

TECHNICAL MEMORANDUM

Project: Pike-Pine Parking Management
 Subject: Off-Street Parking Occupancy Survey
 Date: December 22, 2014
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This memorandum summarizes the findings of the Pike-Pine Off-Street Parking Survey performed for the Seattle Department of Transportation (SDOT) in Fall 2014. The purpose of the study was to collect parking occupancy data for off-street parking facilities to complement recently-collected on-street data. Together these datasets provide a comprehensive account of parking in the Pike-Pine neighborhood.

1. Parking Survey

1.1. Study Area and Off-Street Parking Supply

Figure 1 shows the study area for the Pike-Pine Off-Street Parking Survey. The boundaries are E Olive Street to the north, E Union Street and E Madison Street to the south, Interstate 5 (I-5) to the west, and 15th Avenue to the east. There are 31 off-street parking facilities that offer public parking in this area, which are identified on Figure 1. Facility identification numbers on the map are referenced to the survey database and results described later in this report.

Table 1 summarizes the off-street parking facilities information. Of the 31 facilities surveyed, 24 offer public parking at all times of day; however, seven are reserved for private business use during the day, and are only available in the evening. The hours of operation vary by lot.

Table 1. Summary of Off-Street Parking Types

Type of Facility	Number of Facilities	Total Number of Spaces
Stand-Alone Public Garage	4	998
Private Residential Garages with Public Spaces	5	133
Public Surface Lots	15	593
Private Weekday Surface Lot with Public Evening Spaces	7	114
Total	31	1,838

Source: Heffron Transportation, Inc., October 2014.



- KEY**
- Study Area Boundary
 - # Off-Street Parking Locations

PIKE-PINE NEIGHBORHOOD OFF-STREET PARKING

Figure 1
Off-Street Parking Locations



1.2. Methodology

Parking occupancy data were collected for two time periods: a mid-week afternoon survey was conducted between 12:00 and 3:00 P.M., and a Friday evening survey was conducted between 6:30 and 9:30 P.M. The afternoon surveys were conducted on Thursday October 16, 2014 and Tuesday October 28, 2014. The Friday evening survey was conducted on October 17, 2014.

In addition to collecting parking occupancy information, the parking supply of each off-street location 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 the attached spreadsheets.

2. Parking Occupancy Survey Results

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

Table 2. Off-Street Parking Occupancy Survey Results – 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.

Table 3. Daytime Hours and Rates by Facility – In this table, the daytime rates are broken down into the costs for the first four hours, the all-day costs, and the early bird rates. The all-day costs were generally defined as the rate for a 10-hour parking time limit. All-day costs are provided for those off-street facilities that specifically identify those rates. Surface lots that are reserved during the day are not included in this table.

Table 4. Evening and Weekend Hours and Rates by Facility – This table summarizes the evening and weekend hours and rates and includes all facilities.

Table 5. Comparison of On-Street and Off-Street Rates – This table summarizes the average rates by type of facility and compares those rates to on-street rates.

3. Findings

- There are a total of 1,838 off-street parking spaces that are available for public parking in the Pike-Pine study area: 1,131 in garages and 707 in surface parking lots.
- Overall, the off-street parking is 74% utilized during the weekday afternoon and 38% utilized on a Friday evening.
- During the weekday afternoons, the stand-alone garages have the highest occupancy with overall utilization rates of 81%. The utilization rates ranged from 57% to 89% for the stand-alone garages.
- The overall weekday utilization rate for public surface lots was 74% and the utilization rates ranged from 11% to 94%. Ten of the fifteen public surface lots had weekday utilization rates over 85%.

- Of the 31 off-street facilities, nine post early bird rates and 16 post all day rates.
- It costs less to park on-street for less than four hours than to park in an off-street facility. The all day rates at all off-street facilities are lower than paying for a full 10 hours at applicable on-street pay stations that offer that length of stay.
- On Friday evenings, the highest occupancy occurred in the surface lots with an overall utilization rate of 48%. Lots in close vicinity to evening activities were 100% occupied, though some lots just over a block away had utilization rates under 40%. It is noted that some lots are not user-friendly in the evening due to inadequate lighting and undiscernible parking information.
- The Friday evening utilization rate for all garages was under 40%. The utilization rate at garage spaces connected to private residences was 44%, which was slightly higher than the utilization for stand-alone public garages.

4. Recommendations

- Many of the surface parking lots in the commercial areas are fully utilized on Friday evenings, while parking supply is available in public and private garages. SDOT together with local businesses could develop low-cost parking programs to encourage employees (such as those at local restaurants and nightclubs) to utilize available parking away from the commercial areas instead of on-street or surface parking lots.
- Improved signage directing motorists to public parking in the neighborhood could help disperse parking to available space beyond the commercial core areas.
- The largest public garage in the neighborhood—the 527-space garage at Seattle Central Community College (SCCC)—had some space available during the afternoon and substantial space available in the evening. Real-time information about available supply, which is provided at other Seattle garages through the City’s e-Park program, could help attract users to this garage.
- Improved lighting and parking information could increase utilization at some surface parking lots in the evenings.

Table 2. Off-Street Parking Occupancy Survey Results

Map ID	Access to Facility	Cross-Streets	Total Parking Supply	Weekday Afternoon		Friday Evening	
				% Utiliz.	Unused Spaces ^a	% Utiliz.	Unused Spaces ^a
GARAGES							
<i>Public Garages</i>							
4	Summit Ave	E Pike St and E Pine St	115	76%	28	18%	94
6	Harvard Ave	E Olive St and E Pine St	527	82%	93	23%	406
10 ^b	Harvard Ave	E Pike St and E Union St	272	89%	31	49%	138
14	Broadway	E Union St and E Madison St	84	57%	36	24%	64
Sub-Total			998	81%	188	30%	702
<i>Public Spaces in Private Garages</i>							
11	Nagle Pl	E Pine St and E Olive St	49	55%	22	20%	39
21	13 th Ave	E Olive St and E Pine St	14	57%	6	64%	5
27	14 th Ave	E Pine St and E Pike St	26	27%	19	73%	7
28	E Pine St	14 th Ave and 15 th Ave	9	67%	3	89%	1
31	14 th Ave	E Madison St and E Union St	35	40%	21	34%	23
Sub-Total			133	47%	71	44%	75
Total for Garages			1,131	77%	259	31%	777
SURFACE LOTS							
<i>Public Lots</i>							
1	E Pine St	Melrose Ave and Minor Ave	52	94%	3	81%	10
2	Melrose Ave	E Pine St and Yale Ave	39	85%	6	82%	7
5	Belmont Ave	E Pine St and E Pike St	29	69%	9	41%	17
7	E Union St	Boylston Ave and Harvard Ave	15	80%	3	13%	13
8	Harvard Ave	E Pike St and E Union St	18	89%	2	44%	10
9	Harvard Ave	E Union St and E Pike St	59	92%	5	17%	49
12	Broadway	SE corner at E Pine St	51	65%	18	22%	40
13	Broadway	NE corner at E Union St	28	89%	3	29%	20
15	E Pine St & 10 th Ave	SE corner	52	92%	4	81%	10
16	E Pike St	NE corner at 10 th Ave	17	88%	2	100%	0
17	10 th Ave	E Pike St and E Union St	69	88%	8	35%	45
23	13 th Ave	E Pine St and E Pike St	11	91%	1	100%	0
25	14 th Ave	NW corner at E Pine St	43	91%	4	74%	11

Pike-Pine Parking Management
Off-Street Parking Occupancy Survey

Table 2. Off-Street Parking Occupancy Survey Results

Map ID	Access to Facility	Cross-Streets	Total Parking Supply	Weekday Afternoon		Friday Evening	
				% Utiliz.	Unused Spaces ^a	% Utiliz.	Unused Spaces ^a
29	E Madison St & 14 th Ave	NE corner	57	32%	39	30%	40
30	14 th Ave	SE corner at E Madison St	53	11%	47	23%	41
Sub-Total			593	74%	154	47%	313
Weekday Reserved; Evening/Weekend Public							
3	E Pike St	Boren Ave and Minor Ave	18	50%	9	100%	0
18	E Union St	10 th Ave and 11 th Ave	6	100%	0	33%	4
19	11 th Ave	SW corner at E Union St	9	56%	4	44%	5
20	E Madison St	NW corner at 11 th Ave	28	57%	12	4%	27
22 ^c	13 th Ave	E Pine St and E Pike St	7	29%	5	0%	7
24	E Madison St	E Pike St and 14 th Ave	34	41%	20	71%	10
26	13 th Ave	SE corner with E Pine St	12	42%	7	100%	0
Sub-Total			114	50%	57	54%	53
Total for Surface Lots			707	70%	211	48%	366
TOTAL ALL FACILITIES			1,838	74%	470	38%	1,143

Source: Heffron Transportation, Inc., October 2014.

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

b. This off-street facility has both a surface lot and garage

c. This location is reserved Mon – Sun during the day and only available for public use after 7:30 P.M.

Table 3. Daytime Hours and Rates for Off-Street Parking

Map ID	Hours of Operation ^a	Daytime Parking Rate					Early-Bird Rate
		1-Hour	2-Hour	3 Hour	4 Hour	All Day ^b	
GARAGES							
Public Garages							
4	6:00 A.M. – 5:00 P.M.	\$7.00	\$7.00	\$15.00	\$15.00	\$15.00	--
6	24 Hours	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	--
10 ^c	24 Hours	\$6.56	\$9.02	\$17.21	\$17.21	\$17.21	--
14	4:00 A.M. – 5:00 P.M.	\$2.00	\$4.00	\$6.00	\$8.00	--	--
Public Spaces in Private Garages							
11	6:00 A.M. – 5:00 P.M.	\$4.00	\$6.00	\$10.00	\$12.00	\$14.00	\$10.00
21	4:00 A.M. – 8:00 P.M.	\$3.00	\$6.00	\$9.00	\$12.00	--	--
27	5:30 A.M. – 5:00 P.M.	\$3.00	\$6.00	\$9.00	\$12.00	--	\$10.00
28	4:00 A.M. – 5:00 P.M.	\$2.00	\$4.00	\$6.00	\$8.00	--	\$8.00
31	4:00 A.M. – 5:30 P.M.	\$3.00	\$6.00	\$9.00	\$10.00	\$10.00	--
SURFACE LOTS (Public Only)							
1	7:00 A.M. – 5:00 P.M.	\$6.00	\$6.00	\$15.00	\$15.00	--	\$12.00
2	4:00 A.M. – 5:00 P.M.	\$3.00	\$6.00	\$9.00	\$12.00	--	\$11.00
5	Not posted – 5:00 P.M.	\$7.00	\$7.00	\$15.00	\$15.00	\$15.00	\$9.84
7	7:00 A.M. – 5:00 P.M.	\$7.00	\$7.00	\$12.00	\$12.00	\$12.00	--
8	7:00 A.M. – 5:00 P.M.	\$5.00	\$5.00	\$9.00	\$9.00	\$9.00	--
9	7:00 A.M. – 5:00 P.M.	\$7.00	\$7.00	\$12.00	\$12.00	\$12.00	--
12	4:00 A.M. – 5:00 P.M.	\$2.00	\$4.00	\$6.00	\$8.00	\$19.00	--
13	--	\$2.00	\$4.00	\$6.00	\$8.00	\$10.00	\$11.00 ^e
15	4:00 A.M. – 8:00 P.M.	\$3.00	\$7.00	\$11.00	\$15.00	--	--
16	--	\$5.00	\$5.00	\$7.00	\$7.00	\$13.00	--
17	--	\$5.00	\$5.00	\$7.00	\$7.00	\$11.00	--
23	4:00 A.M. – 5:00 P.M.	\$3.00	\$6.00	\$9.00	\$12.00	--	--
25 ^d	--	--	--	--	--	--	--
29	4:00 A.M. – 5:00 P.M.	\$7.00	\$7.00	\$10.00	\$13.00	\$13.00	\$9.00
30	4:00 A.M. – 5:00 P.M.	\$3.00	\$6.00	\$9.00	\$12.00	\$15.00	\$9.00

Source: Heffron Transportation, Inc., October 2014.

a. Hours are not posted at all locations.

b. At many locations the All Day rate is defined as a maximum of 10 hours. The All Day rate is included only if it is detailed at the lot.

c. These rates are set for every ½ hour up to 3 hours. The per-hour rates are identified in this table.

d. No hours or rates posted at this location.

e. Early bird rate is higher than daily parking rate.

Table 4. Evening and Weekend Hours and Rates for Off-Street Parking

Map ID	Evening ^a	Weekend	Evening Parking Rates				Weekend Rates ^b
			Every Evening	Sun - Wed	Thurs - Sat	Over-night	
GARAGES							
<i>Public Garages</i>							
4	5:00 P.M. – 12:00 A.M.	6:00 A.M. – 2:00 A.M. ^b	\$7.00	--	--	--	same
6	24 Hours	same ^c	\$5.00	--	--	--	same
10 ^c	24 Hours	same	same	--	--	\$17.21	same
14	5:00 P.M. – 4:00 A.M.	same	--	\$10.00	\$12.00	\$15.00	same
<i>Public Spaces in Private Garages</i>							
11	5:00 P.M. – 2:30 A.M.	same	\$8.00	--	--	--	\$5.00
21	8:00 P.M. – 4:00 A.M.	same	\$10.00	--	--	--	same
27	5:00 P.M. – 12:00 A.M.	5:30 A.M. – 2:30 A.M. ^b	\$10.00	--	--	--	same
28	5:00 P.M. – 11:30 P.M.	4:00 A.M. – 12:30 A.M. ^b	\$8.00	--	--	--	same
31	5:30 P.M. – 2:00 A.M.	same	\$10.00	--	--	--	--\$10.00
SURFACE LOTS							
<i>Public Lots</i>							
1	5:00 P.M. – 7:00 A.M.	same		\$12.00	\$15.00	\$15.00	\$12.00
2	5:00 P.M. – 4:00 A.M.	same		\$12.00	\$14.00		same
5	Not posted – 5:00 P.M.	same	\$8.00				\$5.00
7	5:00 P.M. – 7:00 A.M.	same	\$7.00				same
8	5:00 P.M. – 7:00 A.M.	same	\$7.00				\$7.00
9	5:00 P.M. – 7:00 A.M.	same	\$7.00				same
12	5:00 P.M. – 4:00 A.M.	same		\$10.00	\$12.00		same
13	--			\$10.00	\$12.00		same
15	8:00 P.M. – 4:00 A.M.	same	\$12.00				same
16	--	--	\$10.00				same
17	--	--	\$10.00				same
23	4:00 A.M. – 5:00 P.M.	same		\$9.00	\$11.00		same
25 ^d	--	--	--	--	--	--	--
29	5:00 P.M. – 4:00 A.M.	same	\$10.00				same
30	5:00 P.M. – 11:30 P.M.	4:00 A.M. 12:30 A.M. ^b	\$8.00				same

Weekday Reserved; Evening/Weekend Public

Table 4. Evening and Weekend Hours and Rates for Off-Street Parking

Map ID	Evening ^a	Weekend	Evening Parking Rates				Weekend Rates ^b
			Every Evening	Sun - Wed	Thurs - Sat	Over-night	
3	6:00 P.M. – 6:00 A.M.	24 hours	\$12.00				\$12.00
18		same	\$8.00				\$8.00
19	6:00 P.M. – 6:00 A.M.	24 hours	\$8.00				\$8.00
20	6:00 P.M. – 6:00 A.M.	24 hours	\$8.00				\$8.00
22	7:30 P.M. – 6:30 A.M.	same	\$10.00				\$10.00
24	6:00 P.M. – 9:00 A.M.	24 hours ^e	\$8.00				\$8.00
26	5:00 P.M. – 7:00 A.M.	24 hours		\$10.00	\$12.00		\$3.00/hr

Source: Heffron Transportation, Inc., October 2014

a. Hours are not posted at all locations.

b. The evening closing hours apply to Sunday through Thursday. The weekend closing hours apply to Friday and Saturday.

c. 'same' indicates that the hours and/or rates are the same as posted for the weekday day/evening .

d. No hours or rates posted at this location.

e. This location is reserved for private parking on Saturdays from 9:00 A.M. – 1:00 P.M.

Table 5. Comparison of On-Street and Off-Street Parking Rates

Type of Off-Street Facility	Average Daytime Parking Rate					Early-Bird Rate
	1-Hour	2-Hour	3 Hour	4 Hour	All Day ^b	
Public Garages	\$5.14	\$7.26	\$11.80	\$12.30	\$13.74	--
Public Spaces in Private Garages	\$3.00	\$5.60	\$8.60	\$10.80	\$12.00	\$9.33
Public Surface Lot	\$4.64	\$6.00	\$10.07	\$11.64	\$12.90	\$10:31
Weekday Reserved/Weekend Public Lot	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Overall Average for Off-Street Parking	\$4.32	\$5.96	\$9.84	\$11.43	\$12.83	\$9.98
On-Street Parking Rates	\$2.50	\$5.00	\$7.50	\$10.00	\$20.00	N.A.

Source: Heffron Transportation, Inc., October 2014.

a. Hours are not posted at all locations.

b. At many locations the All Day rate is defined as a maximum of 10 hours. The All Day rate is included only if it is detailed at the lot.