

## 2016 NW Parking Data Summary & Permit Evaluation

January 2017 (v6)

### Surveyed Parking Inventory

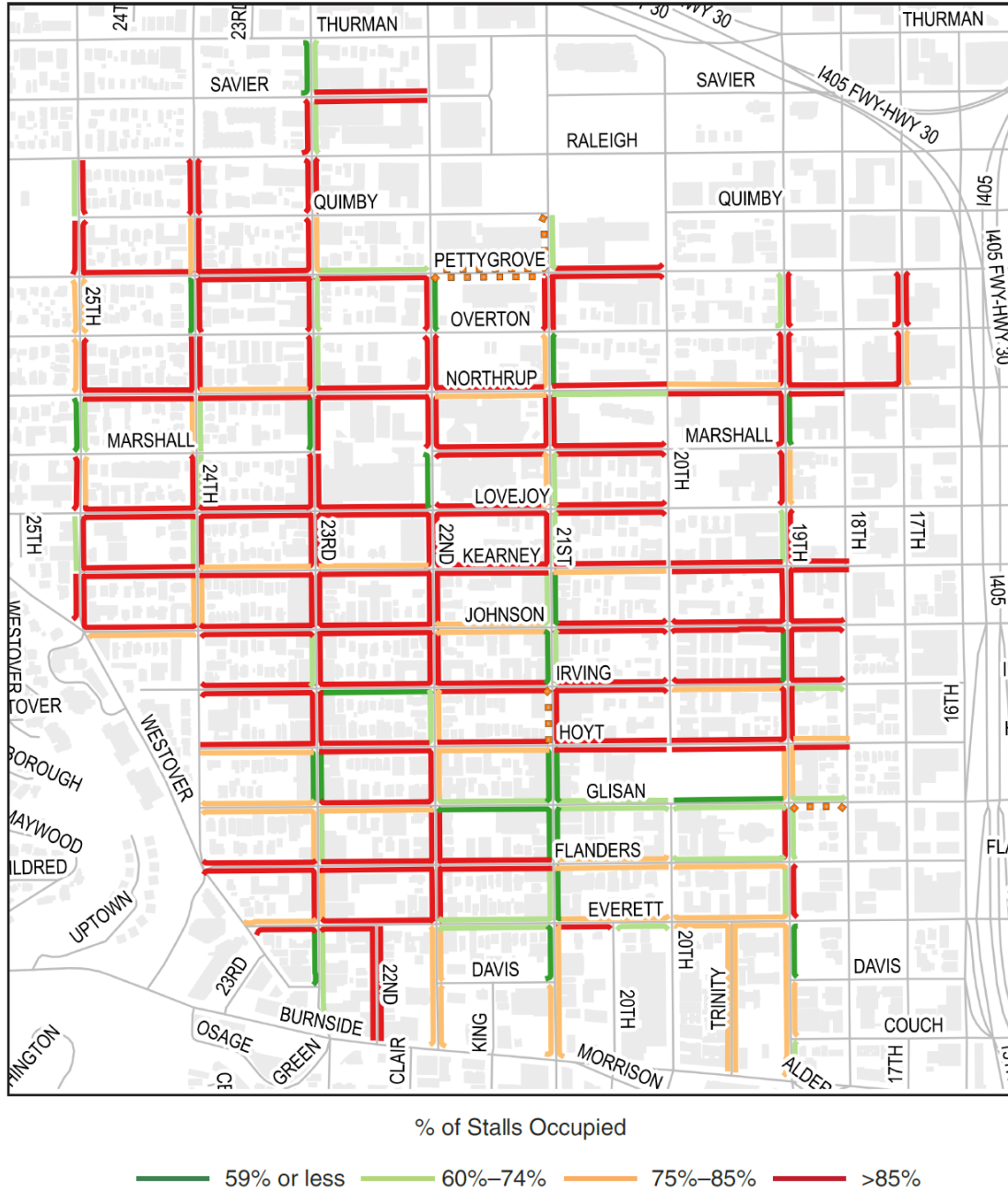
**Table 1: 2016 Northwest Sampled Parking Inventory**

Stalls by Type	2016	% of Total
5 Minute -Signed	6	< 1%
10 Minute - Signed	3	< 1%
15 Minute - Signed	12	< 1%
30 Minute - Signed	2	< 1%
1 Hour - Signed	41	1.3%
2 Hour - Signed	31	1.0%
30 Minutes – Metered	106	3.3%
2 Hour -Metered	79	2.5%
4 Hour - Metered	425	13.4%
4 Hour OBP - Metered	1,798	56.9%
4 Hour OBP - Signed	540	17%
ADA 'Accessible'	3	< 1%
Unsigned	33	1.0%
On-Street Supply Surveyed	<b>3,079<sup>1</sup></b>	<b>100%</b>

- Total number of parking stalls in the Northwest parking district is 5,264 (metered and permit stalls).
- Table 1 represents the sampled stalls surveyed by Lancaster Engineering in their 2016 parking study.

<sup>1</sup> An additional 83 stalls (in a mix of stall types) had restricted use on the survey day.

Figure A: 2016 Parking Study Area



## 12:00 PM Occupancy Heat Map - NW Pdx - Post-Meter Implementation

Table 2: 2016 Northwest On-Street Parking Utilization by Time Stay (Sampled Stalls)

Stall Type	Stalls	Peak Hour Enforcement Hours	Peak Occupancy Enforcement Hrs	Stalls Empty	Average Length of Stay <sup>2</sup>	Peak Hour All (Survey) Hours	Peak Occupancy All Hours
<b>All Stalls</b>	<b>3,079</b>	<b>12:00 – 1:00 PM</b>	<b>87.3%</b>	<b>394</b>	<b>2 hr / 8 min</b>	<b>7:00 – 8:00 PM</b>	<b>90.5%</b>
5 Minute -Signed	6	10:00 – 11:00 AM	83.3%	1	N/A	10:00 – 11:00 AM	83.3%
10 Minute - Signed	3	10:00 – 11:00 AM	33.3%	2	N/A	10:00 – 11:00 AM	33.3%
15 Minute - Signed	12	6:00 – 7:00 PM	66.7%	4	N/A	7:00 – 8:00 PM	91.7%
30 Minute - Signed	2	multiple	100%	0	N/A	multiple	100%
1 Hour - Signed	41	11:00 AM – 12:00 PM	80.5%	8	1 hr / 43 min	11:00 AM – 12:00 PM	80.5%
2 Hour - Signed	31	11:00 AM – 12:00 PM	90.3%	3	1 hr / 55 min	11:00 AM – 12:00 PM	90.3%
30 Minutes – Metered	106	6:00 – 7:00 PM	67.9%	34	N/A	9:00 – 10:00 PM	81.1%
2 Hour -Metered	79	6:00 – 7:00 PM	88.6%	9	1 hr / 31 min	7:00 – 9:00 PM	89.9%
4 Hour - Metered	425	6:00 – 7:00 PM	77.2%	97	1 hr / 43 min	7:00 – 8:00 PM	84.5%
4 Hour OBP - Metered	1,798	6:00 – 7:00 PM	91.7%	149	2 hr / 32 min* 4 hr / 29 min	7:00 – 8:00 PM	94.2%
4 Hour OBP - Signed	540	12:00 – 1:00 PM	94.3%	31	3 hr / 6 min* 3 hr / 58 min	12:00 – 1:00 PM	94.3%
ADA 'Accessible'	3	multiple	66.7%	1	5 hr / 30 min	multiple	66.7%
Unsigned	33	10:00 AM – 12:00 PM	97.0%	1	4 hr / 59 min	10:00 AM – 12:00 PM	97.0%

\* excludes vehicles with displayed permits

<sup>2</sup> Average length of stay is total vehicle hours parked divided by number of unique vehicle trips – this calculation was done for vehicles parked during enforcement hours.

Table 3: 2016 Northwest 2 &amp; 4 Hour On-Street Parking Utilization by User Group (Enforcement Hours)

Stall Type	Stalls (Peak Occupancy)	User Group	# in User Group (peak hr.)	Vehicle Trips	Vehicle Hours Parked	Average Length of Stay	Turnover Rate
<b>2 Hours Signed</b>	31 (90.3%)	All	28	128	249	1 hr/ 57 min	5.14
		Non-Permit Users	24	118	227	1 hr/ 55 min	5.20
		Permits	4	10	22	2 hr/ 12 min	4.55
<b>2 Hours Metered</b>	79 (88.6%)	All	70	318	484	1 hr/ 31 min	6.57
		Non-Permit Users	70	318	484	1 hr/ 31 min	6.57
		Permits	0	0	0	N/A	N/A
<b>4 Hours Metered</b>	425 (77.2%)	All	328	1,630	2,816	1 hr/ 44 min	5.79
		Non-Permit Users	321	1,602	2,738	1 hr/ 43 min	5.85
		Permits	7 <sup>3</sup>	28	78	2 hr / 47 min	3.59
<b>4 Hours OBP Signed</b>	540 (94.3%)	All	509	1,187	4,702	3 hr/ 58 min	2.52
		Non-Permit Users	253	715	2,215	3 hr/ 6 min	3.23
		Permits	256	472	2,487	5 hr/ 16 min	1.90
<b>4 Hours OBP Metered</b>	1,798 (91.7%)	All	1,649	3,578	16,017	4 hr/ 29 min	2.23
		Non-Permit Users	297	1,040	2,634	2 hr/ 32 min	3.95
		Permits	1,352	2,538	13,383	5 hr/ 16 min	1.90

- 969 vehicles were observed parking for at least 10 hours over the course of the survey day.
- Nearly 1 in 10 vehicles were parked for at least 10 hours, or 9.8% of all vehicle trips.

<sup>3</sup> 7 vehicles parked in 4 Hour OBP stalls displayed permits during the midday peak hour (12:00 – 1:00 PM). It is not known whether or not they paid to park at the meter.

## Permit Analysis

Table 4: 2016 NW Permit Allocations

Year	2016
Business	4,054
Guest	1,094
Resident	3,412
Total Allocated	<b>8,558</b>

Table 5: Summary of Permit Use

		A	B	C
	Observation	Sample Size	Percent of Sample	Stalls in NW Parking District
1	On-street stalls in all NW parking district	N/A	N/A	5,264 <sup>4</sup>
2	On-street stalls surveyed – sample size	3,079	100%	
3	Stalls <u>Signed</u> 4 Hour or By Permit	540	18%	923
4	Stalls <u>Metered</u> 4 Hour or By Permit	1,798	58%	3,074
5	Stalls where permits are not valid (Stalls without an Or By Permit designation)	741	24%	1,267
	<b>Extrapolation Analysis</b>			
6	Permits in <u>Signed</u> 4 Hour OBP* - peak hour	258	16%	441
7	Permits in <u>Metered</u> 4 Hour OBP* - peak hour	1,345	82%	2,299
8	Permits observed in all other stall types <sup>5</sup>	39	2%	67
9	Permits displayed during peak hour and extrapolated to all on-street stalls	<b>1,642</b>	<b>N/A</b>	<b>2,807</b>

\* vehicles displaying permits should be parked in these stall types

<sup>4</sup> Stall total for the entire Northwest parking district (metered and permit stalls). Number provided by PBOT.

<sup>5</sup> Ideally no vehicles displaying permits would be parked in these stall types; they are not intended for permit holders.

Table 6: Observations of Permit Allocation

A

	Observation	2016
1	Peak hour occupancy in 4 Hour or By Permit stalls	91%
2	Peak hour demand in 4 Hour or By Permit stalls if 67 permits now using non-permit stalls are allocated to OBP stalls	94%
3	Permits allocated and FTE allowance per business	4,054 100% FTE
4	Permits allocated to residents (an additional 1,094 are allocated to guests or residents)	3,412
5	Business permit “float” <sup>6</sup> based on permits allocated (4,054) / and peak hour permits observed (606 observed, extrapolated to 1,036)	391% (4,054/1,036)
6	Residential permit “float” based on permits allocated (3,412) / and peak hour permits observed (995 <sup>7</sup> observed, extrapolated to 1,701)	238% (3,412/1,701)
7	Guest permit “float” based on permits allocated (1,094) / and peak hour permits observed (0 <sup>8</sup> )	N/A (1,094/0)
8	Permits displayed in peak hour @94% occupancy (extrapolated <sup>9</sup> )	2,807 permits
9	Estimated permits needed to be reduced (from 8,558) as a strategy to lower peak occupancy in 4 Hour or By Permit stalls from 94% to 84% (10 percentage points). <sup>10</sup>	<919 <sup>11</sup> >
10	<b>RECOMMENDATION: Total Permits allocated in 2017</b> (includes elimination of guest permits)	<b>6,547</b>
11	<b>Estimated distribution of users in 4 Hour or By Permit stalls in peak hour @ 84% occupancy</b>	<b>2,506 permits</b>
12	<b>RECOMMENDATION:</b> Discuss options to reduce business permits based on FTE (cap – open enrollment). Residential permit reduction can be approached in several ways – (e.g., per household, per unit, units without off-street parking, open enrollment).	<b>TBD</b>

<sup>6</sup> Float is the relationship between permits allocated and vehicles parked using a permit.

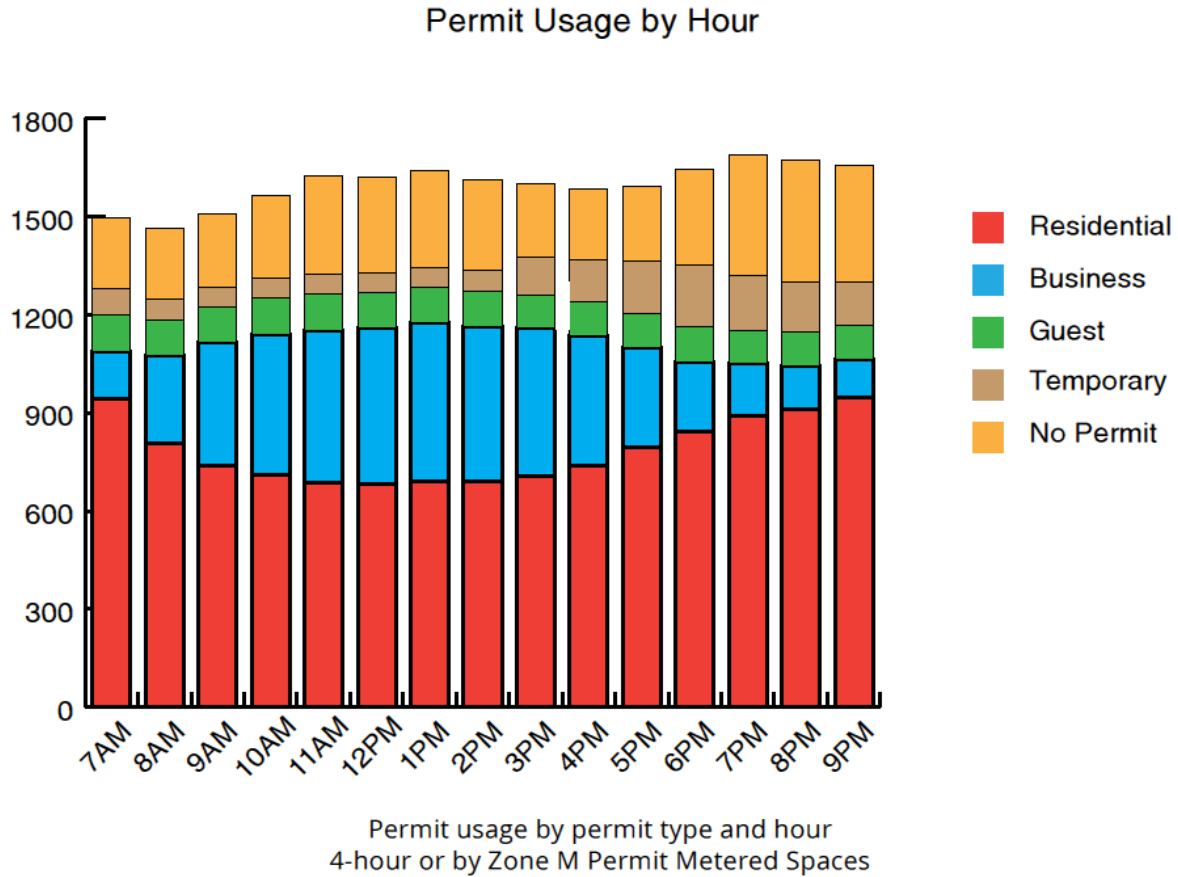
<sup>7</sup> Highest number of residential permits observed during enforcement hours (6:00 – 7:00 PM).

<sup>8</sup> No guest permits were observed during enforcement hours (6:00 – 7:00 PM).

<sup>9</sup> Figure extrapolated to the entire NW parking district (5,264 stalls).

<sup>10</sup> This assumes that existing transient parkers would continue to use these stalls. All efforts to decrease occupancies to 84% would be made through reduced permit sales.

<sup>11</sup> This reduction in permit allocation is intended to achieve an 84% occupancy goal – applies only to existing conditions. It does not take into account new development or growth (in residents or employment).



### Preliminary Recommendations

- Expansion of meters particularly in stalls which are currently signed only. There are currently 540 4 Hour OBP Signed stalls with a 94% occupancy during the midday peak. A high percentage of these stalls should be converted to metered stalls to help reduce demand and bring utilization back to the 85% threshold.
- Reduce the number of 30 Minute spaces (108), which have a 48% occupancy during the midday peak hour (12:00 – 1:00 PM). Reformat time stays to 2 and 4 Hour Metered, this will increase the number of 'customer friendly' stalls available for use during enforcement hours.
- Reduce the number of permits allocated to residents and employees to achieve desired 84% occupancy level during the enforcement day. Reduction recommendation should account for future growth/development in the Northwest parking district.
- Eliminate guest permits. No guest permits (zero) were observed parking in 'Or By Permit' stalls during enforcement hours. Guests may park on-street overnight without risk of penalty after and before enforcement hours.

- Pilot the concept of eliminating time stays in non-commercial-adjacent corridors, while retaining the paid parking requirement. This would allow users to park for longer periods of time in stalls where turnover is not as high a priority. The 'elimination' of time stays would manifest itself in the form of 10 Hour meters, effective from 9:00 AM to 7:00 PM during existing enforcement hours.<sup>12</sup>

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<sup>12</sup> PBOT does not recommend the utilization of 10 Hour meters as it is not consistent with the adopted plan or city policy.