

TECHNICAL MEMORANDUM

Project: Downtown Off-Street Parking Program
Subject: Supply and Demand Survey in June 2014
Date: September 30, 2014
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This memorandum summarizes the methodology and findings of the Downtown Off-Street Parking Study performed for the Seattle Department of Transportation (SDOT) in June 2014. The goal of the study was to collect parking demand data for off-street parking facilities to complement recently-collected on-street data. Together, these datasets provide a comprehensive account of parking in downtown Seattle.

In addition to presenting the methodology for the off-street parking inventory and data collection, this memorandum also summarizes parking utilization, rate trends, and parking space type by subarea. Detailed data collected for this study are available in the Appendix.

1. Study Area

Figure 1 shows the study area for the Downtown Off-Street Parking Survey. The boundaries are Denny Way to the north, S Royal Brougham Way to the south, Elliott Bay to the west, and Interstate 5 (I-5) to the east. Figure 1 shows both the subareas as defined by SDOT and the Puget Sound Regional Council (PSRC), the latter of which are used by the PSRC when it performs region-wide parking surveys. For the purpose of this study, the subareas were divided into two groups: Core Commercial Areas and Areas Outside the Core. These groupings are as follows:

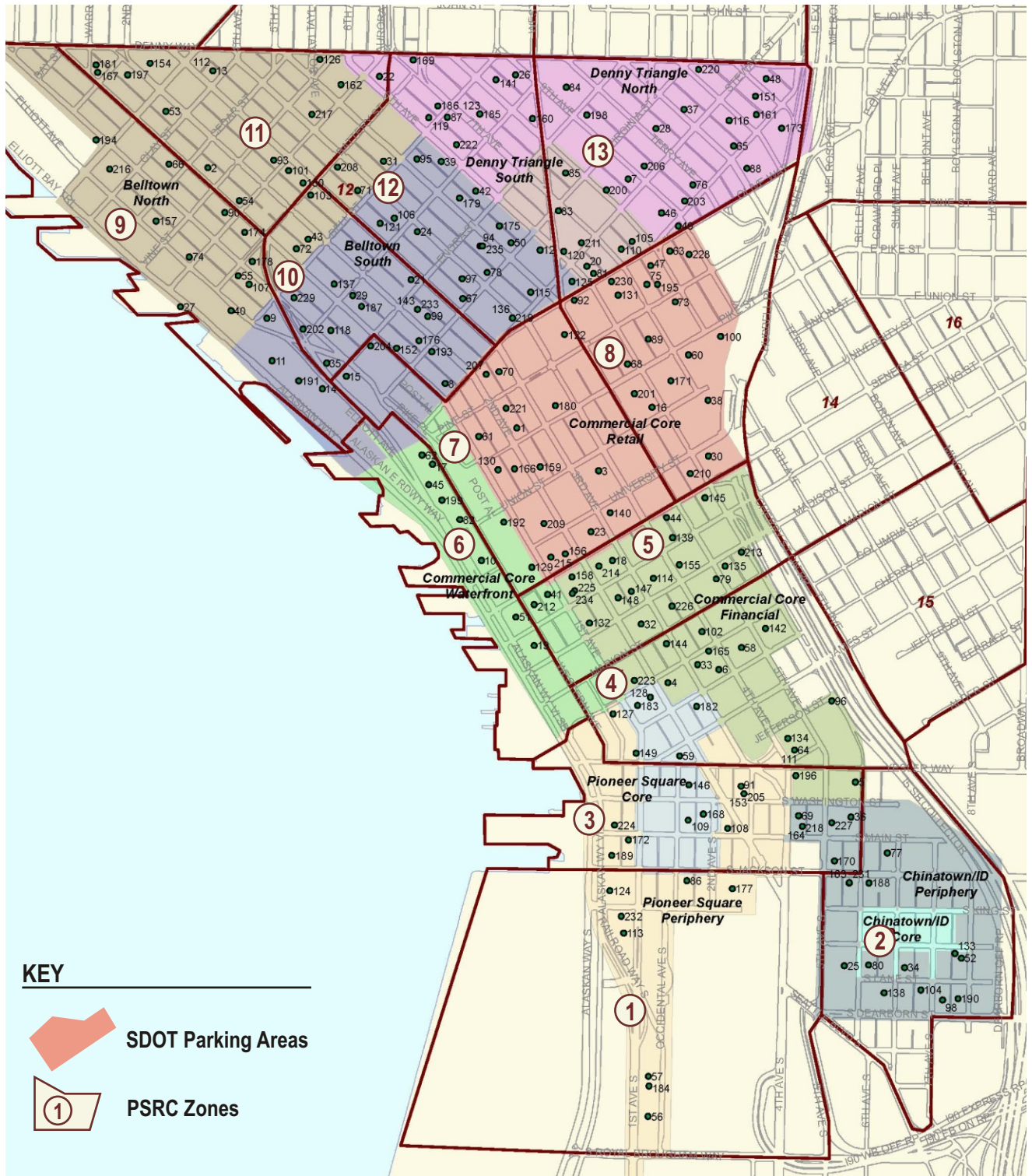
Core Commercial Areas

- Financial
- Retail
- Waterfront

Outside Core Areas

- Belltown North and South
- Denny Triangle North and South
- Chinatown/ID Core and Periphery
- Pioneer Square Core and Periphery

Within the study area there are approximately 235 garages with a supply of 44,000 parking spaces. Ranging in size from six to almost 1,200 parking spaces, parking facilities studied included surface lots, small one-story garages, and multi-story garages.



**DOWNTOWN
OFF-STREET
PARKING SURVEY**

Figure 1
Parking SubAreas

2. Survey Methodology

2.1. Parking Areas

Table 1 provides information about the number of garages and spaces located in each subarea. The comparable PSRC zones are also identified. It was the intent to survey all parking garages in the Core Commercial Areas; however, access was denied at some locations by garage management or security gates. In the areas outside of the commercial core, a sampling of the garages was conducted. The off-street parking sample sites were selected to represent a mixture of small and large facilities as well as surface parking lots and garages. As shown in the table, 96% of the facilities and 98% of the available parking spaces were surveyed in the core area, and 31% of the facilities and 60% of the available parking spaces were surveyed outside of the core areas.

There are currently thirteen garages participating in the e-Park system, which provides real-time information about parking space availability. Since this information is collected digitally, the parking demand information is also available electronically and manual counts were not performed at those garages. At the time of the survey, the e-Park system was not operating at two of these garages. Those garages were included in the manual count.

Table 1. Downtown Off-Street Parking Areas

Core Commercial Areas	Comparable PSRC Zones	Number of Off-Street Parking Facilities			Number of Parking Spaces		
		Available ^a	Inventoried ^{b, c}	% Inventoried	Available ^a	Inventoried ^{b, c}	% Inventoried
Financial	4, 5	33	30	91%	8,057	7,624	95%
Retail	7, 8	36	36	100%	13,312	13,312	100%
Waterfront	6	13	13	100%	2,198	2,198	100%
<i>Total Commercial Core</i>		<i>82</i>	<i>79</i>	<i>96%</i>	<i>23,567</i>	<i>23,134</i>	<i>98%</i>
Outside Core Areas							
Belltown North	9,11	33	7	21%	4,229	3,035	72%
Belltown South	10, 12	39	12	31%	4,320	2,192	51%
Denny Triangle North	12, 13	29	9	31%	3,965	2,224	56%
Denny Triangle South	13	9	3	33%	2,429	1,063	44%
Pioneer Square Core	3, 4	8	5	63%	1,476	1,163	79%
Pioneer Square Periphery	1, 3	17	5	29%	2,323	1,357	58%
Chinatown/ID Core ^d	2	0	0	NA	0	0	NA
Chinatown/ID Periphery	2, 3	20	7	35%	1,735	1,338	77%
<i>Total for Areas Outside Core</i>		<i>155</i>	<i>48</i>	<i>31%</i>	<i>20,477</i>	<i>12,372</i>	<i>60%</i>
Total All Areas		237	127	54%	44,044	35,506	81%

Source: Heffron Transportation, Inc., June 2014.

a. Number of Off-Street locations and parking spaces based on SDOT database.

b. In the Core Commercial Areas, some garages were secured or access was denied by garage management.

c. The e-Park garages are included in the total inventoried even though data were provided through electronic records instead of manual surveys.

d. There were no public off-street facilities identified by SDOT in the Chinatown/ID Core area.

2.2. Data Collection

Parking demand counts were performed over a two-week period between June 2, and June 14, 2014 during the following times:

- Weekday: Monday through Thursday, mornings between 8:45 A.M. and 12:00 P.M. and afternoons between 12:45 P.M. and 3:30 P.M.
- Weekend Evenings: Friday or Saturday evening between 6:00 and 8:00 P.M.
- Weekends: Saturday afternoons between 1:00 and 5:00 P.M.

In addition, the parking supply of each garage was confirmed, and data were collected regarding hours of operation, rates, and parking space attributes. Detailed data collected for this study are available in external databases and spreadsheets.

3. Survey Results

The parking survey data were compiled to show various metrics for each of the eleven subareas. The following tables are attached and show the following:

Table 2. Off-Street Parking Demand Survey Results, Weekday Data – This table summarizes parking utilization for each subarea during the weekday periods. Parking utilization is defined as the number of parked vehicles divided by the number of available parking spaces. Some off-street facilities are closed during the evenings and weekends, thus, the number of available parking spaces fluctuates.

Table 3. Off-Street Parking Demand Survey Results, Weekend Data – This table summarizes parking utilization for the evening and weekend periods.

Table 4. Average Rates for Off-Street Parking – This table summarizes the average posted parking rates for each area for various lengths of stays. Posted rates do not apply to customers who may have a monthly parking pass.

Table 5. Parking by Type of Space – This table summarizes the various types of spaces that were designated in the surveyed garages.

4. Findings

- Weekday parking in the Core Commercial Areas ranged from 68% to 77% utilized. The Financial Core experiences the highest utilization.
- Areas outside of the Commercial Core had parking utilization rates that ranged from 57% to 95% on weekdays. The highest utilization occurred in Denny Triangle South.
- Weekday and evening utilization is much lower throughout all areas. Peak utilization occurred on a weekend afternoon along the Waterfront, which was 69% utilized. All other areas had utilization rates below 50%.
- The highest parking rates were found in the Denny Triangle South subarea, which also had the highest weekday parking utilization (based on a survey of 44% of the parking spaces in this area).

Table 2. Off-Street Parking Demand Survey Results – Weekday Data

	Number of Facilities Surveyed	Number of Available Spaces ^a	Weekdays			
			Morning		Afternoon	
Core Commercial Areas			% Utiliz.	Unused Spaces ^b	% Utiliz.	Unused Spaces ^b
Financial	30	7,624	76%	1,796	77%	1,758
Retail	36	13,312	70%	3,964	72%	3,750
Waterfront	13	2,198	68%	709	76%	534
<i>Total Commercial Core</i>	<i>79</i>	<i>23,134</i>	<i>72%</i>	<i>6,469</i>	<i>74%</i>	<i>6,042</i>
Areas outside Core						
Belltown North	7	3,035	65%	1,059	67%	1,011
Belltown South	12	2,192	78%	477	79%	453
Denny Triangle North	9	3,965	66%	753	76%	542
Denny Triangle South	3	1,063	95%	53	93%	71
Pioneer Square Core	5	1,163	58%	484	75%	294
Pioneer Square Periphery	5	1,357	73%	360	81%	261
Chinatown/ID Core ^c	0	--	--	--	--	--
Chinatown/ID Periphery	7	1,338	57%	569	67%	439
<i>Total for Areas Outside Core</i>	<i>48</i>	<i>12,372</i>	<i>70%</i>	<i>3,755</i>	<i>75%</i>	<i>3,071</i>
Total All Areas	127	35,506	71%	10,224	74%	9,113

Source: Heffron Transportation, Inc., June 2014.

a. Available spaces indicate the total supply.

b. Unused spaces represent the number of spaces where vehicles are not parked.

c. There were no public off-street facilities identified by SDOT in the Chinatown/ID Core area

Table 3. Off-Street Parking Demand Survey Results – Weekend Data

	Weekend Evenings				Saturday Afternoon			
	Number of Facilities Surveyed	Number of Available Spaces ^a	% Utiliz.	Unused Spaces ^b	Number of Facilities Surveyed	Number of Available spaces ^a	% Utiliz.	Unused Spaces ^b
Core Commercial Areas								
Financial	23	4,866	22%	3,802	20	3,434	21%	2,721
Retail	32	12,840	32%	8,699	31	12,777	37%	8,062
Waterfront	12	2,095	46%	1,124	13	2,198	69%	689
<i>Total Commercial Core</i>	<i>67</i>	<i>19,801</i>	<i>31%</i>	<i>13,625</i>	<i>64</i>	<i>18,409</i>	<i>38%</i>	<i>11,472</i>
Areas outside Core								
Belltown North	5	2,628	18%	2,143	6	2,834	28%	2,036
Belltown South	11	2,158	38%	1,333	11	2,158	46%	1,175
Denny Triangle North	5	1,514	21%	1202	4	943	21%	748
Denny Triangle South	1	597	15%	510	1	597	18%	489
Pioneer Square Core	5	1,163	9%	1,054	4	959	20%	767
Pioneer Square Periphery	4	647	5%	613	2	104	4%	100
Chinatown/ID Core ^c	0	--	--	--	--	--	--	--
Chinatown/ID Periphery	6	798	38%	492	6	798	46%	430
<i>Total for Areas Outside Core</i>	<i>37</i>	<i>9,505</i>	<i>23%</i>	<i>7,347</i>	<i>34</i>	<i>8,393</i>	<i>32%</i>	<i>5,745</i>
Total All Areas	104	29,306	28%	20,972	98	26,802	36%	17,217

Source: Heffron Transportation, Inc., June 2014.

a. Available spaces indicate the total supply.

b. Unused spaces represent the number of spaces where vehicles are not parked.

c. There were no public off-street facilities identified by SDOT in the Chinatown/ID Core area

*Downtown Off-Street Parking Program
Supply and Demand Survey in June 2014*

Table 4. Average Rates for Off-Street Parking

Commercial Core Area	Number of Facilities	Average Parking Rate						Early Bird Program ^a	
		1-Hour	2-Hour	3 Hour	4 Hour	All Day	Over-night	% Offering Early Bird	Average Early-Bird Rate
Financial	30	\$9.33	\$13.73	\$17.38	\$20.64	\$27.70	\$23.85	33%	\$14.88
Retail	36	\$8.31	\$12.34	\$15.70	\$19.34	\$30.43	\$31.83	47%	\$14.59
Waterfront	13	\$6.25	\$9.33	\$13.66	\$16.86	\$23.85	\$31.50	54%	\$10.53
Areas outside Core									
Belltown North	7	\$3.88	\$6.00	\$8.67	\$10.75	\$17.00	\$21.00	71%	\$8.12
Belltown South	12	\$6.97	\$9.55	\$15.40	\$15.35	\$24.74	\$21.11	58%	\$12.48
Chinatown/ID Periphery	7	\$6.21	\$9.42	\$12.96	\$13.63	\$13.83	\$9.88	43%	\$11.17
Denny North	9	\$8.22	\$10.00	\$13.33	\$14.44	\$23.20	\$27.60	22%	\$14.50
Denny South	3	\$9.33	\$12.67	\$18.33	\$23.00	\$17.00	\$29.67	67%	\$16.00
Pioneer Square Core	5	\$6.44	\$10.69	\$14.69	\$18.19	n/a	n/a	50%	\$13.00
Pioneer Square Periphery	5	\$5.00	\$8.60	\$11.20	\$13.40	\$25.00	\$20.00	60%	\$12.67

Source: Heffron Transportation, Inc., June 2014.

a. Applies to customers who arrive before a set time in the morning and typically park all day.

Downtown Off-Street Parking Program
Supply and Demand Survey in June 2014

Table 5. Parking by Type of Space

Commercial Core Area	All Space Types ^a		EV Stations		Disabled		Carpool/ Vanpool		Load / Unload		Carshare		Valet		Reserved	
	Number of Facilities	Total Spaces	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total	#	% of Total
Financial	29	7,324	43	0.6%	153	2.1%	20	0.3%	20	0.3%	11	0.2%	373	5.1%	1012	13.8%
Retail	30	9,666	27	0.3%	164	1.7%	84	0.9%	27	0.3%	11	0.1%	307	3.2%	541	5.6%
Waterfront	10	1,408	2	0.1%	24	1.7%	0	0.0%	4	0.3%	10	0.7%	73	5.2%	45	3.2%
Areas Outside Core																
Belltown North	6	1,516	0	0.0%	27	1.8%	0	0.0%	1	0.1%	5	0.3%	0	0.0%	43	2.8%
Belltown South	12	2,192	6	0.3%	30	1.4%	0	0.0%	0	0.0%	3	0.1%	35	1.6%	79	3.6%
Chinatown/ID Periphery	7	1,338	4	0.3%	21	1.6%	10	0.7%	0	0.0%	4	0.3%	0	0.0%	132	9.9%
Denny North	9	2,224	5	0.2%	44	2.0%	0	0.0%	0	0.0%	4	0.2%	59	2.7%	11	0.5%
Denny South	3	1,063	0	0.0%	16	1.5%	80	7.5%	0	0.0%	0	0.0%	0	0.0%	32	3.0%
Pioneer Square Core	4	748	0	0.0%	13	1.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	63	8.4%
Pioneer Square Periphery	4	647	0	0.0%	12	1.9%	0	0.0%	0	0.0%	0	0.0%	100	15.5%	0	0.0%

Source: Heffron Transportation, Inc., June 2014.

a. Facilities were only included if the space type information was available.