA parking spaces. Of the 98 parking lots, four parking lots would require 3 ADA parking spaces, 11 parking lots would require 2 ADA parking spaces and the remaining 83 parking lots would require 1 ADA parking space. While the parking inventory area would require 117 ADA off-street parking spaces, only 59 are currently provided. In all, only 38 of the 98 downtown parking lots comply with ORS 447.233.

Bicycle Parking

The parking inventory area has approximately 95 bicycle parking spaces. Approximately 63 of the bicycle parking spaces are located on private property, while approximately 32 bicycle parking spaces are located within street rights-of-way. According to the City Development Code, bicycle parking is calculated at 5 percent of the off-street parking spaces or 2 spaces, whichever is greater. Of the 93 off-street commercial parking lots (5 apartment parking lots were not calculated), one parking lot would require 4 bicycle parking spaces, three parking lots would require 3 bicycle parking spaces and the remaining 86 parking lots would require 2 bicycle parking spaces. While the parking inventory area would require 191 bicycle parking spaces, only 95 are currently provided. In all, only 14 of the 93 downtown parking lots comply with Development Code Section 17.98.20.

Time Restricted Parking

The parking inventory area has two off-street parking time restricted areas and 15 on-street time restricted areas. Both off-street time restricted areas are located in the public parking lot in Block 18, one of which has 7 parking spaces limited to one hour parking and the second of which has 9 parking spaces limited to two hour parking. The on-street time restricted areas have six time limited variations covering 45 parking spaces and nine different blocks. Table 2 provides a breakdown of the time restricted areas.

Table 2: Time Restrictions

Downtown Sandy Parking Study Area - On-Street Stalls Only

Time Limitation	# of Stalls	Block	Street	Applicable Time	# of Signs
10 minutes	1	14	Proctor	not indicated	1
10 minutes	7	5	Proctor	not indicated	3
10 minutes	2	2	Pioneer	not indicated	1
15 minutes	1	18	Proctor	8-5 M-Sat	1
15 minutes	1	15	Strauss	not indicated	1
15 minutes	2	12	Bruns	not indicated	1
15 minutes	2	3B	Pioneer	not indicated	1
20 minutes	1	14	Alt	not indicated	1
20 minutes	2	12	Proctor	not indicated	1
30 minutes	3	15	Strauss	not indicated	1
1 hour	1	8	Bruns	not indicated	1
1 hour	6	25	Pioneer	not indicated	2
1 hour	6	14	Proctor	not indicated	2
2 hours	2	18	Pioneer	8-5 M-Sat	1
2 hours	8	15	Shelly	8-6 M-Sat	2
TOTALS	45				20

Downtown Sandy Parking Study Area - Off-Street Stalls Only

Time Limitation	# of Stalls	Block	Street	Applicable Time	# of Signs
1 hour	7	18	N/A	7-5 M-F	3
2 hours	9	18	N/A	not indicated	1
TOTALS	16				4

The time restricted areas have six time limitation variations and three separate applicable times, both of which may lead to confusion. Decreasing the variances in time limitation parking stalls could reduce confusion regarding time restriction. Reducing variations in applicable times by defining a unified applicable time throughout the parking inventory area, such as 8:00 AM to 5:00 PM Monday through Friday, could also increase user understanding of the time restriction parking spaces.

In addition, many of the time restriction signs are not placed in areas that make it obvious for the user where the restricted area begins and ends. Some of the time restricted signs simply have arrows that are intended to point the user towards parking spaces; however, the arrows are non-descriptive and not particularly helpful. Signs that indicate 'here to driveway' like those in front of 39130 Proctor Boulevard (Sandy Chainsaw) are more helpful for identifying where the time limitation parking spaces are located. Staff anticipates that replacing the arrows on the time limitation signs with more descriptive identification, such as 'here to driveway' will almost entirely eliminate confusion to where the time limitation spaces are located.

Land Use Inventory

The parking inventory area contains 209 separate buildings. Approximately 26 of the buildings have two or more different land uses within the same building for a total of 248 separate uses. Table 3 provides a breakdown of the uses and Appendix B contains a detailed map of the land use inventory.

Table 3: Buildings with Uses

Use	Count
Automotive	2
Car Wash	1
Church	2
Community Center	1
Eating or Drinking	22
Fire Station	1
Fuel Sales	5
Funeral Home	1
Garage	28
Library	1
Fraternal Lodge	3
Medical Office or Clinic	10
Museum	1
Multi-Family Dwelling	13
Office	28
Recreation (gyms)	1
Single Family Detached	71
Retail Sales	29
Food and Beverage Sales	9
Service	16
Storage	1
Theater	1
Vehicle Sales	1
TOTAL	**248**

As of September 2011 there were approximately 694 employees working in downtown Sandy. According to Sandy Development Code Section 17.98.20(C), off-street parking shall be provided for employees based on a formula of one space per two employees in addition to the required parking specified by use and corresponding square footage. The 694 employees require 347 off-street parking spaces.

The parking inventory area has a building footprint of approximately 580,741 square feet. This footprint was calculated by measuring the at grade floor area of all buildings including residential buildings and garages, but does not include the area above or below grade. To measure above and below grade floor area, staff conducted a visual assessment. To calculate required parking staff then separated buildings into different use areas (i.e. office, retail, etc.), residential uses and buildings with fixed seating which is calculated differently than traditional buildings based on square footage.

Based on staff calculations the downtown parking inventory area would require approximately 2,028 off-street parking spaces. Combined with the required employee parking the downtown core would need to have approximately 2,375 off-street parking spaces. The Sandy Development Code does allow a 25 percent reduction in off-street parking which would reduce the required off-street parking by 594 spaces and bring the required off-street parking required to 1,781 parking spaces.

As explained in the Parking Inventory Section of this management study, the downtown parking inventory area contains 2,460 total parking spaces. In accordance with the Sandy

Development Code, the inventory area requires approximately 1,781 off-street parking spaces, but there are only 1,627 (with overflow) off-street parking spaces available which leaves the city with a deficit of 154 off-street parking spaces in the downtown core. The overall parking surplus after adding the 773 on-street parking spaces is positive 85 parking spaces over the 2,375 spaces required per code.

The actual parking surplus is much higher than the above calculations would indicate for several reasons. First, some of the commercial businesses are only used on a seasonal basis or are used only sparingly, such as church buildings. Second, some of the buildings or units/suites within the buildings are vacant or not fully occupied. Third, most of the commercial buildings within the downtown core do not devote their entire square footage for their stated commercial use, but instead have a portion of the building for ancillary uses, such as restrooms or storage. If the vacant areas and the ancillary areas were removed from the parking space demand, the parking surplus would increase dramatically.

Section III: Survey Analysis

Surveys are a great tool to gain public insight into parking related issues and patterns. The survey associated with this study allowed individuals to stress the importance of particular issues while emphasizing their level of satisfaction or dissatisfaction with downtown parking conditions. The survey contained 12 multiple choice questions, six yes or no questions, one comment box and one opportunity for survey respondents to leave their contact information.

Survey Distribution

The City of Sandy chose Survey Monkey to host the electronic survey, and had links to the host website on the City website homepage and the Chamber of Commerce website homepage. The City also used Facebook to post several reminders about completing the survey on both the City of Sandy Facebook page and the Sandy Main Street Facebook page. In addition, a brief article regarding the survey was posted in the Sandy Post on July 13, 2011.

Hard copy survey collection boxes were located at 10 locations in the downtown. The 10 locations were: Sandy Area Chamber of Commerce, Community Action Center, Dita's Chocolates, Mountain Moka, Otto's Cross Country Ski Shop, Sandy Historical Museum, City Hall, Sandy Community Center, Sandy Library and the Sandy Main Street Office. City staff delivered hard copy surveys to 106 downtown business locations, but did not reach all downtown businesses as some were temporarily closed and/or otherwise unwilling to participate. The survey began at 12:00 PM on July 12, 2011 and lasted through 9:00 AM on August 2, 2011.

Survey Intent

The survey was designed to ask all users of downtown parking, including business owners, employees and customers who frequent downtown businesses questions regarding their experiences and observations of downtown parking.

Survey Results and Interpretations

In total 280 responses to the survey were received, of which 200 were completed electronically and 80 by hand. Of the 280 respondents, 32 people identified themselves as a downtown business/property owner, 100 people identified themselves as a downtown employee and 148 people identified themselves as a downtown customer.

Demographics

Of the 132 people identifying themselves as either a downtown business/property owner or an employee the highest percentage identified themselves as government employees. Figure 2 provides a breakdown of respondents by type of employment.

Figure 2: Business Enterprises Defined
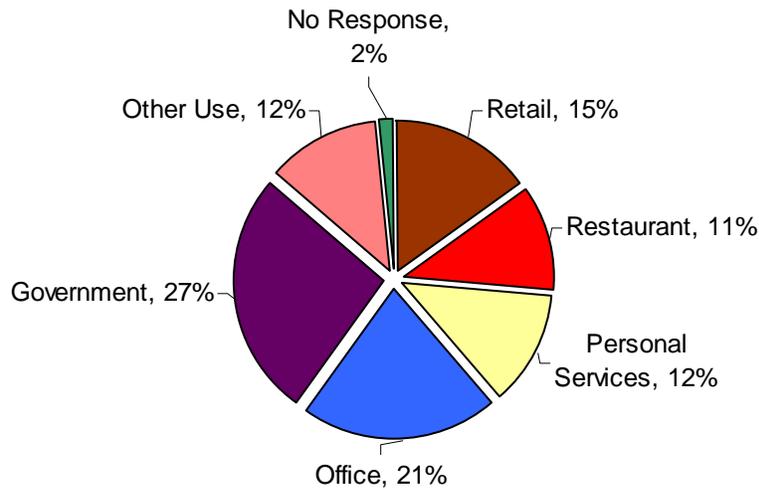
When people were asked where they typically park the responses were fairly equal across the board. Respondents were allowed to answer all that applied. Of the 419 locations that were identified, 99 replies indicated they use on-street parking along Proctor Boulevard and Pioneer Boulevard, while 85 replies identified they used on-street along side streets. In addition, 119 replies signified they used off-street parking in private lots, while 116 used off-street locations in a public parking lot.

When looking at where different users typically park, it was determined that about 79 percent of downtown employees park in off-street private and public parking lots. This high percentage of employees parking off-street is important for keeping the on-street parking available for higher turnover customer parking. Unfortunately, only about 62 percent of downtown business owners/property owners indicated they park in off-street lots. Approximately 56 percent of downtown customer parking occurs on-street where parking spaces are more easily accessed. Some customers probably prefer off-street parking because it seems safer to get in and out of the car, while others probably prefer off-street because of proximity to their destination.

As shown in Figure 3, regarding years of shopping and working in the downtown, the highest percentage of respondents have lived or worked in Sandy more than 20 years, followed by 1 to 5 years and 6 to 10 years. Less than a year, 11 to 15 years and 16 to 20 years were all lower responses. Interestingly, people working or shopping in Sandy 1 to 5 years has the lowest percentage of respondents that state there is a parking problem, with the highest percentage of respondents stating there is a parking problem increasing at 6 to 10 years and peaking at 11 to 15 years. After 15 years, the percentage of individuals indicating there is a parking problem trends back down. Of the respondents, 61 percent indicated they park within the parking inventory area three or more times a week, 26 percent park once or twice a week, 12 percent park in downtown once a month or so and about 2 percent only park downtown once or twice a year.

Figure 3: Years Shopping and Working Downtown
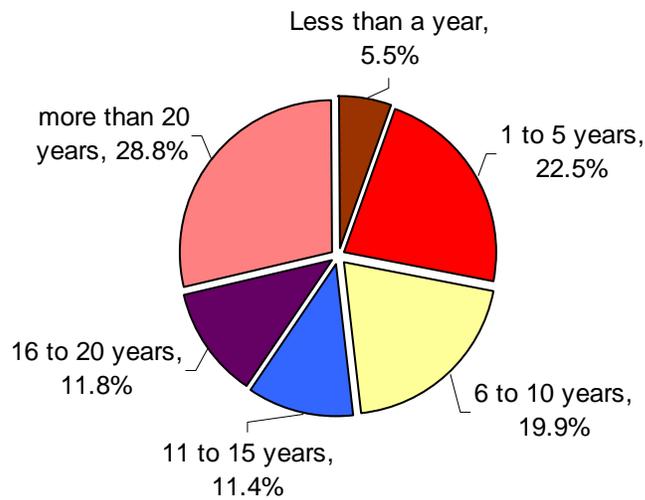
Problems Defined

When asked if there is a parking problem in downtown Sandy, about 54 percent of respondents said yes, 32 percent said no and 14 percent said they were unsure. Only 46 percent of downtown customers indicated they believe a parking problem exists. In contrast, 90 percent of business/property owners indicated they believe a problem exists and 55 percent of employees agree with there being a problem. The higher number of business/property owners believing there is a parking problem reflects that parking is a primary concern regarding business success. For survey respondents who responded 'yes' or 'unsure' to this question, they then had the opportunity to respond to four questions relating to the potential problem.

The first question asked respondents to check all answers that best described the parking problems. "Not having enough spaces in the downtown" was the highest response at 114 responses, with the second highest response at 72 responses being that "available spaces are too far away from desired destinations". Other responses such as "not having the ability to park in spaces for long enough periods of time" and "not having large enough spaces" were of less concern. A number of written responses included that lack of signage and lack of on-street ADA parking spaces is also a problem in downtown.

The second question asked respondents to check all answers that describe what locations have parking problems. The responses were fairly even across the board with 110 responses indicating on-street along Pioneer Boulevard, 108 responses indicating on-street along Proctor Boulevard and 95 responses indicating off-street in parking lots. Written responses indicated problems on Shelly Avenue and parking spaces surrounding the library. Downtown business/property owners, employees and

customers were all in agreement that on-street has more parking problems then off-street parking.

The third question asked respondents to check all answers that indicate at what time of the year a parking problem occurs. Not surprisingly, 130 of the 153 people responding to this question indicated that during the Mountain Festival there is a parking problem. 123 respondents indicated they believe there is a parking problem during the summer, while only 92 respondents indicated there is a parking problem during the winter. Many written responses indicated that downtown parking problems are continuous throughout the year.

The fourth question asked respondents to define how often there is a parking problem in downtown. This question did not give respondents the opportunity to check all answers that apply. Of the 169 responses to the question, 82 indicated 'often', 46 'always', and 41 'once in awhile.' There were also 10 respondents that had other explanations, but they had a large variance and little similarities between one another indicating they are observations that are most likely not shared by the majority of survey respondents.

The remaining questions on the survey allowed all respondents to participate. When asked to check what day of the week it is most difficult to find a parking space the highest response was Friday, with the remaining of the week, excluding Sunday, fairly even across the board. When asked what time of the day it is most difficult to find a parking space, responses were similar to a bell curve with the largest indication occurring between noon and 2:00 PM. The remainder of the day starting between 10:00 AM to noon and 2:00 PM to 4:00 PM decreased in difficulty to find a parking space.

Ease of Parking

When respondents were asked about their awareness of two City owned downtown public parking lots with free parking, 38 percent of respondents said they were not aware of the two lots. Property/business owners had the highest awareness of the two public parking lots at 84 percent, with employees at 69 percent and customers at 52 percent. To no surprise, 76 percent of the respondents indicated that parking is not adequately identified and easy to find in downtown. This indicates that current signage is not adequate to direct people to off-street public parking. The lack of crosswalks across Pioneer Boulevard also makes pedestrian navigation difficult to the parking lot in Block 3B.

When asked about their willingness to walk from a parking space to their workplace or shopping/eating destination, 60 percent indicated they are willing to walk 1 or 2 blocks, 30 percent 3 or more block, while only 10 percent indicated they are not willing or able to walk at all. Willingness to walk is fairly even across the board, with business/property owners interestingly having the least willingness to walk. This indicates that people are willing to walk some distance, but without proper identification regarding where to park the options to some people may appear limited.

Future Solutions

The three final multiple choice questions asked respondents to rank mitigation techniques for solving parking related issues. When asked whether an employee or business owner would be willing to pay for a nominal ($5 to $10) yearly downtown employee parking permit fee for downtown parking maintenance expenses, 52 percent said they were not willing to pay, 30 percent indicated they were unsure and only 17 percent said they are willing to pay.

The next question asked respondents to indicate if they believe there should be a parking enforcement officer in the downtown. Of the 253 responses, 53 percent indicated they do not think there should be a parking enforcement officer, 25 percent indicated they believe there should be an enforcement officer and 22 percent indicated they were unsure. Interestingly, when then asked if there should be parking fines for violators in downtown, 45 percent said there should be fines, 34 percent said there should not be fines and 21 percent said they were unsure. Responses to this question conflict with the previous question regarding hiring an enforcement officer since one of the jobs of this officer would be the issuance of fines. See Appendix C for further details regarding all survey results.

Section IV: Parking Demand Analysis

Parking demand ratios represent the number of available parking spaces occupied at varying times of the day, week and year. Counts were conducted at different times and days within the study area to determine when demand ratios are at their peak. Parking turnover counts were also conducted, particularly in high count areas to determine the length of stay for vehicles.

Parking Demand Results

Counts of the entire downtown parking district were conducted during every day of the week, excluding Sunday, and at varying times of the day from 8:20 AM to 7:15 PM.

In total, 13 parking counts of the entire downtown and 2 parking counts between 6:30 and 7:30 at areas around restaurants, taverns and other evening establishments were completed. Six of the counts were conducted before the beginning of the public school year, while seven counts were conducted during the school year. The parking counts occurred on the following days and times:

> Tuesday August 23, 2011 (2:00 PM to 3:30 PM)
> Thursday August 25, 2011 (8:20 AM to 9:10 AM)
> Thursday August 25, 2011 (10:30 AM to 11:30 AM)
> Monday August 29, 2011 (8:45 AM to 9:40 AM)
> Monday August 29, 2011 (2:35 PM to 3:25 PM)
> Wednesday August 31, 2011 (12:00 PM to 1:00 PM)
> Wednesday September 7, 2011 (11:00 AM to 12:00 PM)
> Friday September 9, 2011 (12:00 PM to 1:30 PM)
> Friday September 9, 2011 (4:00 PM to 5:30 PM)
> Tuesday September 13, 2011 (12:30 PM to 1:30 PM)
> Friday September 16, 2011 (12:30 PM to 1:45 PM)
> Friday September 16, 2011 (2:30 PM to 3:50 PM)
> Saturday September 17, 2011 (4:30 PM to 5:35 PM)
>
> Friday September 9, 2011 (6:45 PM to 7:15 PM)
> Saturday September 17, 2011 (6:35 PM to 7:05 PM)

The total number of vehicles counted during the 13 regular downtown parking counts was 9,139. The total number of parking spaces that could have been occupied was 31,200 spaces. Based on these results, approximately 29 percent of downtown parking spaces were occupied during the 13 parking counts. On-street capacity averaged approximately 159 vehicles or almost 21 percent of on-street parking capacity. Off-street capacity averaged approximately 544 vehicles or 34 percent of the downtown off-street parking capacity. Table 4 and Figure 4 provide detailed count breakdowns.

The time of day the parking count was conducted was a much higher indicator of parking capacity than was day of the week, excluding Saturday which showed a significant decrease in the number of vehicles parked within the parking inventory district. The Saturday decrease was likely due to non-retail businesses being closed and subsequently

Table 4: Parking Inventory Area Demand Analysis Overview

Date and Time	On-Street Count	Off-Street Count	Total Count	On-Street Cap	Off-Street Cap	Total Cap	On-Street % Full	Off-Street % Full	Percent Full
Tuesday August 23, 2011 (2:00 PM to 3:30 PM)	165	591	756	773	1627	2400	21.35%	36.32%	31.50%
Thursday August 25, 2011 (8:20 AM to 9:10 AM)	117	399	516	773	1627	2400	15.14%	24.52%	21.50%
Thursday August 25, 2011 (10:30 AM to 11:30 AM)	176	588	764	773	1627	2400	22.77%	36.14%	31.83%
Monday August 29, 2011 (8:45 AM to 9:40 AM)	140	473	613	773	1627	2400	18.11%	29.07%	25.54%
Monday August 29, 2011 (2:35 PM to 3:25 PM)	148	605	753	773	1627	2400	19.15%	37.19%	31.38%
Wednesday August 31, 2011 (12:00 PM to 1:00 PM)	203	585	788	773	1627	2400	26.26%	35.96%	32.83%
Wednesday September 7, 2011 (11:00 AM to 12:00 PM)	179	589	768	773	1627	2400	23.16%	36.20%	32.00%
Friday September 9, 2011 (12:00 PM to 1:30 PM)	187	602	789	773	1627	2400	24.19%	37.00%	32.88%
Friday September 9, 2011 (4:00 PM to 5:30 PM)	147	543	690	773	1627	2400	19.02%	33.37%	28.75%
Tuesday September 13, 2011 (12:30 PM to 1:30 PM)	179	597	776	773	1627	2400	23.16%	36.69%	32.33%
Friday September 16, 2011 (12:30 PM to 1:45 PM)	174	589	763	773	1627	2400	22.51%	36.20%	31.79%
Friday September 16, 2011 (2:30 PM to 3:50 PM)	161	558	719	773	1627	2400	20.83%	34.30%	29.96%
Saturday September 17, 2011 (4:30 PM to 5:35 PM)	85	359	444	773	1627	2400	11.00%	22.07%	18.50%
TOTALS	2061	7078	9139	10049	21151	31200			
Friday September 9, 2011 (6:45 PM to 7:15 PM)	99	153	252	305	423	728	32.46%	36.17%	34.62%
Saturday September 17, 2011 (6:35 PM to 7:05 PM)	72	126	198	305	423	728	23.61%	29.79%	27.20%
TOTALS	171	279	450	610	846	1456			

Figure 4: Parking Counts Overview
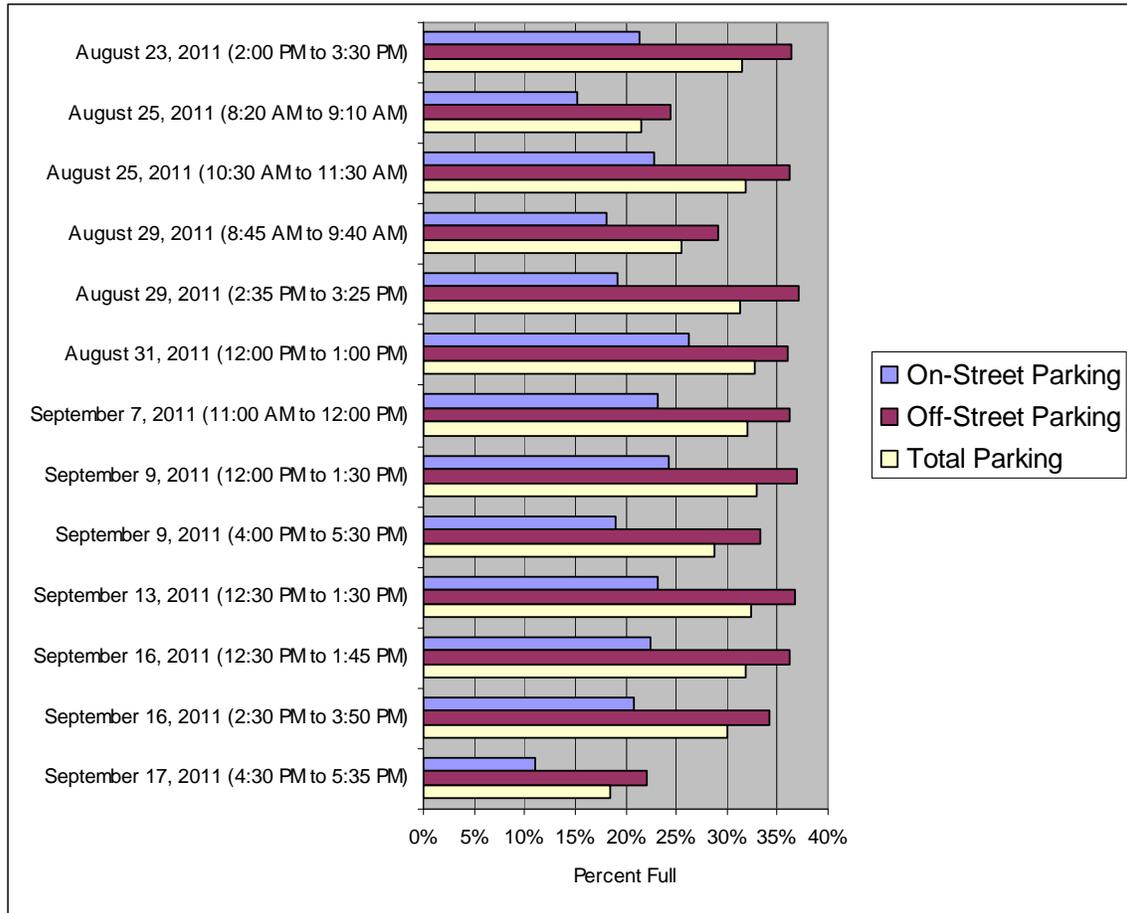
a decrease in commerce. Early morning, late afternoon and evening count times all had decreases in the total number of parked vehicles, while late morning, mid-day and early afternoon all consistently had higher numbers of parked vehicles. See Appendix D, Figure 7 and the following sections for detailed count information and for a breakdown regarding problematic areas.

Morning Counts (8:00 AM to 12:00 PM)

The four morning counts occurred on August 25th (two counts), August 29th and September 7th. During the morning hours of 8:00 AM to 10:00 AM on-street parking capacity revealed an average of 129 vehicles or 16.69 percent of on-street capacity, while off-street parking capacity revealed an average 436 vehicles or 26.80 percent of off-street capacity. Blocks 11 and 18 had the highest on-street parking capacity rates, with only Block 11 ever exceeding 50 percent capacity. Blocks 16 and 18 both exceeded 50 percent capacity for off-street parking each of the two days that were counted.

During the morning hours of 10:00 AM to 12:00 PM on-street parking capacity revealed an average of 178 vehicles or 23.03 percent of on-street capacity, while off-street parking

capacity revealed an average 589 vehicles or 36.20 percent of off-street capacity. Blocks 9, 11, 16, 17 and 18 all exceeded 50 percent capacity for on-street parking each of the two days that were counted. Blocks 14, 16 and 18 all exceeded 50 percent capacity for off-street parking each of the two days that were counted.

Mid-day Counts (12:00 PM to 2:00 PM)

The four mid-day counts occurred on August 31st, September 9th, September 13th and September 16th. The four mid-day counts between 12:00 PM and 2:00 PM had an average of 779 vehicles counted within the parking inventory area. Only 32.46 percent of the 2,400 vehicular spaces were occupied. During the mid-day hours of 12:00 PM to 2:00 PM on-street parking capacity revealed an average of 186 vehicles or 24.06 percent of on-street capacity, while off-street parking capacity revealed an average 593 vehicles or 36.45 percent of off-street capacity.

Only Block 9 exceeded 50 percent on-street parking capacity for all four mid-day parking counts; however, several blocks exceeded 50 percent or 60 percent on-street capacity on one or more days. Block 18 was the only block that exceeded 50 percent off-street parking capacity for all four mid-day parking counts.

Afternoon Counts (2:00 PM to 6:00 PM)

The five afternoon counts occurred on August 23rd, August 29th, September 9th, September 16th and September 17th. During the afternoon hours of 2:00 PM to 4:00 PM on-street parking capacity revealed an average of 158 vehicles or 20.44 percent of on-street capacity, while off-street parking capacity revealed an average 585 vehicles or 35.96 percent of off-street capacity. Blocks 11, 16 and 17 had the highest on-street parking capacity rates, with only Blocks 16 and 17 exceeding 50 percent capacity on two days. Blocks 16, 18, 19, 25, 26A and 31 had the highest on-street parking capacity rates.

During the afternoon hours of 4:00 PM to 6:00 PM on-street parking capacity revealed an average of 116 vehicles or 15.01 percent of on-street capacity, while off-street parking capacity revealed an average 451 vehicles or 27.72 percent of off-street capacity. The afternoon counts on Friday September 9th yielded higher parking counts than the afternoon counts on Saturday September 17th. Block 17 was the only block that had 40 percent on-street parking capacity on both days. Blocks 8, 16, 18 and 25 had the highest off-street parking capacity rates, yet none exceeded 50 percent capacity on both days.

Evening Counts (after 6:00 PM)

The total number of vehicles counted during the two late evening parking counts was 450 vehicles of 1,456 spaces that could have been occupied. Targeted locations for evening counts were areas around restaurants, taverns and other evening establishments. Areas that were targeted included select locations on the following blocks: 1, 2, 3A, 3B, 4, 5, 8, 9, 10, 11, 12, 14, 15, 17, 18, 19, 24, 26A and 28. The Friday evening of September 9th had 99 on-street vehicles and 153 off-street vehicles around select locations, while the

Saturday evening of September 17th had 72 on-street vehicles and 126 off-street vehicles around select locations. The evening of September 9th was sunny and yielded higher vehicle counts than the evening of September 17th which was cloudy with light rain.

The evening of September 9th had some of its highest capacities around the No Place Saloon on Block 8, La Bamba on Block 9 and the Sandy Veterans of Foreign Wars (VFW) on Block 2. The No Place Saloon had a 100 percent off-street capacity and 68.18 percent on-street capacity within the immediate vicinity. With the recent street modifications on Scales Avenue, the area surrounding the No Place Saloon will most likely see an increase in on-street parking as the off-street parking area has been slightly reduced.

The evening of September 17th had some of its highest capacities around the Trout Pub on Block 28 and once again around the No Place Saloon on Block 8 and the VFW on Block 2. Only three of the 19 on-street selected areas exceeded 50 percent capacity, while only two of the 12 off-street selected parking areas exceeded 50 percent capacity.

Off-Street Public Parking

The off-street public parking lot in Block 3B had an average occupancy of 4.3 standard spaces over the 13 parking counts between 8:00 AM and 6:00 PM with a high count of 8 vehicles during the late afternoon of September 9th. The average occupancy is only 7.8 percent of the 55 available standard parking spaces.

The off-street public parking lot in Block 18 had an average occupancy of approximately 44 standard spaces over the 13 parking counts between 8:00 AM and 6:00 PM with a high count of 54 during the late morning of August 25th. The average occupancy is 78.6 percent of the 56 available standard parking spaces.

Accessible (ADA) Parking

During 12 of the 13 parking counts ADA parking was counted. As previously mentioned, the parking inventory area has 59 off-street ADA parking spaces spread throughout downtown and 1 on-street ADA parking space on Alt Avenue adjacent to Clackamas Bank. The 2 future ADA parking spaces at the permanent location for the library and the 2 future ADA parking spaces at 39570 Pioneer Boulevard were included in this analysis.

The total number of off-street ADA parking spaces that were occupied over the 12 counts was 51 spaces or 7.20 percent of the possible 708 ADA parking spaces. The highest number of off-street ADA parking spaces being occupied during any of the parking counts was 7 spaces on both the late morning of September 7th and the late afternoon of September 9th. Only at mid-day on September 9th was the one on-street ADA parking space on Alt Avenue occupied. While only 38 of the 98 downtown parking lots are in compliance with ORS 447.233, ADA parking demand seems low at this time.

Bicycle Parking

During 12 of the 13 parking counts bicycle parking was counted. As previously mentioned, the parking inventory area has approximately 95 bicycle parking spaces. The 4 future bicycle parking spaces at the permanent location for the library and the 2 future bicycle parking spaces at 39570 Pioneer Boulevard were included in this analysis.

The total number of bicycle parking spaces that were occupied over the 12 counts was 21 spaces or 1.84 percent of the possible 1,140 bicycle parking spaces. The highest number of bicycle parking spaces being occupied during any of the parking counts was 4 spaces on three separate occasions. While only 14 of the 93 downtown parking lots are in compliance with Development Code Section 17.98.20, securable bicycle parking demand seems very low at this time.

Parking Count Analysis

The parking counts have revealed that most areas within the downtown core do not have parking capacity shortfalls. Figure 5 provides a visual heat index that displays blocks that are less full as yellow and more full as red. One problematic area that was not mentioned above is off-street parking for Block 32. Block 32 only has 4 off-street parking spaces all owned by one property owner. The off-street parking for Block 32 met or exceeded 50 percent capacity for 12 of the 13 parking counts. As mentioned in Section I of this study, parking areas are typically not considered full until they reach 85 percent to 90 percent occupancy. The following is a list of blocks that exceeded 85 percent parking capacity for on-street or off-street parking during the counts:

- Block 16 in the late morning of August 25th had 87.50 percent on-street parking capacity
- Block 16 on the afternoon of August 29th had 100 percent on-street parking capacity
- Block 16 at mid-day on August 31st had 87.50 percent on-street parking capacity
- Block 16 at mid-day on August 31st had 88.89 percent off-street parking capacity
- Block 18 in the early afternoon of August 23rd had 85.59 percent off-street parking capacity
- Block 18 in the late morning of August 25th had 92.79 percent off-street parking capacity
- Block 18 at mid-day on September 13th had 90.99 percent off-street parking capacity
- Block 32 in the early morning of August 25th had 100 percent off-street parking capacity
- Block 32 in the early morning of August 29th had 125 percent off-street parking capacity
- Block 32 in the early afternoon of August 29th had 125 percent off-street parking capacity
- Block 32 at mid-day on September 13th had 100 percent off-street parking capacity

Figure 5: Parking Demand Heat Index
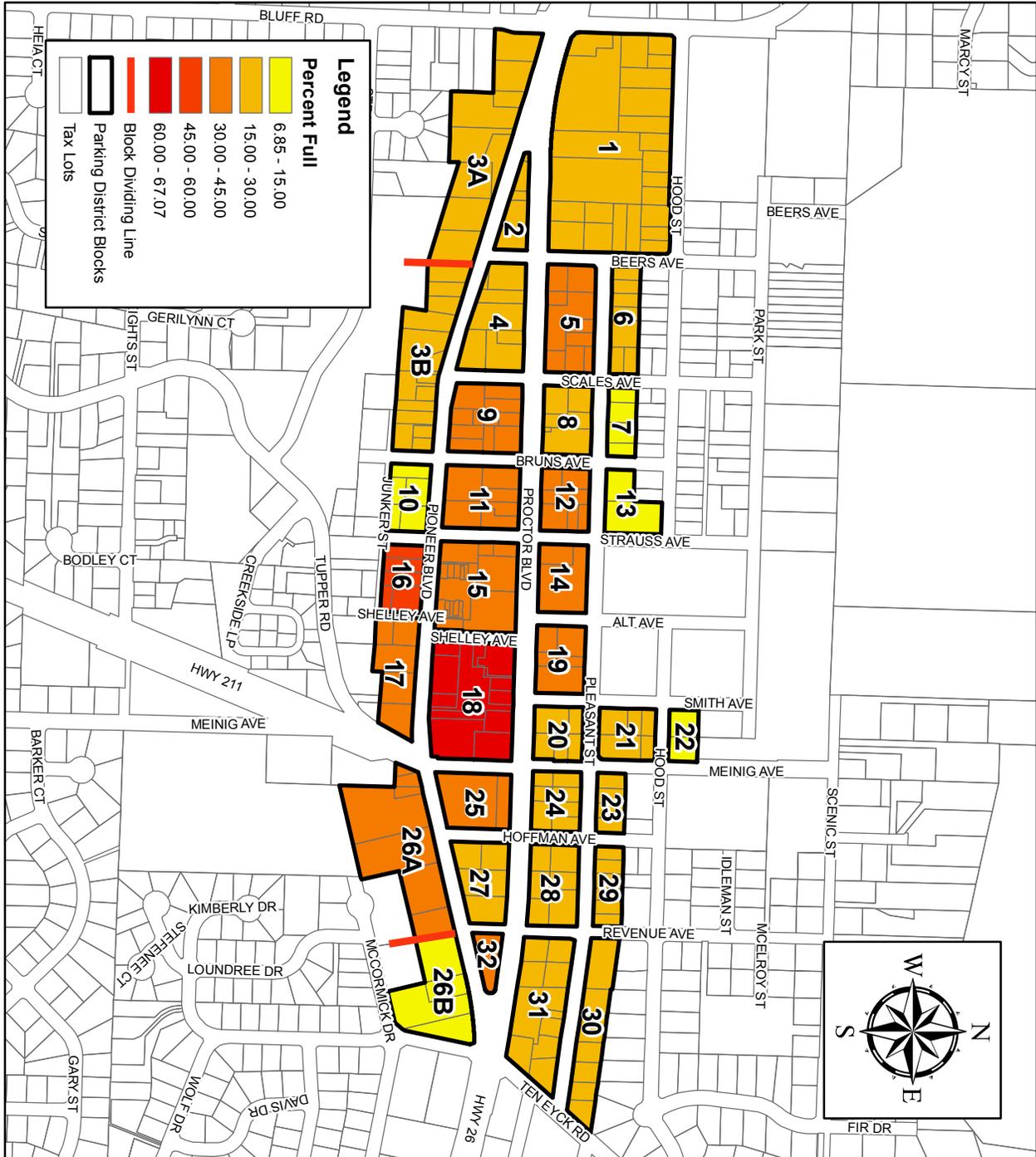
Blocks 16, 18 and 32 all have revealed off-street parking capacity shortfalls at least during one parking count, and Block 16 also revealed on-street parking capacity shortfalls during several of the parking counts. With moderate mitigation the problems existing at Block 16 could easily be fixed as there is land that could be developed for off-street parking. Blocks 18 and 32 both pose more challenging obstacles as both blocks have been fully built and have no developable land upon which to build more parking. The best way to mitigate off-street parking shortfalls for these two blocks is to encourage customers to use on-street parking and to enforce parking turnover more often. See Appendix E for count capacity information regarding all 34 blocks.

Library Count Analysis

Once construction for the permanent location of the library is complete staff anticipates that parking capacity for both on-street and off-street parking for Block 15 will increase. Other blocks around Block 15 could also see parking capacity increases. It is anticipated that parking demand for and around Block 9 will decrease as a result of closure to the temporary library location, unless another business with equal demand to that of the library is opened.

Parking Turnover Results
Parking turnover counts were conducted in the highest demand parking areas (on and around Blocks 9, 11, 15 and 18). Turnover counts measure the number of parking spaces that remain occupied by the same vehicle during a given period with higher percentages of turnover considered positive. The four turnover counts were completed on August 29th, August 31st, September 9th and September 16th. See Appendix F for further information on turnover counts.

Turnover #1: August 29th

The turnover count on August 29, 2011 occurred from approximately 2:10 PM to 4:50 PM, with an average of two hours between chalking and counting. This turnover study was largely conducted to determine what areas would need to be evaluated for the second and third parking turnover studies. Blocks 11, 15 and 18 were counted in their entirety, except for select private lots. Southern block faces for Blocks 12, 14, 19 and 20, northern block faces for Blocks 10, 16 and 17, and the eastern block face for Block 9 were also counted.

There were 55 vehicles marked on-street at the beginning of the count and only 17 of those vehicles remained throughout the two hours which is a 69.09 percent turnover. The worst block for on-street turnover was Block 15 (57.14 percent) and the most efficient block for turnover was Block 18 (80 percent). There were 114 vehicles marked off-street

in select parking lots at the beginning of the count and only 59 of those vehicles remained throughout the two hours which is a 48.25 percent turnover. The worst block for off-street turnover was Block 11 (36.36 percent) and the most efficient block for turnover was Block 15 (58.62 percent).

Turnover #2: August 31st

The turnover count on August 31, 2011 occurred from approximately 1:35 PM to 4:23 PM, with an average of two hours between chalking and counting. The second turnover study was designed to focus on the area of downtown with the highest density and most need for parking. Blocks 11, 15 and 18 were counted in their entirety.

There were 45 vehicles marked on-street at the beginning of the count and only 19 of those vehicles remained throughout the two hours which is a 57.78 percent turnover. The worst block for on-street turnover was Block 11 (37.50 percent) and the most efficient block for turnover was Block 15 (75 percent). There were 133 vehicles marked off-street in select parking lots at the beginning of the count and only 71 of those vehicles remained throughout the two hours which is a 46.62 percent turnover. The worst block for off-street turnover was Block 18 (40 percent) and the most efficient block for turnover was Block 15 (60.71 percent).

Turnover #3: September 9th

The turnover count on September 9, 2011 occurred from approximately 1:40 PM to 4:20 PM, with an average of two hours between chalking and counting. This third turnover study was conducted as a follow-up to the second turnover study. Blocks 11, 15 and 18 were counted in their entirety.

There were 47 vehicles marked on-street at the beginning of the count and only 17 of those vehicles remained throughout the two hours which is a 63.83 percent turnover. The worst block for on-street turnover was Block 15 (61.11 percent) and the most efficient block for turnover was Block 18 (69.23 percent). There were 120 vehicles marked off-street in select parking lots at the beginning of the count and only 56 of those vehicles remained throughout the two hours which is a 53.33 percent turnover. The worst block for off-street turnover was Block 11 (30 percent) and the most efficient block for turnover was Block 15 (62.07 percent).

Turnover #4: September 16th – Library Turnover Analysis

The turnover count on September 16, 2011 occurred from approximately 1:50 PM to 4:17 PM, with an average of two hours between chalking and counting. The fourth turnover study was conducted to determine the turnover rate at and around the temporary public library location at 38750 Proctor Boulevard. The northern, southern and western faces of Block 9 were counted, along with the parking lots for the temporary library location and Prudential Insurance. The southern block face of Block 8 and the eastern block face of Block 4 were also counted.

There were 19 vehicles marked on-street at the beginning of the count and only 6 of those vehicles remained throughout the two hours which is a 68.42 percent turnover. There were 9 vehicles marked off-street in the library and Prudential parking lots at the beginning of the count and only 4 of those vehicles remained throughout the two hours which is a 55.56 percent turnover. The turnover rate around the temporary library location indicates that most customers have adequate areas to park within close proximity of the library. If equal or improved turnover will exist around the permanent location of the library has yet to be determined.

Section V: Summary and Conclusions

This study was undertaken in support of the downtown business community, and was designed and implemented to directly address their collective concerns about the availability and management of parking in Sandy's downtown core. The data generated by this study reveals that the parking inventory area does not in fact have an overall parking shortfall. The following is a list of key statistics that were revealed as part of this study:

- 54 percent of survey respondents indicated there is a downtown parking problem, 32 percent said there is not a parking problem and 14 percent said they were unsure.

- 29 percent of the downtown parking spaces were occupied during the 13 parking counts.

- On-street capacity averaged approximately 159 vehicles or 21 percent of the downtown on-street parking capacity.

- Off-street capacity averaged approximately 544 vehicles or 34 percent of the downtown off-street parking capacity.

- ADA (Off-street) parking capacity was 51 spaces or 7 percent of the possible 708 ADA parking spaces.

- Bicycle parking capacity was 21 spaces or about 2 percent of the possible 1,140 bicycle parking spaces.

Based on a review of the data and observations in the field a number of issues were identified in the parking inventory area that guided the recommendations contained in Section VI of this study:

- Lack of oversight and review of downtown parking issues;

- No dedicated funding to cover future public parking lot improvements;

- No mechanism exists to allow developers of new projects in the downtown to reduce parking requirements and build at higher densities;

- Lack of enforcement of time limited parking areas;

- No incentive for downtown employees to park in private off-street parking lots;

- Inadequate signage directing individuals to parking opportunities;

- Limited on-street ADA parking spaces;

- A number of curbs are unnecessarily painted yellow;

- An excessive number of time variations and applicable time variations for restricted parking;

- Arrows on time restriction signs are non-descriptive and lead to confusion;

- The public parking lot located in Block 3B (behind Otto's Ski Shop) is underused;

- Blocks 16, 18 and 32 contained off-street parking capacity shortfalls at least during one parking count; and

- Block 16 also contained on-street parking capacity shortfalls during several parking counts.

Identifying future trends and issues is problematic as they are forecasts, often times not entirely in line with reality. Defining potential future issues and opportunities is a more accurate way of looking into the future. Over the next 10-20 years and onward, the city of Sandy will likely face obstacles such as higher land use densities and more downtown businesses which will most likely result in less available parking spaces. Increasing usage of alternative transportation or the development of an alternative to the single occupant vehicle notwithstanding, parking availability will remain a key issue facing downtown development and success.

One of the keys to managing parking in downtown Sandy is the initiation and completion of recommendations contained within this management study. Fulfilling these recommendations is a key component of implementing a successful downtown parking strategy. While completing the recommendations contained within this report are a great starting point for improving downtown parking, it should be recognized that maintaining a Downtown Parking Advisory Committee (DPAC) is of the utmost importance. The ongoing review of downtown parking issues and recommended strategies for overcoming those issues is of primary importance for the DPAC.

While this study attempted to look at parking in downtown Sandy in a comprehensive way it will be important to continue to monitor these issues into the future.

Section VI: Recommendations

The recommendations contained in this study are based on the conclusions as discussed above. Low cost recommendations with immediate positive results are defined as near-term strategies (Phase 1). Additional mid-term and long-term strategies (Phases 2 and 3) are also recommended for later implementation.

Recommendations:

Phase 1 Implementation: Organize (Immediate to 6 months)

The following strategies are recommended for near-term implementation.

1. Initiate a public awareness campaign regarding the findings of this study that include: 1) educating downtown employees and business owners on the importance of parking in private off-street parking lots, and 2) educating business owners on the importance of assisting their customers in finding available parking.

2. Establish a Downtown Parking Advisory Committee (DPAC) consisting of downtown stakeholders to monitor study goals and implementation projects. The Committee should be tasked with the following:
    - Review downtown parking issues;
    - Review time limited sign and handicapped/ADA sign requests for on-street parking spaces and public parking lots;
    - Review on-street parking space additions and eliminations;
    - Review pedestrian accessibility issues relating to parking, including street crossing placements; and
    - Advise the City Council on implementation strategies.

3. Assign City staff to oversee continued coordination of the DPAC. This position shall coordinate DPAC meetings, monitor the parking district over time and present staff recommendations to the DPAC.

4. Establish a Downtown Parking Fund to direct funds derived from parking into a dedicated fund to cover future public parking improvements.

5. Create a Downtown Parking District that encompasses the study area as defined in this study. This District will define the DPAC commitment area, identify the Downtown Parking Fund allocation area and provide boundaries for a future employee parking permit program.

6. Develop criteria for installing time limited signs and handicapped/ADA signs. Evaluate other areas within the downtown for time limitation potential and necessity.

7. Develop a wayfinding plan that includes the location and design of signs for City owned public parking lots.

8. Research the financial practicality of hiring a part-time parking enforcement officer to monitor public parking areas.

9. Evaluate the need to provide additional on-street ADA parking and evaluate the practicality to modify the existing on-street ADA parking space to meet state standards.

10. Identify the location of curb areas on public streets currently painted yellow and evaluate whether painting should be removed in any location.

11. Coordinate with Sandy Main Street to develop display materials identifying parking and points of interest within the downtown.

Phase 2 Implementation: Initiate (6-24 months)

The following strategies are recommended for mid-term implementation.

12. Convert time limited parking to consistent time limitations and eliminate variations in applicable times. Replace all arrows on signs with a more descriptive identification, such as 'here to driveway'.

13. If applicable, install additional on-street ADA parking spaces at identified locations and modify the existing on-street ADA parking space.

14. Install new parking signs as specified in the Wayfinding Plan.

15. Remove unnecessary yellow painted curbs or paint over needed curbs as identified above.

16. Coordinate with Sandy Transit regarding the designation of a portion of the public parking lot to the south of Pioneer Boulevard and between Bruns Avenue and Scales Avenue as a park-and-ride facility.

17. Initiate a fee-in-lieu option for new parking development in downtown that would allow developers to build at higher densities while providing the City of Sandy with money to purchase land for future off-street parking.

18. Consider initiating an on-street and public off-street employee parking permit program (i.e. paid permits).

19. Consider hiring a part-time parking enforcement officer to monitor public parking areas.

Phase 3 Implementation: Monitor (24 months and beyond)

The following strategies are recommended for long-term implementation.

20. Install additional parking time limitation signs.

21. Lease/acquire strategically located land for use as future public off-street parking.

22. Sponsor employer-based initiatives to encourage employee use of alternate modes of travel and/or car-pools.

23. Further evaluate off-street parking capacity solutions for high demand Blocks 9, 11, 15, 18 and 32.

24. Continue to monitor downtown parking use and function.

Appendices

Appendix A: Downtown Capacity Map West

Appendix A: Downtown Capacity Map East

Appendix B: Parking Inventory Area Land Use Classification Map
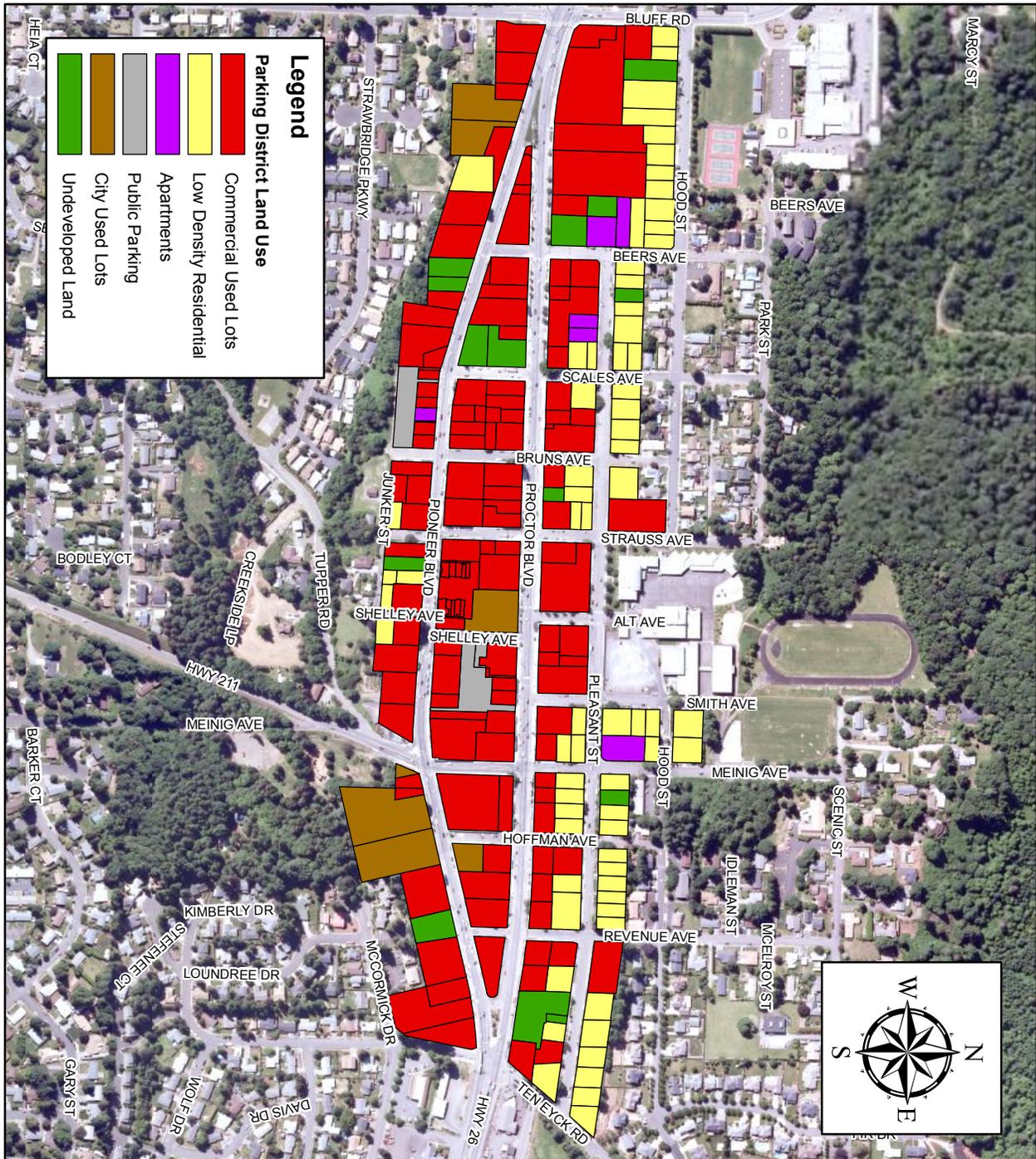
City of Sandy Downtown Parking Survey

39250 Pioneer Boulevard, Sandy, OR 97055

The City of Sandy and Sandy Main Street are conducting a parking study to address the City Council's goal of managing downtown parking. This survey should only take a few minutes and is intended to reveal information, that only you, a downtown Sandy user has knowledge of. Please return the survey by **August 1st** to the above address or the location where the survey was obtained. The survey may also be completed online at: www.ci.sandy.or.us/. Please fill out only one survey per person. If you have any questions or would like additional information, please contact Kelly O'Neill at 503-489-2163 or koneill@cityofsandy.com. Thanks for your time and input.

1. What best defines you as a downtown Sandy user (check only one)?
   - ❑ Downtown business/property owner
   - ❑ Downtown employee
   - ❑ Downtown customer (go to question 3)

2. For business owners and employees, what most accurately classifies your business (check only one)?
   - ❑ Retail (includes convenience stores)
   - ❑ Restaurant (includes taverns)
   - ❑ Personal Services (i.e. hair salon or dentist)
   - ❑ Office (i.e. insurance or real estate)
   - ❑ Office, Government
   - ❑ Other, please explain: _____

3. Where do you typically park (check all that apply)?
   - ❑ On-street along Proctor and Pioneer
   - ❑ On-street along side streets
   - ❑ Off-street in private parking lots
   - ❑ Off-street in public parking lots

4. How many years have you shopped or worked in downtown Sandy?
   - ❑ Less than 1 year
   - ❑ 1 to 5 years
   - ❑ 6 to 10 years
   - ❑ 11 to 15 years
   - ❑ 16 to 20 years
   - ❑ More than 20 years

5. How often do you park in downtown Sandy?
   - ❑ Once or twice a year
   - ❑ Once a month or so
   - ❑ Once or twice a week
   - ❑ Three or more times a week

6. Do you think there is a parking problem in downtown Sandy?
   - ❑ Yes
   - ❑ No (go to question 11)
   - ❑ Unsure

7. If you answered yes to question #6, what best describes the parking problem (check all that apply)?
   - ❑ Not enough spaces
   - ❑ Can't park in spaces for long enough time
   - ❑ Not large enough spaces
   - ❑ Available spaces are too far away from destination
   - ❑ All of the above
   - ❑ Other, please explain: _____

8. If you answered yes to question #6, what location(s) have a parking problem (check all that apply)?
   - ❑ On-street along Proctor
   - ❑ On-street along Pioneer
   - ❑ Off-street in parking lots
   - ❑ Specific Location: _____

9. If you answered yes to question #6, at what time of year is there a parking problem (check all that apply)?
   - ❑ Summer
   - ❑ Winter
   - ❑ Mountain Festival
   - ❑ Other, please explain: _____

10. If you answered yes to question #6, how often is there a parking problem (check only one)?
- ❑ Once in awhile
- ❑ Often
- ❑ Always
- ❑ Other, please explain: _____

11. What day(s) of the week is it most difficult to find a parking space (check all that apply)?
- ❑ Monday
- ❑ Tuesday
- ❑ Wednesday
- ❑ Thursday
- ❑ Friday
- ❑ Saturday
- ❑ Sunday

12. What time(s) of the day is it most difficult to find a parking space (check all that apply)?
- ❑ Before 8:00 AM
- ❑ 8:00 AM to 10:00 AM
- ❑ 10:00 AM to 12:00 PM
- ❑ 12:00 PM to 2:00 PM
- ❑ 2:00 PM to 4:00 PM
- ❑ 4:00 PM to 6:00 PM
- ❑ After 6:00 PM

13. Are you aware there are two City owned downtown public parking lots with free parking?
- ❑ Yes
- ❑ No

14. Do you think parking is adequately identified and easy to find in downtown Sandy?
- ❑ Yes
- ❑ No

15. How far are you willing to walk from a parking space to get to work or to shop/eat?
- ❑ 1 block
- ❑ 2 blocks
- ❑ 3 or more blocks
- ❑ Not willing to walk

16. If you are an employee or business owner, would you be willing to pay a nominal ($5 to $25) yearly downtown employee parking permit fee to help pay for downtown parking maintenance expenses?
- ❑ Yes
- ❑ No
- ❑ Unsure

17. Do you think there should be a parking enforcement officer in downtown Sandy?
- ❑ Yes
- ❑ No
- ❑ Unsure

18. Do you think there should be parking fines for violators in downtown Sandy?
- ❑ Yes
- ❑ No
- ❑ Unsure

19. Do you have any comments to address parking in downtown Sandy?

_____

_____

_____

If you are interested in finding out more about Sandy Main Street or interested in receiving an electronic copy of the parking study results, please leave your name and email address below:

_____

Q1. What best defines you as a downtown Sandy user?

Answer Options	Response Percent	Response Count
Downtown business/property owner	11.4%	32
Downtown employee	35.7%	100
Downtown customer	52.9%	148
	answered question	280
	skipped question	0

Q2. For business owners and employees, what most accurately classifies your business?

Answer Options	Response Percent	Response Count
Retail (includes convenience stores)	17.5%	20
Restaurant (includes taverns)	13.2%	15
Personal Services (i.e. hair salon or dentist)	14.00%	16
Office (i.e. insurance or real estate)	24.6%	28
Office, Government	30.7%	35
Comments		16
	answered question	114
	skipped question	166

Q3. Where do you typically park (check all that apply)?

Answer Options	Response Percent	Response Count
On-street along Proctor and Pioneer	36.8%	99
On-street along side streets	31.6%	85
Off-street in private parking lots	44.2%	119
Off-street in public parking lots	43.1%	116
	answered question	269
	skipped question	11

Q4. How many years have you shopped or worked in downtown Sandy?

Answer Options	Response Percent	Response Count
Less than 1 year	5.5%	15
1 to 5 years	22.5%	61
6 to 10 years	19.9%	54
11 to 15 years	11.4%	31
16 to 20 years	11.8%	32
More than 20 years	28.8%	78
	answered question	271
	skipped question	9

Q5. How often do you park in downtown Sandy?

Answer Options	Response Percent	Response Count
Once or twice a year	1.5%	4
Once a month or so	11.8%	32
Once or twice a week	25.8%	70
Three or more times a week	60.9%	165
	answered question	271
	skipped question	9

Q6. Do you think there is a parking problem in downtown Sandy?

Answer Options	Response Percent	Response Count
Yes	54.4%	147
No	31.5%	85
Unsure	14.1%	38
	answered question	270
	skipped question	10

Q7. What best describes the parking problem (check all that apply)?

Answer Options	Response Percent	Response Count
Not enough spaces	70.8%	114
Can't park in spaces for long enough time	10.6%	17
Not large enough spaces	18.6%	30
Available spaces are too far away from destination	44.7%	72
All of the above	18.6%	30
Comments		33
	answered question	161
	skipped question	119

Q8. What location(s) have a parking problem (check all that apply)?

Answer Options	Response Percent	Response Count
On-street along Proctor	67.1%	108
On-street along Pioneer	68.3%	110
Off-street in parking lots	59.0%	95
Comments		28
	answered question	161
	skipped question	119

Q9. At what time of year is there a parking problem (check all that apply)?

Answer Options	Response Percent	Response Count
Summer	80.4%	123
Winter	60.1%	92
Mountain Festival	85.0%	130
Comments		39
	answered question	153
	skipped question	127

Q10. How often is there a parking problem?

Answer Options	Response Percent	Response Count
Once in awhile	24.3%	41
Often	48.5%	82
Always	27.2%	46
Comments		10
	answered question	169
	skipped question	111

Q11. What day(s) of the week is it most difficult to find a parking space (check all that apply)?

Answer Options	Response Percent	Response Count
Monday	55.7%	103
Tuesday	53.5%	99
Wednesday	53.5%	99
Thursday	55.7%	103
Friday	73.0%	135
Saturday	47.6%	88
Sunday	24.3%	45
	answered question	185
	skipped question	95

Q12. What time(s) of the day is it most difficult to find a parking space (check all that apply)?

Answer Options	Response Percent	Response Count
Before 8:00 AM	3.0%	6
8:00 AM to 10:00 AM	36.4%	72
10:00 AM to 12:00 PM	51.0%	101
12:00 PM to 2:00 PM	62.1%	123
2:00 PM to 4:00 PM	57.1%	113
4:00 PM to 6:00 PM	47.0%	93
After 6:00 PM	18.7%	37
	answered question	198
	skipped question	82

Q13. Are you aware there are two City owned downtown public parking lots with free parking?

Answer Options	Response Percent	Response Count
Yes	61.7%	158
No	38.3%	98
	answered question	256
	skipped question	24

Q14. Do you think parking is adequately identified and easy to find in downtown Sandy?

Answer Options	Response Percent	Response Count
Yes	24.4%	62
No	75.6%	192
	answered question	254
	skipped question	26

Q15. How far are you willing to walk from a parking space to get to work or to shop/eat?

Answer Options	Response Percent	Response Count
1 block	27.1%	70
2 blocks	33.3%	86
3 or more blocks	29.5%	76
Not willing to walk	10.1%	26
	answered question	258
	skipped question	22

Q16. If you are an employee or business owner, would you be willing to pay a nominal ($5 to $25) yearly downtown employee parking permit fee to help pay for downtown parking maintenance expenses?

Answer Options	Response Percent	Response Count
Yes	17.3%	32
No	52.4%	97
Unsure	30.3%	56
	answered question	185
	skipped question	95

Q17. Do you think there should be a parking enforcement officer in downtown Sandy?

Answer Options	Response Percent	Response Count
Yes	24.9%	63
No	53.0%	134
Unsure	22.1%	56
	answered question	253
	skipped question	27

Q18. Do you think there should be parking fines for violators in downtown Sandy?

Answer Options	Response Percent	Response Count
Yes	45.0%	116
No	33.7%	87
Unsure	21.3%	55
	answered question	258
	skipped question	22

Survey comments for Question 19 of the survey:

8/2/2011 - No disabled spot on Shelly.

8/2/2011 - Lack of disable parking spot.

8/2/2011 - Cops give out stupid parking tickets for parking by High School where signs say you must have parking permit, but don't specify city or school permit.

8/2/2011 - There is definitely not enough handicap parking in town. Remember we are all getting older :)

8/2/2011 - I'm a senior citizen - don't drive but I do take the bus 2 or more times a day all over town.

8/2/2011 - Need to have a lot for businesses and employees. They should not park in front of their businesses, and encourage employees to park elsewhere.

8/2/2011 - Build a tunnel for through traffic on Highway 26, starting at 362nd to Ten Eyck. Build easy to find walking and biking pathways away from main road. Sandy should have a functioning public health clinic before more tax money are spent on facades.

8/2/2011 - Of course, there is a problem parking in downtown Sandy and in the neighborhood surrounding Mt. Festival. It's part of the whole! Any parking problems depend on the weather (snow, ice) or the traffic which we cannot control. At times, many times, out of area traffic follows too close or too fast which makes it difficult to slow down/pull over to park or turn off Proctor or Pioneer. One sign which points to parking across from Stephanie's points to a one way street. Need signage on both sides of a street, also signs that say parking is for example, "one block on right, etc.". If businesses are complaining about lack of sales because of parking, perhaps, they are simply not selling what people want - something like chocolate! Out of area traffic mostly sees Sandy as an annoyance (as) they want to pass through as quickly as possible.

8/2/2011 - When activities are taking place in Meinig Park parking is difficult. If people would offer their driveways it would be helpful.

8/2/2011 - Employee education plus incentive.

8/2/2011 - I never find parking to be a problem except at the library - old and current location.

8/1/2011 - I've planned shopping trips downtown in AM before noon or I'd pass on stopping/shopping. If I park on street during rush hrs, traffic backed up way beyond downtown, it's a pain to try to pull out onto street. When I go to the book store, I would park in the side parking lot until the last time I went and saw that customer parking was not allowed! How inconvenient. Sometimes the whole street parking is full of motorcycles, customers of the bar. That's when I decide not to stop there.

8/1/2011 - 50 years in Sandy I know the way around parking problems. It is the newbies and drive-throughs you need to hear from.

8/1/2011 - The only parking problem I see is that dry cleaner employees need to park in their own parking lot. We get a lot of complaints from customers over here at Wong's King because the dry cleaner people park in our parking lot and take up all the street parking around here.

8/1/2011 - Parking is fine; sorry about a bigger problem, maybe get rid of some of the tweekers in this town. They hang out by the library. If you want money from transportation, charge bicyclists a tax - they use our road also.

8/1/2011 - Unauthorized users of handicap parking (permits).

8/1/2011 - I've lived in Sandy over 30 years and there is no parking problem. That is a total no brainer to anyone who utilizes the city. I can't believe you are spending time on an issue like this,

just look around Sandy any time of any day and you will see there is always plenty of parking. Why don't you spend your time trying to find ways to cut city spending instead of increasing it?

8/1/2011 - I believe parking along Proctor and Pioneer should be marked limited time parking at busy weekday hours. Thanks for doing this survey.

8/1/2011 - I don't think you should waste tax dollars to hire one officer to man parking when the officers we have can't do their jobs right now.

8/1/2011 - Some buildings have a larger employee parking shortage than others, this open spills onto other building, parking spots.

8/1/2011 - We don't need or want the government involved in parking! People can figure out how to do it. If we have to walk a little farther than maybe that will help with our obesity problem.

8/1/2011 - Parking should not be allowed along side streets near the schools in order to allow for better flow of traffic all times of the year. The streets are to narrow to allow parking on both sides and for two way traffic.

8/1/2011 - I have only had problems finding parking during the Sandy Mountain Days, but that is expected. I think a parking enforcement officer should be employed only if the revenue generated from the parking fines would justify the salary of the officer.

7/31/2011 - No, but on the bus depot at the square, it's a very bad idea. Someone was not thinking when they thought of it or it is very bad planning on the city's part.

7/30/2011 - Money was wasted on wide sidewalks, which decreased the parking tremendously. The city is spending irresponsibly on frivolous projects.

7/30/2011 - I have lived in Sandy for over 20 years and parking gets worse each year.

7/30/2011 - Sandy does not need a parking officer. The city needs a sidewalk officer since there are way more sidewalks that are obstructed than a parking problem. There are lots near downtown that are wasted, such as the lot west of Sandy Grade. The lot across the street from AEC is for WHO to park? ACE hardware is notorious for slapping notices on anyone parking in their lot. This is a real turnoff for not wanting to be an ACE customer. Library parking is the main lot we use and sometimes it's crowded/hard to get out of due to weird parking lot design. In short, downtown parking sucks!

7/29/2011 - I didn't even realize there is a parking problem. I walk into town or park at the stores, Fred Meyers, Walgreen's Parking lots when shopping and I decide to drive.

7/29/2011 - If there are parking fines, the amount should not exceed ฤ but be no less than ŭ.

7/28/2011 - Parking adjacent to business should be allowed only 1 or 2 hours, depending on the business. Park and ride should be offered so people are not parking in the business area and leaving their car all day.

7/28/2011 - Most businesses provide parking. However, the library moved into temp quarters, and their patrons abuse their parking rights. The businesses that reside at the same location as the "library" seriously take it in the shorts. I'm not sure where our customers are supposed to be parking.

7/27/2011 - Parking is not properly monitored or planned. We have more visitors than spots. My house is surrounded by strangers.

7/27/2011 - Some businesses that have many employees take a lot of parking that customers could use and some of them park alongside streets in residential areas. I have a problem with people avoiding the main drag which is posted 25mph, that some people ignore, and speed through residential streets that are not posted unless near a school (Pleasant Street).

7/27/2011 - You have ruined any parking in Sandy and created more problems for businesses and local people living here to get anywhere in town. Plus your traffic lights suck also!

7/27/2011 - Where will you shop if you park downtown?

7/27/2011 - Am a SAM bus rider. People should read area papers to know what area is having roadwork or building - such as the recent library area. Most walkers don't have a problem with parking.

7/27/2011 - Improve signage where free parking is available.

7/27/2011 - Parking is not usually a problem - traffic can be though. Sandy should be safer to walk and bike in.

7/27/2011 - Public parking needs better signs.

7/26/2011 - Enforcement: Perhaps for people who block driveways, or leave vehicles parked for extended periods (days, for example). Otherwise, nope. We don't need it.

7/26/2011 - Parking wouldn't be a problem if it wasn't about getting in and out of small spaces/lots (obstructed view) and trying to get into traffic that is unpredictable (doesn't flow smoothly) ~ Nice job on the electronic survey !!

7/26/2011 - no

7/26/2011 - Good luck with this one!

7/25/2011 - I go to plays at the Sandy Actors Theater that take longer than 2 hrs....I feel like a law breaker.

7/25/2011 - Don't allow parking along one-way streets near corners as it's hard to see to turn, esp. Pioneer and Proctor.

7/25/2011 - Need more parking all over.

7/25/2011 - Streets are becoming increasingly hazardous, especially for elderly and disabled and children. Parking isn't any better and at certain times during the day getting back onto the street when parked is a real challenge.

7/25/2011 - 1. Joe's Donuts patron parking often blocks the alley, and creates a hazard along Pioneer. 2. Visibility is dangerous at several locations when drivers try to merge onto Proctor.

7/22/2011 - Only time parking seems to be a problem is during public events. I don't feel there is a problem with parking.

7/22/2011 - More parking in the middle, not behind business and fields.

7/21/2011 - I have never had a problem, but I also don't mind walking.

7/21/2011 - We have the business Pioneer Barber Shop the public parking is right behind are business but a lot of our customer don't even know it is there. They need bigger signs saying there is free public parking.

7/21/2011 - People should not be able to park in front of businesses all day, but people should also be able to walk a little bit. 5 blocks is good for you, enjoy that fresh air!

7/21/2011 - I assume the company I work for pays taxes to the city of Sandy. I assume larger companies with more employees pay more taxes. If a retail owner doesn't want an office worker to park in front of their store, maybe they can lease the parking space(s) from the city and post signs "Parking for Betty's Baskets only".

7/20/2011 - Parking enforcement is often a safety issue and a law enforcement issue and should therefore be considered a basic public service.

7/20/2011 - It's a waste of money to have parking police, but if a police officer sees a violation, that violation should be ticketed. Don't waste taxpayer money on a parking police officer or meter maid. If you create another position, I'd rather have another full time cop.

7/20/2011 - My company has a private lot but it is across Pioneer. I have been almost hit as a pedestrian too many times to cross. Also, I have medical issues that aren't bad enough for a handicap tag, but make it difficult to walk at times.

7/20/2011 - AEC has a fantastic private lot. If there are parking issues, offer to pay AEC to use their lot outside of company work hours.

7/20/2011 - It will not do Sandy any good to have 100,000 or more cars traveling through if you cannot tempt them to stop with convenient parking and nice boutique shops grouped in appealing sites with easy access. Once a car has stopped in Sandy they are more likely to use other retail opportunities close by.

7/20/2011 - no

7/20/2011 - My customers find it difficult to park near my business as the large (employees) next door use up all the parking spaces and ignore the one hour parking limit sign.

7/19/2011 - There is plenty of parking, people are too lazy to walk.

7/18/2011 - Sandy does not have a parking problem, maybe a traffic problem on weekends but no shortage of parking...not an expense the city should take on after that school budget passed.

7/18/2011 - I have a shady street so people park in front of my house when downtown. Often I have no place for visitors or family to park. My mail box is frequently blocked and I do not get my mail.... Sandy Mountain festival is the worse time but that is one weekend of the year. I feel there are far greater issues the City of Sandy should spend time and money on!

7/18/2011 - If it is raining, I am not willing to walk very far at all. When I think of parking infractions, I think of people who hog one space or illegally park in handicap parking or block emergency parking or lanes or driveways other similar.

7/18/2011 - Traffic is terrible - fast and busy; makes it more difficult to navigate to a parking place near your destination.

7/18/2011 - We're small, personal and like it that way. No need to police our parking. Waste of $$$ and a rude gesture to our visitors.

7/18/2011 - Public parking lots need better signage.

7/18/2011 - We are not downtown Portland therefore, we should not have parking enforcement.

7/18/2011 - We the people of Sandy need freedom. Not more poor excuses for slavery. If there is no victim of a crime there is no crime. We do not need more laws to generate revenue for the City of Sandy in the name of victimless crimes! Read the Oregon state Constitution. Let me know if I am in error.

7/18/2011 - I frequent several businesses' downtown and they have a very hard time getting people to stop due to the parking situation. I would hate for some of our local businesses to go under because of this. There is so much traffic coming through Sandy to and from the mountain, I believe if we had better parking options people would be more likely to stop at these business' and it could only be a plus for the entire city of Sandy.

7/18/2011 - 99% of the time parking is readily available. I have never perceived of a problem in the time we have lived and shopped in Sandy.

7/18/2011 - I think the biggest problems with parking are: 1. lack of signs - no one knows where there is parking and 2. A perceived lack of parking even more than a real lack of parking. I can always find a space, it may just take a trip around the block, or may require a little walk. Would

love a parking structure or more signs to inform people where there is parking and what is "public" rather than private parking.

7/18/2011 - Traffic volume is probably the biggest concern. The new light at Proctor and Alt is not effective, and doesn't help the problem. Traffic makes me avoid downtown altogether whenever possible.

7/17/2011 - Add large well placed signage to direct people to existing public parking. Enlist business owners help to have their employees park where they are not using short term customer parking. Enforce timed parking zones.

7/17/2011 - As a rural community, parking spaces should better accommodate larger vehicles i.e. full size pick-ups and SUV's. Furthermore, as an owner of a box-van, space is non-existent for my business truck when I come into town to conduct business. Often I am forced to park in areas that limit visibility to pedestrians and other motorists.

7/17/2011 - Just need more signage to direct folks to the lots.

7/16/2011 - What a dumb survey.

7/15/2011 - Sandy area merchants need to be able to attract customers, as I stated in a previous answer, the way to get traffic passing through town to stop is to make parking convenient. The idea that installing stop lights in the middle of town will attract customers to downtown businesses will not work.

7/15/2011 - I think Sandy is doing a really good job with parking options. I think the most challenging times are during special events and festivals. The influx of "out of town" folks makes it difficult.

7/14/2011 - The cross streets have curbs that protrude into both Pioneer and Proctor Blvds. Why? You've lost parking spaces in front of businesses; side street parking is lost also because of the wide curbs. The new "Sandy Style" construction has such wide sidewalks that you cannot park (Proctor Blvd.) anywhere. Businesses are losing customers who just want to stop for a moment to get a cup of coffee, a newspaper, etc. because there is no place to park.

7/14/2011 - Not clear that there is parking BEHIND businesses on Pioneer (Yoga, Thai, etc.) That could be made clearer.

7/14/2011 - I think that my biggest complaint is that other business owners are very inconsiderate of where they are parking (in potential spots for our clients) for more than 8 hours a day, everyday. Although I do have to say that our one hour parking out front has helped greatly.

7/14/2011 - Need to find easily found park & ride.

7/13/2011 - The public parking lots should have better signage to help people be aware of them as they're driving by. Also, more public lots are needed so people won't park in private lots.

7/13/2011 - Fix the mess that has been created with the stoplight by CCB and remove the "no turn on red" sign while cars are waiting to turn left onto Proctor from the library. It's absolutely ludicrous! And cars wait for no reason when traffic is clear.

7/12/2011 - If the public lots were more prominently identified and if business owners required their employees to use those spaces away from the ones on Pioneer and Proctor the problem would be very close to being solved.

7/12/2011 - People complain sometimes, but parking generally isn't much of a problem except for the Mt. Festival days. I ride my bike when it's not raining (& I'm old, lol) to avoid adding to traffic and to help stay in shape, so parking is not a problem on those days. Yet, it's scary to ride on Pioneer and Proctor.

7/12/2011 - Not willing to pay fee for downtown parking as there's already a fee included in the rent where our office is located.

7/12/2011 - I don't mind walking several blocks, but I do NOT want to cross the highway. Parking in the core area is limited, and I don't know which days are worse than others, but it's very often a problem.

7/12/2011 - Where is the second city lot in Downtown? Only know of the one behind Otto's Ski. If the second one is the one behind AEC -- that is NOT useable during the week -- it is filled by AEC and the tenants in the area.

7/12/2011 - More bike parking in town.

7/12/2011 - I don't think there's a problem with the number of spaces, only that people don't know about the public parking and that maybe there should be some time limits on the public lot in the center of town. I don't think we need to add any more parking though. The hardest place to park is the library.

7/12/2011 - Identify who the public lots are intended for. Business customer parking, employee, or city employee parking.

7/12/2011 - Sandy has a lot of traffic going through it daily. However most people refuse to stop if there is not parking directly in front, or more then a block away.

7/12/2011 - Small parking structures for employees who park all day? Visitors/customers need easy access or they will strictly use one-stop shopping stores.

7/12/2011 - The worst parking seems to be daytime hours Monday through Friday, however, if it's your intent for people to spend more time walking the town and visiting shops and restaurants on the weekend, weekends would become just as bad. Some more noticeable signage for the public lots would be helpful. Also, businesses that are closed on the weekends (banks) could maybe offer their lots.

7/12/2011 - It would be great if all the lots between Pioneer and Proctor were available for folks shopping/obtaining services in the Sandy area. Employee parking should be moved out of these areas. This is especially true in the lot between Ace Hardware to the Library. The lot next to the florist shop should be open to the public and it would be great if the empty lot by Red Apple had parking available until they do something else with the space.

7/12/2011 - No real problems with street or lot parking, as long as people are prepared to walk a block or two. However, because of traffic in downtown, hard to get out of a street parking space.

7/12/2011 - None at this time.

Appendix D: Parking Capacity Spreadsheets

Parking Occupany by Block: August 23, 2011 at 2-4

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	4	48	8.33%	56	142	39.44%		
2	3	20	15.00%	8	21	38.10%		
3A	1	23	4.35%	18	92	19.57%		
3B	5	23	21.74%	33	103	32.04%		
4	7	36	19.44%	10	37	27.03%		
5	9	32	28.13%	22	58	37.93%		
6	2	18	11.11%	6	24	25.00%		
7	2	17	11.76%	2	15	13.33%		
8	11	29	37.93%	6	24	25.00%		
9	14	29	48.28%	27	72	37.50%		
10	2	12	16.67%	1	13	7.69%		
11	14	27	51.85%	25	72	34.72%		
12	6	21	28.57%	9	24	37.50%		
13	2	18	11.11%	0	46	0.00%		
14	10	26	38.46%	11	23	47.83%		
15	21	48	43.75%	27	86	31.40%		
16	4	8	50.00%	9	18	50.00%		
17	3	13	23.08%	23	69	33.33%		
18	14	35	40.00%	95	111	85.59%		
19	3	20	15.00%	37	67	55.22%		
20	2	18	11.11%	7	26	26.92%		
21	0	21	0.00%	9	19	47.37%		
22	0	8	0.00%	2	13	15.38%		
23	2	11	18.18%	1	8	12.50%		
24	4	23	17.39%	16	33	48.48%		
25	3	26	11.54%	26	70	37.14%		
26A	4	17	23.53%	41	68	60.29%		
26B	1	13	7.69%	8	47	17.02%		
27	3	19	15.79%	11	43	25.58%		
28	1	30	3.33%	11	41	26.83%		
29	2	12	16.67%	5	17	29.41%		
30	1	24	4.17%	5	45	11.11%		
31	4	38	10.53%	21	76	27.63%		
32	1	10	10.00%	3	4	75.00%		
	165	773		591	1627			

Parking Occupany by Block: August 25, 2011 at 8-10

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	4	48	8.33%	32	142	22.54%		
2	6	20	30.00%	0	21	0.00%		
3A	0	23	0.00%	14	92	15.22%		
3B	0	23	0.00%	22	103	21.36%		
4	1	36	2.78%	3	37	8.11%		
5	4	32	12.50%	11	58	18.97%		
6	1	18	5.56%	6	24	25.00%		
7	1	17	5.88%	6	15	40.00%		
8	5	29	17.24%	5	24	20.83%		
9	12	29	41.38%	7	72	9.72%		
10	1	12	8.33%	1	13	7.69%		
11	15	27	55.56%	25	72	34.72%		
12	3	21	14.29%	8	24	33.33%		
13	4	18	22.22%	0	46	0.00%		
14	5	26	19.23%	11	23	47.83%		
15	9	48	18.75%	8	86	9.30%		
16	2	8	25.00%	9	18	50.00%		1
17	1	13	7.69%	18	69	26.09%		
18	15	35	42.86%	76	111	68.47%		
19	2	20	10.00%	26	67	38.81%		
20	0	18	0.00%	6	26	23.08%		
21	1	21	4.76%	4	19	21.05%		
22	1	8	12.50%	3	13	23.08%		
23	2	11	18.18%	1	8	12.50%		
24	1	23	4.35%	17	33	51.52%		
25	3	26	11.54%	14	70	20.00%		
26A	3	17	17.65%	14	68	20.59%		
26B	0	13	0.00%	3	47	6.38%		
27	0	19	0.00%	5	43	11.63%		
28	0	30	0.00%	13	41	31.71%		
29	1	12	8.33%	5	17	29.41%		
30	2	24	8.33%	6	45	13.33%		
31	9	38	23.68%	16	76	21.05%		
32	3	10	30.00%	4	4	100.00%		
	117	773		399	1627			

Parking Occupany by Block: August 25, 2011 at 10-12

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	5	48	10.42%	50	142	35.21%	1	
2	6	20	30.00%	1	21	4.76%		
3A	2	23	8.70%	23	92	25.00%	2	
3B	0	23	0.00%	24	103	23.30%		
4	0	36	0.00%	6	37	16.22%		
5	12	32	37.50%	18	58	31.03%		
6	3	18	16.67%	6	24	25.00%		
7	1	17	5.88%	4	15	26.67%		
8	7	29	24.14%	5	24	20.83%		
9	15	29	51.72%	27	72	37.50%		
10	2	12	16.67%	1	13	7.69%		
11	18	27	66.67%	31	72	43.06%		
12	7	21	33.33%	11	24	45.83%		
13	3	18	16.67%	0	46	0.00%		
14	7	26	26.92%	12	23	52.17%		
15	18	48	37.50%	35	86	40.70%		
16	7	8	87.50%	11	18	61.11%		
17	8	13	61.54%	18	69	26.09%		
18	18	35	51.43%	103	111	92.79%		
19	2	20	10.00%	31	67	46.27%		
20	2	18	11.11%	9	26	34.62%		
21	2	21	9.52%	7	19	36.84%	1	
22	1	8	12.50%	3	13	23.08%		
23	2	11	18.18%	1	8	12.50%		
24	5	23	21.74%	14	33	42.42%		
25	6	26	23.08%	27	70	38.57%		
26A	0	17	0.00%	45	68	66.18%		
26B	0	13	0.00%	2	47	4.26%		
27	2	19	10.53%	17	43	39.53%		
28	4	30	13.33%	14	41	34.15%		
29	2	12	16.67%	4	17	23.53%		
30	2	24	8.33%	9	45	20.00%	1	
31	6	38	15.79%	16	76	21.05%		
32	1	10	10.00%	3	4	75.00%		
	176	773		588	1627			

Parking Occupany by Block: August 29, 2011 at 8-10

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	18	48	37.50%	43	142	30.28%		
2	5	20	25.00%	3	21	14.29%		
3A	0	23	0.00%	21	92	22.83%		
3B	0	23	0.00%	28	103	27.18%		
4	1	36	2.78%	3	37	8.11%		
5	7	32	21.88%	13	58	22.41%		
6	3	18	16.67%	7	24	29.17%		
7	1	17	5.88%	4	15	26.67%		
8	3	29	10.34%	1	24	4.17%		
9	8	29	27.59%	6	72	8.33%		
10	1	12	8.33%	1	13	7.69%		
11	18	27	66.67%	24	72	33.33%		
12	4	21	19.05%	11	24	45.83%		
13	4	18	22.22%	0	46	0.00%		
14	9	26	34.62%	7	23	30.43%		
15	14	48	29.17%	18	86	20.93%		
16	2	8	25.00%	10	18	55.56%		
17	3	13	23.08%	23	69	33.33%		
18	16	35	45.71%	92	111	82.88%	2	
19	2	20	10.00%	30	67	44.78%		
20	0	18	0.00%	4	26	15.38%		
21	0	21	0.00%	6	19	31.58%	1	
22	0	8	0.00%	1	13	7.69%		
23	1	11	9.09%	1	8	12.50%		
24	2	23	8.70%	13	33	39.39%		
25	2	26	7.69%	16	70	22.86%	1	
26A	2	17	11.76%	30	68	44.12%		
26B	0	13	0.00%	5	47	10.64%		
27	1	19	5.26%	8	43	18.60%		
28	2	30	6.67%	10	41	24.39%		
29	2	12	16.67%	6	17	35.29%		
30	1	24	4.17%	9	45	20.00%		
31	7	38	18.42%	14	76	18.42%		
32	1	10	10.00%	5	4	125.00%		
	140	773		473	1627			

Parking Occupany by Block: August 29, 2011 at 2-4

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	6	48	12.50%	59	142	41.55%		
2	5	20	25.00%	6	21	28.57%		
3A	0	23	0.00%	26	92	28.26%		
3B	3	23	13.04%	36	103	34.95%		
4	5	36	13.89%	8	37	21.62%		
5	8	32	25.00%	18	58	31.03%		
6	2	18	11.11%	9	24	37.50%		
7	1	17	5.88%	2	15	13.33%		
8	3	29	10.34%	11	24	45.83%		
9	10	29	34.48%	21	72	29.17%		
10	0	12	0.00%	1	13	7.69%		
11	13	27	48.15%	25	72	34.72%		
12	3	21	14.29%	11	24	45.83%		
13	5	18	27.78%	0	46	0.00%		
14	10	26	38.46%	9	23	39.13%		
15	14	48	29.17%	34	86	39.53%		
16	8	8	100.00%	13	18	72.22%		
17	7	13	53.85%	27	69	39.13%		
18	16	35	45.71%	82	111	73.87%	2	
19	3	20	15.00%	32	67	47.76%		
20	0	18	0.00%	8	26	30.77%		
21	2	21	9.52%	6	19	31.58%	1	
22	0	8	0.00%	3	13	23.08%		
23	1	11	9.09%	2	8	25.00%		
24	3	23	13.04%	16	33	48.48%		
25	3	26	11.54%	41	70	58.57%	1	
26A	3	17	17.65%	35	68	51.47%		
26B	1	13	7.69%	5	47	10.64%		
27	0	19	0.00%	12	43	27.91%		
28	3	30	10.00%	6	41	14.63%		
29	1	12	8.33%	5	17	29.41%		
30	2	24	8.33%	10	45	22.22%		
31	4	38	10.53%	21	76	27.63%		
32	3	10	30.00%	5	4	125.00%		
	148	773		605	1627			

Parking Occupany by Block: August 31, 2011 at 12-2

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	6	48	12.50%	48	142	33.80%		1
2	10	20	50.00%	7	21	33.33%		
3A	0	23	0.00%	42	92	45.65%		
3B	6	23	26.09%	30	103	29.13%		
4	9	36	25.00%	7	37	18.92%		
5	9	32	28.13%	22	58	37.93%		
6	1	18	5.56%	6	24	25.00%		
7	2	17	11.76%	2	15	13.33%		
8	8	29	27.59%	7	24	29.17%		
9	15	29	51.72%	22	72	30.56%		
10	3	12	25.00%	2	13	15.38%		
11	15	27	55.56%	22	72	30.56%		
12	7	21	33.33%	9	24	37.50%		
13	5	18	27.78%	0	46	0.00%		
14	14	26	53.85%	11	23	47.83%		
15	19	48	39.58%	29	86	33.72%		1
16	7	8	87.50%	16	18	88.89%		
17	7	13	53.85%	28	69	40.58%		
18	18	35	51.43%	85	111	76.58%	4	
19	6	20	30.00%	24	67	35.82%		
20	3	18	16.67%	10	26	38.46%		
21	1	21	4.76%	7	19	36.84%	1	
22	0	8	0.00%	2	13	15.38%		
23	2	11	18.18%	2	8	25.00%		
24	4	23	17.39%	15	33	45.45%		
25	4	26	15.38%	28	70	40.00%		
26A	4	17	23.53%	42	68	61.76%		
26B	0	13	0.00%	5	47	10.64%		
27	1	19	5.26%	14	43	32.56%		
28	6	30	20.00%	12	41	29.27%		
29	2	12	16.67%	5	17	29.41%		
30	4	24	16.67%	7	45	15.56%		
31	5	38	13.16%	14	76	18.42%		2
32	0	10	0.00%	3	4	75.00%		
	203	773		585	1627			

Parking Occupany by Block: September 7, 2011 at 10-12

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	3	48	6.25%	52	142	36.62%	1	2
2	3	20	15.00%	3	21	14.29%		
3A	1	23	4.35%	37	92	40.22%		1
3B	1	23	4.35%	29	103	28.16%		
4	2	36	5.56%	3	37	8.11%		
5	11	32	34.38%	19	58	32.76%		
6	0	18	0.00%	8	24	33.33%		
7	0	17	0.00%	4	15	26.67%		
8	5	29	17.24%	4	24	16.67%		
9	16	29	55.17%	25	72	34.72%		
10	0	12	0.00%	2	13	15.38%		
11	16	27	59.26%	20	72	27.78%		
12	9	21	42.86%	11	24	45.83%		
13	8	18	44.44%	0	46	0.00%		
14	9	26	34.62%	15	23	65.22%		
15	21	48	43.75%	36	86	41.86%		1
16	4	8	50.00%	9	18	50.00%		
17	7	13	53.85%	27	69	39.13%		
18	20	35	57.14%	94	111	84.68%	4	
19	4	20	20.00%	30	67	44.78%		
20	2	18	11.11%	9	26	34.62%		
21	2	21	9.52%	5	19	26.32%	1	
22	0	8	0.00%	1	13	7.69%		
23	1	11	9.09%	3	8	37.50%		
24	4	23	17.39%	15	33	45.45%		
25	4	26	15.38%	36	70	51.43%	1	
26A	5	17	29.41%	31	68	45.59%		
26B	0	13	0.00%	2	47	4.26%		
27	3	19	15.79%	14	43	32.56%		
28	5	30	16.67%	19	41	46.34%		
29	3	12	25.00%	3	17	17.65%		
30	4	24	16.67%	5	45	11.11%		
31	5	38	13.16%	15	76	19.74%		
32	1	10	10.00%	3	4	75.00%		
	179	773		589	1627			

Parking Occupancy by Block: September 9, 2011 at 12-2

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	5	48	10.42%	55	142	38.73%		
2	3	20	15.00%	7	21	33.33%		
3A	0	23	0.00%	39	92	42.39%	2	
3B	3	23	13.04%	28	103	27.18%		
4	5	36	13.89%	17	37	45.95%		
5	12	32	37.50%	19	58	32.76%		
6	0	18	0.00%	7	24	29.17%		
7	0	17	0.00%	2	15	13.33%		
8	18	29	62.07%	10	24	41.67%		
9	18	29	62.07%	26	72	36.11%		
10	2	12	16.67%	1	13	7.69%		
11	16	27	59.26%	15	72	20.83%		
12	8	21	38.10%	11	24	45.83%		
13	5	18	27.78%	0	46	0.00%		
14	8	26	30.77%	10	23	43.48%	1:on-street	
15	10	48	20.83%	33	86	38.37%		1
16	2	8	25.00%	8	18	44.44%		
17	6	13	46.15%	25	69	36.23%		
18	15	35	42.86%	91	111	81.98%	1	
19	5	20	25.00%	34	67	50.75%		
20	2	18	11.11%	9	26	34.62%		
21	1	21	4.76%	4	19	21.05%	1	
22	0	8	0.00%	1	13	7.69%		
23	1	11	9.09%	3	8	37.50%		
24	6	23	26.09%	10	33	30.30%		
25	3	26	11.54%	20	70	28.57%		
26A	4	17	23.53%	29	68	42.65%		
26B	0	13	0.00%	6	47	12.77%		
27	2	19	10.53%	10	43	23.26%		
28	11	30	36.67%	15	41	36.59%		
29	2	12	16.67%	6	17	35.29%		
30	6	24	25.00%	18	45	40.00%	1	
31	5	38	13.16%	30	76	39.47%		
32	3	10	30.00%	3	4	75.00%		
	187	773		602	1627			

Parking Occupany by Block: September 9, 2011 at 4-6

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	2	48	4.17%	55	142	38.73%		1
2	4	20	20.00%	5	21	23.81%		
3A	0	23	0.00%	28	92	30.43%		
3B	6	23	26.09%	36	103	34.95%		
4	0	36	0.00%	13	37	35.14%		
5	19	32	59.38%	21	58	36.21%		
6	1	18	5.56%	8	24	33.33%		
7	0	17	0.00%	3	15	20.00%		
8	14	29	48.28%	14	24	58.33%	1	
9	10	29	34.48%	22	72	30.56%		
10	1	12	8.33%	2	13	15.38%		
11	9	27	33.33%	20	72	27.78%		
12	12	21	57.14%	11	24	45.83%		
13	1	18	5.56%	0	46	0.00%		
14	6	26	23.08%	10	23	43.48%		
15	14	48	29.17%	39	86	45.35%		1
16	2	8	25.00%	10	18	55.56%		
17	8	13	61.54%	21	69	30.43%		
18	11	35	31.43%	58	111	52.25%	3	
19	0	20	0.00%	32	67	47.76%		
20	2	18	11.11%	5	26	19.23%		
21	0	21	0.00%	3	19	15.79%	1	
22	0	8	0.00%	2	13	15.38%		
23	1	11	9.09%	3	8	37.50%		
24	0	23	0.00%	15	33	45.45%		
25	2	26	7.69%	26	70	37.14%	1	
26A	2	17	11.76%	27	68	39.71%	1	
26B	0	13	0.00%	6	47	12.77%		
27	4	19	21.05%	6	43	13.95%		
28	3	30	10.00%	10	41	24.39%		
29	2	12	16.67%	5	17	29.41%		
30	1	24	4.17%	8	45	17.78%		
31	8	38	21.05%	17	76	22.37%		
32	2	10	20.00%	2	4	50.00%		
	147	773		543	1627			

Parking Occupany by Block: September 13, 2011 at 12-2

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	5	48	10.42%	53	142	37.32%		1
2	5	20	25.00%	3	21	14.29%		
3A	0	23	0.00%	37	92	40.22%		
3B	5	23	21.74%	38	103	36.89%		
4	10	36	27.78%	7	37	18.92%		
5	9	32	28.13%	23	58	39.66%		
6	1	18	5.56%	10	24	41.67%		
7	0	17	0.00%	3	15	20.00%		
8	10	29	34.48%	6	24	25.00%		
9	18	29	62.07%	35	72	48.61%		
10	1	12	8.33%	0	13	0.00%		
11	16	27	59.26%	22	72	30.56%		
12	8	21	38.10%	10	24	41.67%		
13	9	18	50.00%	0	46	0.00%		
14	10	26	38.46%	9	23	39.13%		
15	19	48	39.58%	26	86	30.23%		1
16	3	8	37.50%	9	18	50.00%		
17	8	13	61.54%	29	69	42.03%		
18	16	35	45.71%	101	111	90.99%	3	
19	4	20	20.00%	32	67	47.76%		
20	2	18	11.11%	9	26	34.62%		
21	0	21	0.00%	5	19	26.32%	1	
22	0	8	0.00%	1	13	7.69%		
23	1	11	9.09%	2	8	25.00%		
24	3	23	13.04%	13	33	39.39%		
25	3	26	11.54%	23	70	32.86%	1	
26A	1	17	5.88%	27	68	39.71%		1
26B	0	13	0.00%	6	47	12.77%		
27	0	19	0.00%	11	43	25.58%		
28	7	30	23.33%	13	41	31.71%		
29	1	12	8.33%	3	17	17.65%		
30	0	24	0.00%	8	45	17.78%		
31	4	38	10.53%	19	76	25.00%		1
32	0	10	0.00%	4	4	100.00%		
	179	773		597	1627			

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	6	48	12.50%	57	142	40.14%		1
2	5	20	25.00%	6	21	28.57%		
3A	5	23	21.74%	31	92	33.70%		
3B	6	23	26.09%	34	103	33.01%		
4	5	36	13.89%	13	37	35.14%		
5	8	32	25.00%	24	58	41.38%		
6	0	18	0.00%	11	24	45.83%		
7	0	17	0.00%	3	15	20.00%		
8	12	29	41.38%	5	24	20.83%		
9	15	29	51.72%	31	72	43.06%		
10	0	12	0.00%	1	13	7.69%		
11	11	27	40.74%	14	72	19.44%		
12	9	21	42.86%	10	24	41.67%		
13	6	18	33.33%	0	46	0.00%		
14	12	26	46.15%	10	23	43.48%		
15	14	48	29.17%	40	86	46.51%		1
16	3	8	37.50%	8	18	44.44%		
17	9	13	69.23%	18	69	26.09%		
18	15	35	42.86%	90	111	81.08%	1	
19	2	20	10.00%	34	67	50.75%		
20	1	18	5.56%	9	26	34.62%		
21	2	21	9.52%	4	19	21.05%	1	
22	0	8	0.00%	1	13	7.69%		
23	1	11	9.09%	2	8	25.00%		
24	2	23	8.70%	11	33	33.33%		
25	8	26	30.77%	30	70	42.86%		
26A	2	17	11.76%	26	68	38.24%		
26B	1	13	7.69%	3	47	6.38%		
27	2	19	10.53%	11	43	25.58%		
28	3	30	10.00%	15	41	36.59%		
29	0	12	0.00%	4	17	23.53%		
30	1	24	4.17%	11	45	24.44%		
31	6	38	15.79%	20	76	26.32%		
32	2	10	20.00%	2	4	50.00%		
	174	773		589	1627			

Parking Occupany by Block: September 16, 2011 at 2-4

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	8	48	16.67%	59	142	41.55%	1	
2	5	20	25.00%	5	21	23.81%		
3A	4	23	17.39%	27	92	29.35%		
3B	3	23	13.04%	34	103	33.01%		
4	5	36	13.89%	9	37	24.32%		
5	9	32	28.13%	25	58	43.10%		
6	1	18	5.56%	12	24	50.00%		
7	0	17	0.00%	5	15	33.33%		
8	11	29	37.93%	6	24	25.00%		
9	13	29	44.83%	28	72	38.89%		
10	1	12	8.33%	1	13	7.69%		
11	9	27	33.33%	15	72	20.83%		
12	9	21	42.86%	10	24	41.67%		
13	4	18	22.22%	0	46	0.00%		
14	8	26	30.77%	9	23	39.13%		
15	16	48	33.33%	32	86	37.21%		1
16	3	8	37.50%	8	18	44.44%		
17	10	13	76.92%	22	69	31.88%		
18	11	35	31.43%	76	111	68.47%	1	
19	3	20	15.00%	35	67	52.24%		
20	0	18	0.00%	9	26	34.62%		
21	0	21	0.00%	4	19	21.05%	1	
22	1	8	12.50%	2	13	15.38%		
23	1	11	9.09%	3	8	37.50%		
24	3	23	13.04%	13	33	39.39%		
25	3	26	11.54%	29	70	41.43%	1	
26A	3	17	17.65%	21	68	30.88%		1
26B	1	13	7.69%	3	47	6.38%		
27	3	19	15.79%	11	43	25.58%		
28	6	30	20.00%	9	41	21.95%		
29	0	12	0.00%	4	17	23.53%		
30	2	24	8.33%	9	45	20.00%		
31	4	38	10.53%	22	76	28.95%		
32	1	10	10.00%	1	4	25.00%		
	161	773		558	1627			

Parking Occupany by Block: September 17, 2011 at 4-6

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Off-Street ADA Full	Bike Full
1	5	48	10.42%	43	142	30.28%		
2	7	20	35.00%	4	21	19.05%		
3A	1	23	4.35%	17	92	18.48%		
3B	0	23	0.00%	14	103	13.59%		
4	2	36	5.56%	7	37	18.92%		
5	6	32	18.75%	8	58	13.79%		
6	2	18	11.11%	11	24	45.83%		
7	1	17	5.88%	3	15	20.00%		
8	11	29	37.93%	8	24	33.33%		
9	5	29	17.24%	25	72	34.72%		
10	1	12	8.33%	0	13	0.00%		
11	8	27	29.63%	18	72	25.00%		
12	1	21	4.76%	6	24	25.00%		
13	1	18	5.56%	0	46	0.00%		
14	3	26	11.54%	7	23	30.43%		
15	1	48	2.08%	17	86	19.77%		1
16	1	8	12.50%	6	18	33.33%		
17	6	13	46.15%	7	69	10.14%		
18	2	35	5.71%	43	111	38.74%		
19	2	20	10.00%	7	67	10.45%	1	
20	0	18	0.00%	3	26	11.54%		
21	2	21	9.52%	9	19	47.37%	1	
22	0	8	0.00%	3	13	23.08%		
23	1	11	9.09%	4	8	50.00%		
24	2	23	8.70%	6	33	18.18%		
25	2	26	7.69%	29	70	41.43%	1	
26A	2	17	11.76%	10	68	14.71%		
26B	0	13	0.00%	3	47	6.38%		
27	0	19	0.00%	2	43	4.65%		
28	7	30	23.33%	9	41	21.95%		
29	2	12	16.67%	8	17	47.06%		
30	0	24	0.00%	8	45	17.78%		
31	0	38	0.00%	12	76	15.79%		
32	1	10	10.00%	2	4	50.00%		
	85	773		359	1627			

Parking Occupany by Select Block Face and Lot: September 9, 2011 at 6-8

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full
1	3	12	25.00%	N/A	N/A	N/A
2	11	20	55.00%	6	17	35.29%
3A	1	12	8.33%	5	15	33.33%
3B	7	23	30.43%	12	64	18.75%
4	8	28	28.57%	11	35	31.43%
5	3	6	50.00%	N/A	N/A	N/A
8	15	22	68.18%	13	13	100.00%
9	18	29	62.07%	30	59	50.85%
10	3	10	30.00%	N/A	N/A	N/A
11	1	9	11.11%	N/A	N/A	N/A
12	4	15	26.67%	N/A	N/A	N/A
14	5	18	27.78%	N/A	N/A	N/A
15	1	11	9.09%	10	23	43.48%
17	6	13	46.15%	5	44	11.36%
18	5	35	14.29%	39	96	40.63%
19	1	3	33.33%	8	14	57.14%
24	2	6	33.33%	N/A	N/A	N/A
26A	0	17	0.00%	10	33	30.30%
28	5	16	31.25%	4	10	40.00%
	99	305		153	423	

Parking Occupany by Select Block Face and Lot: September 17, 2011 at 6-8

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full
1	0	12	0.00%	N/A	N/A	N/A
2	12	20	60.00%	8	17	47.06%
3A	1	12	8.33%	3	15	20.00%
3B	5	23	21.74%	11	64	17.19%
4	7	28	25.00%	6	35	17.14%
5	4	6	66.67%	N/A	N/A	N/A
8	7	22	31.82%	7	13	53.85%
9	9	29	31.03%	12	59	20.34%
10	1	10	10.00%	N/A	N/A	N/A
11	1	9	11.11%	N/A	N/A	N/A
12	1	15	6.67%	N/A	N/A	N/A
14	2	18	11.11%	N/A	N/A	N/A
15	0	11	0.00%	6	23	26.09%
17	5	13	38.46%	6	44	13.64%
18	7	35	20.00%	43	96	44.79%
19	0	3	0.00%	4	14	28.57%
24	4	6	66.67%	N/A	N/A	N/A
26A	0	17	0.00%	11	33	33.33%
28	6	16	37.50%	9	10	90.00%
	72	305		126	423	

Appendix E: Parking Demand Block Breakdown Spreadsheet

Parking Occupany Block Breakdown

Block	On-Street Numbers	On-Street Capacity	On-Street % Full	Off-Street Numbers	Off-Street Capacity	Off-Street % Full	Total Number	Total Capacity	Total % Full
1	77	624	12.34%	662	1846	35.86%	739	2470	29.92%
2	67	260	25.77%	58	273	21.25%	125	533	23.45%
3A	14	299	4.68%	360	1196	30.10%	374	1495	25.02%
3B	38	299	12.71%	386	1339	28.83%	424	1638	25.89%
4	52	468	11.11%	106	481	22.04%	158	949	16.65%
5	123	416	29.57%	243	754	32.23%	366	1170	31.28%
6	17	234	7.26%	107	312	34.29%	124	546	22.71%
7	9	221	4.07%	43	195	22.05%	52	416	12.50%
8	118	377	31.30%	88	312	28.21%	206	689	29.90%
9	169	377	44.83%	302	936	32.26%	471	1313	35.87%
10	15	156	9.62%	14	169	8.28%	29	325	8.92%
11	178	351	50.71%	276	936	29.49%	454	1287	35.28%
12	86	273	31.50%	128	312	41.03%	214	585	36.58%
13	57	234	24.36%	0	598	0.00%	57	832	6.85%
14	111	338	32.84%	131	299	43.81%	242	637	37.99%
15	190	624	30.45%	374	1118	33.45%	564	1742	32.38%
16	48	104	46.15%	126	234	53.85%	174	338	51.48%
17	83	169	49.11%	286	897	31.88%	369	1066	34.62%
18	187	455	41.10%	1086	1443	75.26%	1273	1898	67.07%
19	38	260	14.62%	384	871	44.09%	422	1131	37.31%
20	16	234	6.84%	97	338	28.70%	113	572	19.76%
21	13	273	4.76%	73	247	29.55%	86	520	16.54%
22	3	104	2.88%	25	169	14.79%	28	273	10.26%
23	17	143	11.89%	28	104	26.92%	45	247	18.22%
24	39	299	13.04%	174	429	40.56%	213	728	29.26%
25	46	338	13.61%	345	910	37.91%	391	1248	31.33%
26A	35	221	15.84%	378	884	42.76%	413	1105	37.38%
26B	4	169	2.37%	57	611	9.33%	61	780	7.82%
27	21	247	8.50%	132	559	23.61%	153	806	18.98%
28	58	390	14.87%	156	533	29.27%	214	923	23.19%
29	20	156	12.82%	63	221	28.51%	83	377	22.02%
30	26	312	8.33%	113	585	19.32%	139	897	15.50%
31	67	494	13.56%	237	988	23.99%	304	1482	20.51%
32	19	130	14.62%	40	52	76.92%	59	182	32.42%
	2061	10049		7078	21151		9139	31200	

Appendix F: Parking Turnover Spreadsheets

Parking Occupany by Block: August 29, 2011 TURNOVER (2 hrs afternoon)

Block	On-Street Start	On-Street End	Turnover	Turnover %	Off-Street Start	Off-Street End	Turnover	Turnover %
9	5	1	4	80.00%	N/A	N/A	N/A	N/A
10	0	0	0	N/A	N/A	N/A	N/A	N/A
11	13	5	8	61.54%	11	7	4	36.36%
12	3	1	2	66.67%	N/A	N/A	N/A	N/A
14	1	0	1	100.00%	N/A	N/A	N/A	N/A
15	14	6	8	57.14%	29	12	17	58.62%
16	0	0	0	N/A	N/A	N/A	N/A	N/A
17	4	1	3	75.00%	N/A	N/A	N/A	N/A
18	15	3	12	80.00%	74	40	34	45.95%
19	0	0	0	N/A	N/A	N/A	N/A	N/A
20	0	0	0	N/A	N/A	N/A	N/A	N/A
	55	17	38	69.09%	114	59	55	48.25%

Parking Occupany by Block: August 31, 2011 TURNOVER (2 hrs afternoon)

Block	On-Street Start	On-Street End	Turnover	Turnover %	Off-Street Start	Off-Street End	Turnover	Turnover %
11	16	10	6	37.50%	25	12	13	52.00%
15	12	3	9	75.00%	28	11	17	60.71%
18	17	6	11	64.71%	80	48	32	40.00%
	45	19	26	57.78%	133	71	62	46.62%

Parking Occupany by Block: Sept. 9, 2011 TURNOVER (2 hrs afternoon)

Block	On-Street Start	On-Street End	Turnover	Turnover %	Off-Street Start	Off-Street End	Turnover	Turnover %
11	16	6	10	62.50%	10	7	3	30.00%
15	18	7	11	61.11%	29	11	18	62.07%
18	13	4	9	69.23%	81	38	43	53.09%
	47	17	30	63.83%	120	56	64	53.33%

Parking Occupany by Block: Sept. 16, 2011 TURNOVER (2 hrs afternoon)

Block	On-Street Start	On-Street End	Turnover	Turnover %	Off-Street Start	Off-Street End	Turnover	Turnover %
4	4	1	3	75.00%	N/A	N/A	N/A	N/A
8	5	2	3	60.00%	N/A	N/A	N/A	N/A
9	10	3	7	70.00%	9	4	5	55.56%
	19	6	13	68.42%	9	4	5	55.56%

Appendix G: Works Cited and Research Material (MLA)

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