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# Island Center Homes Traffic Impact Analysis

Jurisdiction: King County

November 2019



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## **1. INTRODUCTION**

Gibson Traffic Consultants, Inc. (GTC) has been retained to complete a traffic impact analysis (TIA) for the proposed Island Center Homes development per King County Level One Traffic Impact Analysis requirements. The development is located northwest quadrant of the Vashon Highway SW and SW 188<sup>th</sup> Street intersection. There is currently a vacant 4-plex on the site. The proposed Island Center Homes development will consist of 5 single-family units each housing 8 individuals for a total of 40 rooms. A site vicinity map is included in Figure 1.

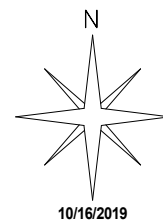
The scoping and analysis methodology for the Island Center Homes follows a limited scope Level One Traffic Impact Analysis as identified by Robert Eichelsdoerfer, P.E, Senior Engineer with King County Department of Transportation (KCDOT). This memorandum report summarizes GTC's traffic analysis and findings that include:

- 1) Proposed site development
- 2) Existing site conditions
- 3) Trip generation and trip distribution
- 4) Parking demand
- 5) Access analysis
- 6) Mitigation

Zach Wieben, responsible for the traffic analysis and report, is a licensed professional engineer (Civil) in the State of Washington and a current member of the Washington State section of ITE.

## **2. PROPOSED SITE DEVELOPMENT & ACCESS**

The proposed Island Center Homes development will include construction of 5 single-family homes with a total of 40 sleeping rooms for low-income seniors, veterans, as well as special needs populations. The parking area on-site will consist of 18 parking stalls. Vehicle access to the parking lot will come via an access easement to SW 188<sup>th</sup> Street on the west side of the property.



VASHON HWY SW

SW 184TH WY

103RD AVE SW

**SITE**

SW 188TH ST

SW 192ND ST

105TH AVE SW

SW CEMETARY RD

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**TRAFFIC IMPACT STUDY**  
GTC #19-212

**ISLAND CENTER HOMES  
40 ROOMS  
SUPPORTIVE HOUSING**

**LEGEND**



DEVELOPMENT SITE

**FIGURE 1  
SITE VICINITY MAP**

**KING COUNTY**

### **3. EXISTING CONDITIONS**

#### **3.1 Transit Service**

King County Metro Transit provides public transit service within unincorporated King County. There are two routes that service the site vicinity during weekdays: Routes 118 and 119. Routes 118 and 119 provide northbound/southbound service on Vashon Island to/from downtown Seattle via the Fauntleroy Ferry Terminal. Combined headways for the routes range from 20-90 minutes between 4 AM and 10 PM.

#### **3.2 Collision Analysis**

GTC has conducted a collision analysis using WSDOT data for the frontage of the development site (including the intersection of Vashon Highway SW at SW 188<sup>th</sup> Street) for the previous five full years (2014 through 2018). Five reported collisions occurred (all at the intersection) in the five years which results in a collision frequency of 1 collision per year. There were no fatalities and no pedestrian or cyclists involved in the reported collisions.

#### **3.3 Existing Road Conditions**

The Island Center Homes development has frontage on two roads—SW 188<sup>th</sup> Street and Vashon Highway SW. Vashon Highway SW is a two-lane road with a posted speed limit of 40 mph and paved shoulders ranging from 5-10 feet. SW 188<sup>th</sup> Street is a two-lane road with a posted speed limit of 25 mph and no shoulders along the development's frontage.

### **4. DEVELOPMENT**

#### **4.1 Trip Generation**

The Institute of Transportation Engineers (ITE) is a national organization that publishes trip generation data for different land uses. The types of units being constructed as part of the Island Center Homes development would be best categorized as Land Use Code 220, Multifamily Housing (Low-Rise). However, ITE does not publish data for supportive housing developments similar to the proposed Island Center Homes development. Supportive housing typically has a lower trip generation rate per unit than market-rate housing because of reduced vehicle ownership rates by tenants.

In order to provide an estimate for the number of new trips generated by the Island Center Homes development, driveway counts for two existing veterans housing developments in Everett, WA and Shoreline, WA were conducted. The driveway counts were conducted by the independent data collection firm Traffic Data Gathering in September 2019 for the peak hour occurring between 4-6 PM. The combined trip generation rate for the two sites was 0.30 trips per room/unit and was about 46% lower than the average ITE PM peak-hour trip generation rate for Land Use Code 220, Multifamily Housing (Low-Rise). This same reduction was applied to the average weekday and AM peak-hour trip generation rates for Land Use Code 220 to estimate the new trip generation of the Island Center Homes development.

The existing site currently has four vacant apartment units that were previously rented at market-rate. Credit for the previous use of the site is included in the trip generation calculations by using the average trip generation rates for Land Use Code 220, Multifamily Housing (Low-Rise). Trip generation calculations are summarized in Table 1.

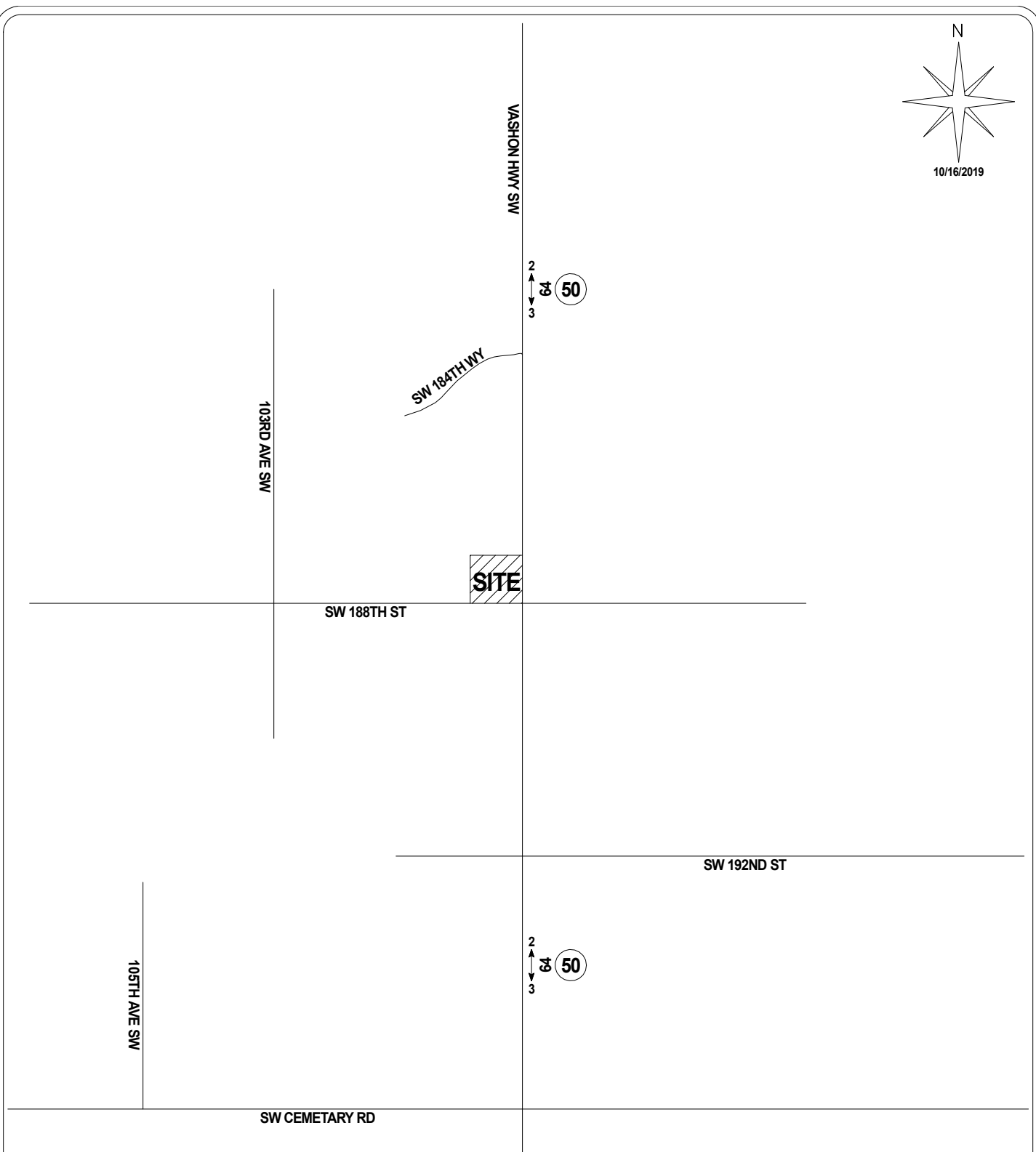
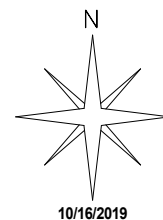
**Table 1: Trip Generation Summary**

Land Use	Size	ADT	AM Peak-Hour (7-9 AM)			PM Peak-Hour (4-6PM)		
			In	Out	Total	In	Out	Total
Supportive Housing (Study/Reduced ITE)	40 rooms	156.8	2.3	7.7	10.0	6.0	6.0	12.0
ITE LUC 220 Multifamily Housing (Low-Rise)	-4 units	-29.3	-0.4	-1.4	-1.8	-1.4	-0.8	-2.2
<b>Total</b>		<b>127.5</b>	<b>1.9</b>	<b>6.3</b>	<b>8.2</b>	<b>4.6</b>	<b>5.2</b>	<b>9.8</b>

The Island Center Homes development is anticipated to generate approximately 128 new average daily trips, 8 new AM peak-hour trips, and 10 new PM peak-hour trips after credit for the previous use of the site is included. Trip generation calculations, including data from the Everett, WA and Shoreline, WA veterans housing counts, are included in the attachments.

## 4.2 Trip Distribution

The trip distribution for the Island Center Homes development is based on historic ADT counts from King County. It is anticipated that 50% of the site traffic would travel to and from the north on Vashon Highway SW. The remaining 50% of the site traffic is expected to travel to and from the south on Vashon Highway SW. A detailed trip distribution for the PM peak-hour is shown in Figure 2.



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**ISLAND CENTER HOMES  
40 ROOMS  
SUPPORTIVE HOUSING**

**KING COUNTY**

**LEGEND**  
AWDT  
PM ← → PEAK  
(XX)  
NEW DAILY TRAFFIC  
NEW PM PEAK-HOUR TRIPS  
TRIP DISTRIBUTION %

**FIGURE 2  
DEVELOPMENT  
PM PEAK-HOUR  
TRIP DISTRIBUTION**

## 5. PARKING DEMAND

King County Code (Section 21A.18.030) requires 2 off-street parking spaces per single-family residence. The 5 single-family units being constructed as part of the Island Center Homes development would therefore require 10 off-street parking spaces. The development will be providing at least 18 parking spaces on-site and will therefore meet code requirements for parking.

ITE's *Parking Generation Manual 5<sup>th</sup> Edition (2019)* identifies average peak period parking demand for a range of uses. ITE Land Use Code 223, Affordable Housing (note: ITE does not publish *trip* generation information for this land use) is the most similar land use to the Island Center Homes development. Additionally, historic parking demand counts conducted at veterans housing sites in Everett, WA and Shoreline, WA were reviewed for use to estimate average peak-period parking demand at the Island Center Homes development. The parking data from the veterans housing locations is summarized below:

Everett Location – 2504 Melvin Avenue – 8 Units ( $6 + 1 \text{ HC} = 7$  parking spaces)

- April 1, 2013 – 9 PM : 2 Vehicles Parked – 0.25 vehicles per unit
- April 2, 2013 – 11 AM : 2 Vehicles Parked – 0.25 vehicles per unit

Shoreline Location – 1301 N 200<sup>th</sup> Street – 25 Units ( $12 + 2 \text{ HC} = 14$  parking spaces)

- April 1, 2013 – 9 PM : 7 Vehicles Parked – 0.28 vehicles per unit
- April 2, 2013 – 11 AM : 11 Vehicles Parked – 0.36 vehicles per unit

Since the Island Center Homes development is expected to serve a mix of low-income seniors, veterans, as well as special needs populations, peak period parking demand rates from ITE Land Use Code 223, Affordable Housing, and the veterans housing sites were averaged to form an estimated parking demand rate for the Island Center Homes development. The *per bedroom* parking demand rate was used for Land Use Code 223 because the Island Center Homes development is expected to have single-room sleeping areas. Per bedroom data was not available for the veterans housing locations. There is only expected to be a single occupant per room in the Island Center Homes development, therefore, use of the per unit rates for veterans housing parking demand estimates should be considered conservatively high because of the possibility for multiple bedrooms/tenants per unit. The highest parking demand rate per unit has been used in the calculations because that veterans housing locations were only observed during anticipated peak-hours and not for a continuous 24-hour period. The calculation for the parking demand rate and total estimated parking demand for the site is summarized in Table 2.



**Table 2: Parking Demand Rates and Calculations**

<b>Land Use</b>	<b>Average Peak Period Rate</b>
ITE LUC 223 Affordable Housing	0.54 parking stalls per bedroom
Veterans Housing (Shoreline/Everett)	0.36 <sup>1</sup> parking stalls per unit
<b>Average Rate</b>	<b>0.45 parking stalls per room/sleeping unit</b>
Number of Rooms	40
Estimated Parking Demand	40 rooms x 0.45 parking stalls per room = <b>18 parking stalls</b>

The Island Center Homes development is expected to have an average peak period parking demand of 18 parking spaces equivalent to 0.45 parking spaces per sleeping room. The development will be providing at least 18 parking spaces on site which would meet the average peak period demand.

## 6. ACCESS ANALYSIS

The posted speed limit along SW 188<sup>th</sup> Street in the site vicinity is 25 mph. Based on a 35-mph design speed (posted speed limit plus 10 mph) and King County sight distances requirements, the required stopping sight distance is 250 feet and the required entering sight distance is 390 feet. There is expected to be clear sight to Vashon Highway SW east of the site access (approximately 258 ft) and there is expected to be sufficient stopping and entering sight distance to the west.

The Island Center Homes access is expected to be located approximately 265 feet west of Vashon Highway SW (centerline-to-centerline). The access is located on the western edge of the development site and therefore maximizing the available spacing to Vashon Highway SW. The access location is not expected to create any operational or safety hazards.

<sup>1</sup> Using max parking demand rate observed in counts.

## **7. TRAFFIC MITIGATION**

### **7.1 On-Site/Access Improvements**

The following on-site/access improvement will be constructed by the developer or is recommended to enhance the traffic flow and safety conditions at the site access:

- The access to SW 188<sup>th</sup> Street needs to be stop-controlled with a “STOP” sign on the site access approach.

### **7.2 Off-Site Mitigation/Improvements**

The development generated traffic will not impact any off-site intersections with 30 or more PM peak-hour trips with deficient level of service; therefore, off-site intersection improvements should not be required.

### **7.3 Washington State Department of Transportation**

No State intersections will be impacted with 30 or more PM peak-hour trips. Therefore, no mitigation would be provided to WSDOT.

# **Trip Generation**

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Trip Generation for: Development Peak Weekday  
(a.k.a.): Average Weekday Daily Trips (AWDT)

LAND USES		NET EXTERNAL TRIPS BY TYPE									
		IN BOTH DIRECTIONS					DIRECTIONAL ASSIGNMENTS				
		Gross Trips		Internal Crossover		TOTAL	PASS-BY		NEW	PASS-BY	
		ITE LU code	VARIABLE	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	% of Ext. Trips	In+Out (Total)	In+Out (Total)
Multifamily Housing (Low-Rise)	40 units	220		3.92	50%	50%	156.80	0%	0%	0.00	156.80
Multifamily Housing (removed)	-4 units	220		7.32	50%	50%	-29.28	0%	0%	0.00	-29.28
Total							127.52			0.00	127.52
										0.00	78.40
										0.00	-14.64
										0.00	63.76

Island Center Homes  
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Trip Generation for: Development Peak Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 7 and 9 AM  
(a.k.a.): Weekday AM Peak Hour

NET EXTERNAL TRIPS BY TYPE															
				IN BOTH DIRECTIONS					DIRECTIONAL ASSIGNMENTS						
				Gross Trips			Internal Crossover		TOTAL	PASS-BY		NEW	PASS-BY		NEW
LAND USES	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	Trips In+Out (Total)	In+Out (Total)	% Ext. Trips	In+Out (Total)	In	Out	In	Out
			0.25	23%	77%	10.00	0%	0.00	0.00	10.00	0%	0.00	0.00	0.00	2.30
Multifamily Housing (Low-Rise)	40 units	220	0.25	23%	77%	10.00	0%	0.00	-1.84	0%	0.00	0.00	0.00	-0.42	-1.42
Multifamily Housing (removed)	-4 units	220	0.46	23%	77%	-1.84	0%	0.00	8.16		0.00	0.00	0.00	1.88	6.28
Total						8.16		0.00							

Island Center Homes  
GTC #19-212

Trip Generation for: Development Peak Weekday, Peak Hour of Adjacent Street Traffic, One Hour between 4 and 6 PM  
(a.k.a.): Weekday PM Peak Hour

LAND USES		NET EXTERNAL TRIPS BY TYPE										
		IN BOTH DIRECTIONS					DIRECTIONAL ASSIGNMENTS					
		TOTAL	PASS-BY		NEW	PASS-BY		NEW		NEW		
	VARIABLE	ITE LU code	Trip Rate	% IN	% OUT	In+Out (Total)	% of Gross Trips	Trips In+Out (Total)	% of Ext. Trips	In+Out (Total)	In	Out
Veterans Housing	40 units	Std	0.30	50%	50%	12.00	0%	0.00	0%	12.00	6.00	6.00
Multifamily Housing (removed)	-4 units	220	0.56	63%	37%	-2.24	0%	0.00	0%	-2.24	-1.41	-0.83
Total						9.76		0.00		9.76	4.59	5.17

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**AM Peak-Hour**

%	New ADT	New AM Peak Hour Trips		
		In	Out	Total
100%	128	2	6	8
1%	1.28	0.02	0.06	0.08
2%	2.55	0.04	0.13	0.16
3%	3.83	0.06	0.19	0.24
4%	5.10	0.08	0.25	0.33
5%	6.38	0.09	0.31	0.41
6%	7.65	0.11	0.38	0.49
7%	8.93	0.13	0.44	0.57
8%	10.20	0.15	0.50	0.65
9%	11.48	0.17	0.57	0.73
10%	12.75	0.19	0.63	0.82
11%	14.03	0.21	0.69	0.90
12%	15.30	0.23	0.75	0.98
13%	16.58	0.24	0.82	1.06
14%	17.85	0.26	0.88	1.14
15%	19.13	0.28	0.94	1.22
16%	20.40	0.30	1.00	1.31
17%	21.68	0.32	1.07	1.39
18%	22.95	0.34	1.13	1.47
19%	24.23	0.36	1.19	1.55
20%	25.50	0.38	1.26	1.63
21%	26.78	0.39	1.32	1.71
22%	28.05	0.41	1.38	1.80
23%	29.33	0.43	1.44	1.88
24%	30.60	0.45	1.51	1.96
25%	31.88	0.47	1.57	2.04
26%	33.16	0.49	1.63	2.12
27%	34.43	0.51	1.70	2.20
28%	35.71	0.53	1.76	2.28
29%	36.98	0.55	1.82	2.37
30%	38.26	0.56	1.88	2.45
31%	39.53	0.58	1.95	2.53
32%	40.81	0.60	2.01	2.61
33%	42.08	0.62	2.07	2.69
34%	43.36	0.64	2.14	2.77
35%	44.63	0.66	2.20	2.86
36%	45.91	0.68	2.26	2.94
37%	47.18	0.70	2.32	3.02
38%	48.46	0.71	2.39	3.10
39%	49.73	0.73	2.45	3.18
40%	51.01	0.75	2.51	3.26
41%	52.28	0.77	2.57	3.35
42%	53.56	0.79	2.64	3.43
43%	54.83	0.81	2.70	3.51
44%	56.11	0.83	2.76	3.59
45%	57.38	0.85	2.83	3.67
46%	58.66	0.86	2.89	3.75
47%	59.93	0.88	2.95	3.84
48%	61.21	0.90	3.01	3.92
49%	62.48	0.92	3.08	4.00
50%	63.76	0.94	3.14	4.08
51%	65.04	0.96	3.20	4.16
52%	66.31	0.98	3.27	4.24
53%	67.59	1.00	3.33	4.32
54%	68.86	1.02	3.39	4.41
55%	70.14	1.03	3.45	4.49
56%	71.41	1.05	3.52	4.57
57%	72.69	1.07	3.58	4.65
58%	73.96	1.09	3.64	4.73
59%	75.24	1.11	3.71	4.81
60%	76.51	1.13	3.77	4.90
61%	77.79	1.15	3.83	4.98
62%	79.06	1.17	3.89	5.06
63%	80.34	1.18	3.96	5.14
64%	81.61	1.20	4.02	5.22
65%	82.89	1.22	4.08	5.30
66%	84.16	1.24	4.14	5.39
67%	85.44	1.26	4.21	5.47
68%	86.71	1.28	4.27	5.55
69%	87.99	1.30	4.33	5.63
70%	89.26	1.32	4.40	5.71
71%	90.54	1.33	4.46	5.79
72%	91.81	1.35	4.52	5.88
73%	93.09	1.37	4.58	5.96
74%	94.36	1.39	4.65	6.04
75%	95.64	1.41	4.71	6.12
76%	96.92	1.43	4.77	6.20
77%	98.19	1.45	4.84	6.28
78%	99.47	1.47	4.90	6.36
79%	100.74	1.49	4.96	6.45
80%	102.02	1.50	5.02	6.53
81%	103.29	1.52	5.09	6.61
82%	104.57	1.54	5.15	6.69
83%	105.84	1.56	5.21	6.77
84%	107.12	1.58	5.28	6.85
85%	108.39	1.60	5.34	6.94
86%	109.67	1.62	5.40	7.02
87%	110.94	1.64	5.46	7.10
88%	112.22	1.65	5.53	7.18
89%	113.49	1.67	5.59	7.26
90%	114.77	1.69	5.65	7.34
91%	116.04	1.71	5.71	7.43
92%	117.32	1.73	5.78	7.51
93%	118.59	1.75	5.84	7.59
94%	119.87	1.77	5.90	7.67
95%	121.14	1.79	5.97	7.75
96%	122.42	1.80	6.03	7.83
97%	123.69	1.82	6.09	7.92
98%	124.97	1.84	6.15	8.00
99%	126.24	1.86	6.22	8.08
100%	127.52	1.88	6.28	8.16

Island Center Homes  
GTC #19-212

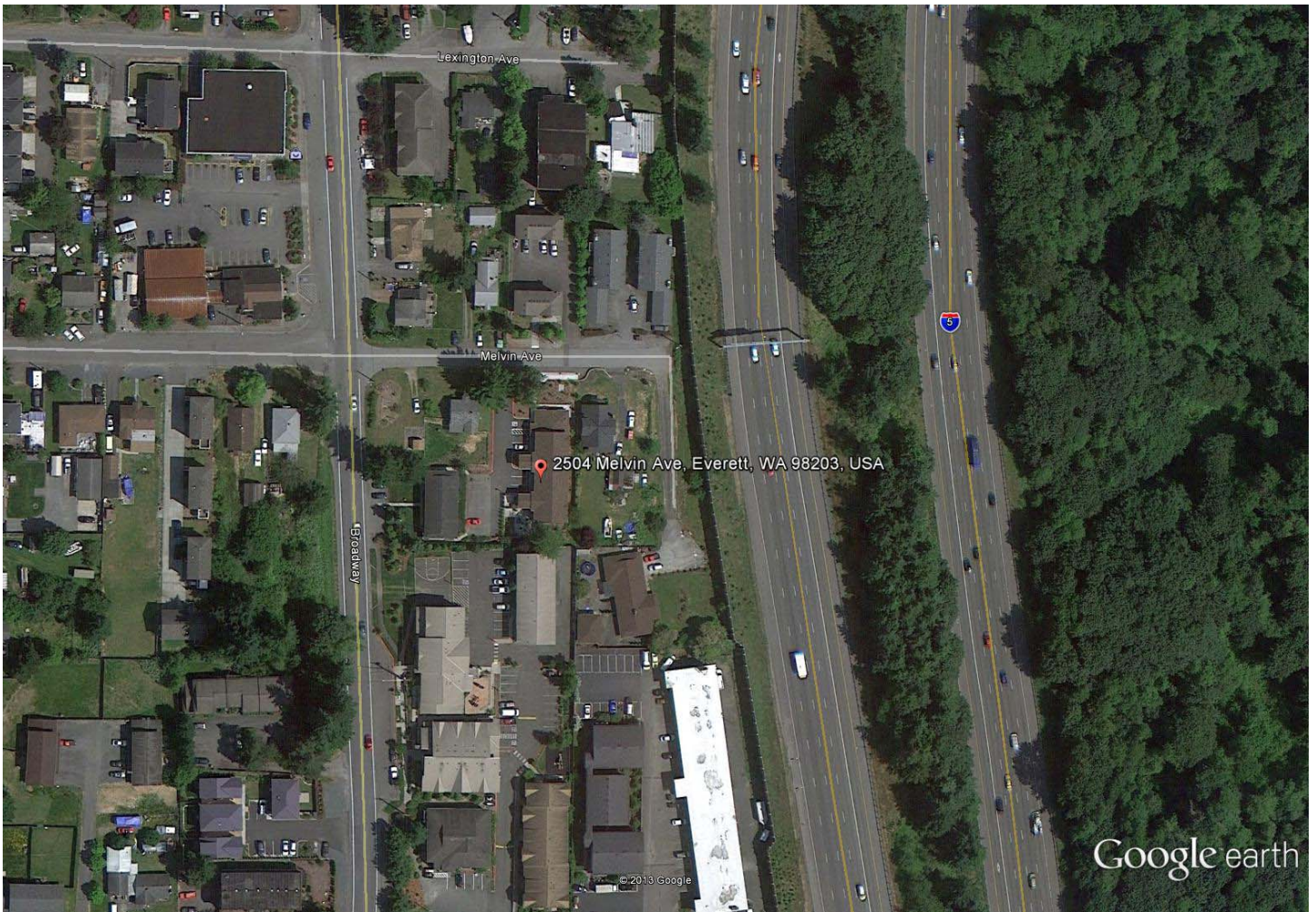
**PM Peak-Hour**

%	New ADT	New PM Peak Hour Trips		
		In	Out	Total
100%	128	5	5	10
1%	1.28	0.05	0.05	0.10
2%	2.55	0.09	0.10	0.20
3%	3.83	0.14	0.16	0.29
4%	5.10	0.18	0.21	0.39
5%	<b>6.38</b>	<b>0.23</b>	<b>0.26</b>	<b>0.49</b>
6%	7.65	0.28	0.31	0.59
7%	8.93	0.32	0.36	0.68
8%	10.20	0.37	0.41	0.78
9%	11.48	0.41	0.47	0.88
10%	<b>12.75</b>	<b>0.46</b>	<b>0.52</b>	<b>0.98</b>
11%	14.03	0.50	0.57	1.07
12%	15.30	0.55	0.62	1.17
13%	16.58	0.60	0.67	1.27
14%	17.85	0.64	0.72	1.37
15%	<b>19.13</b>	<b>0.69</b>	<b>0.78</b>	<b>1.46</b>
16%	20.40	0.73	0.83	1.56
17%	21.68	0.78	0.88	1.66
18%	22.95	0.83	0.93	1.76
19%	24.23	0.87	0.98	1.85
20%	<b>25.50</b>	<b>0.92</b>	<b>1.03</b>	<b>1.95</b>
21%	26.78	0.96	1.09	2.05
22%	28.05	1.01	1.14	2.15
23%	29.33	1.06	1.19	2.24
24%	30.60	1.10	1.24	2.34
25%	<b>31.88</b>	<b>1.15</b>	<b>1.29</b>	<b>2.44</b>
26%	33.16	1.19	1.34	2.54
27%	34.43	1.24	1.40	2.64
28%	35.71	1.29	1.45	2.73
29%	36.98	1.33	1.50	2.83
30%	<b>38.26</b>	<b>1.38</b>	<b>1.55</b>	<b>2.93</b>
31%	39.53	1.42	1.60	3.03
32%	40.81	1.47	1.65	3.12
33%	42.08	1.51	1.71	3.22
34%	43.36	1.56	1.76	3.32
35%	<b>44.63</b>	<b>1.61</b>	<b>1.81</b>	<b>3.42</b>
36%	45.91	1.65	1.86	3.51
37%	47.18	1.70	1.91	3.61
38%	48.46	1.74	1.96	3.71
39%	49.73	1.79	2.02	3.81
40%	<b>51.01</b>	<b>1.84</b>	<b>2.07</b>	<b>3.90</b>
41%	52.28	1.88	2.12	4.00
42%	53.56	1.93	2.17	4.10
43%	54.83	1.97	2.22	4.20
44%	56.11	2.02	2.27	4.29
45%	<b>57.38</b>	<b>2.07</b>	<b>2.33</b>	<b>4.39</b>
46%	58.66	2.11	2.38	4.49
47%	59.93	2.16	2.43	4.59
48%	61.21	2.20	2.48	4.68
49%	62.48	2.25	2.53	4.78
50%	<b>63.76</b>	<b>2.30</b>	<b>2.59</b>	<b>4.88</b>

%	New ADT	New PM Peak Hour Trips		
		In	Out	Total
100%	128	5	5	10
51%	65.04	2.34	2.64	4.98
52%	66.31	2.39	2.69	5.08
53%	67.59	2.43	2.74	5.17
54%	68.86	2.48	2.79	5.27
55%	<b>70.14</b>	<b>2.52</b>	<b>2.84</b>	<b>5.37</b>
56%	71.41	2.57	2.90	5.47
57%	72.69	2.62	2.95	5.56
58%	73.96	2.66	3.00	5.66
59%	75.24	2.71	3.05	5.76
60%	<b>76.51</b>	<b>2.75</b>	<b>3.10</b>	<b>5.86</b>
61%	77.79	2.80	3.15	5.95
62%	79.06	2.85	3.21	6.05
63%	80.34	2.89	3.26	6.15
64%	81.61	2.94	3.31	6.25
65%	<b>82.89</b>	<b>2.98</b>	<b>3.36</b>	<b>6.34</b>
66%	84.16	3.03	3.41	6.44
67%	85.44	3.08	3.46	6.54
68%	86.71	3.12	3.52	6.64
69%	87.99	3.17	3.57	6.73
70%	<b>89.26</b>	<b>3.21</b>	<b>3.62</b>	<b>6.83</b>
71%	90.54	3.26	3.67	6.93
72%	91.81	3.30	3.72	7.03
73%	93.09	3.35	3.77	7.12
74%	94.36	3.40	3.83	7.22
75%	<b>95.64</b>	<b>3.44</b>	<b>3.88</b>	<b>7.32</b>
76%	96.92	3.49	3.93	7.42
77%	98.19	3.53	3.98	7.52
78%	99.47	3.58	4.03	7.61
79%	100.74	3.63	4.08	7.71
80%	<b>102.02</b>	<b>3.67</b>	<b>4.14</b>	<b>7.81</b>
81%	103.29	3.72	4.19	7.91
82%	104.57	3.76	4.24	8.00
83%	105.84	3.81	4.29	8.10
84%	107.12	3.86	4.34	8.20
85%	<b>108.39</b>	<b>3.90</b>	<b>4.39</b>	<b>8.30</b>
86%	109.67	3.95	4.45	8.39
87%	110.94	3.99	4.50	8.49
88%	112.22	4.04	4.55	8.59
89%	113.49	4.09	4.60	8.69
90%	<b>114.77</b>	<b>4.13</b>	<b>4.65</b>	<b>8.78</b>
91%	116.04	4.18	4.70	8.88
92%	117.32	4.22	4.76	8.98
93%	118.59	4.27	4.81	9.08
94%	119.87	4.31	4.86	9.17
95%	<b>121.14</b>	<b>4.36</b>	<b>4.91</b>	<b>9.27</b>
96%	122.42	4.41	4.96	9.37
97%	123.69	4.45	5.01	9.47
98%	124.97	4.50	5.07	9.56
99%	126.24	4.54	5.12	9.66
100%	<b>127.52</b>	<b>4.59</b>	<b>5.17</b>	<b>9.76</b>



# Count and Parking Data



Google earth

feet  
meters





# iMAP



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Date: 4/1/2013

Source: King County iMAP - Property Information (<http://www.metrokc.gov/GIS/iMAP>)



**King County**



## **TRAFFIC DATA GATHERING**

### **REDUCTION SHEET**

**LOCATION:** Everett & Shoreline

**Date:** 9/12/2019

TIME	2504 Melvin Ave, Everett, WA	
	Vehicles	
	IN	OUT
04:00 PM - 04:15 PM	0	1
04:15 PM - 04:30 PM	0	0
04:30 PM - 04:45 PM	0	0
04:45 PM - 05:00 PM	2	1
05:00 PM - 05:15 PM	1	1
05:15 PM - 05:30 PM	0	0
05:30 PM - 05:45 PM	0	0
05:45 PM - 06:00 PM	0	0

1301 N 200th St, Shoreline, WA	
Vehicles	
IN	OUT
0	0
1	1
0	1
1	1
0	0
0	0
0	0
0	0

## Veterans Housing Trip Generation Counts

**Day** Thursday 9/12/2019

**Time** 4:00 - 6:00 PM

Start Time	Everett		
	In	Out	Total
4:00 PM	0	1	1
4:15 PM	0	0	0
4:30 PM	0	0	0
4:45 PM	2	1	3
5:00 PM	1	1	2
5:15 PM	0	0	0
5:30 PM	0	0	0
5:45 PM	0	0	0
Total	3	3	6

Start Time	Shoreline		
	In	Out	Total
4:00 PM	0	0	0
4:15 PM	1	1	2
4:30 PM	0	1	1
4:45 PM	1	1	2
5:00 PM	0	0	0
5:15 PM	0	0	0
5:30 PM	0	0	0
5:45 PM	0	0	0
Total	2	3	5

Peak-Hour	Start Time	4:15 PM		
	Volume	3	2	5
TG Rate		60%	40%	0.63

Peak-Hour	Start Time	4:00 PM		
	Volume	2	3	5
TG Rate		40%	60%	0.20

---

SUMMARY	Everett	Shoreline	Combined
Peak-Hr Trips	5	5	10
Size (Units)	8	25	33
Trips/Unit	0.63	0.20	0.30

% In      % Out  
50%      50%

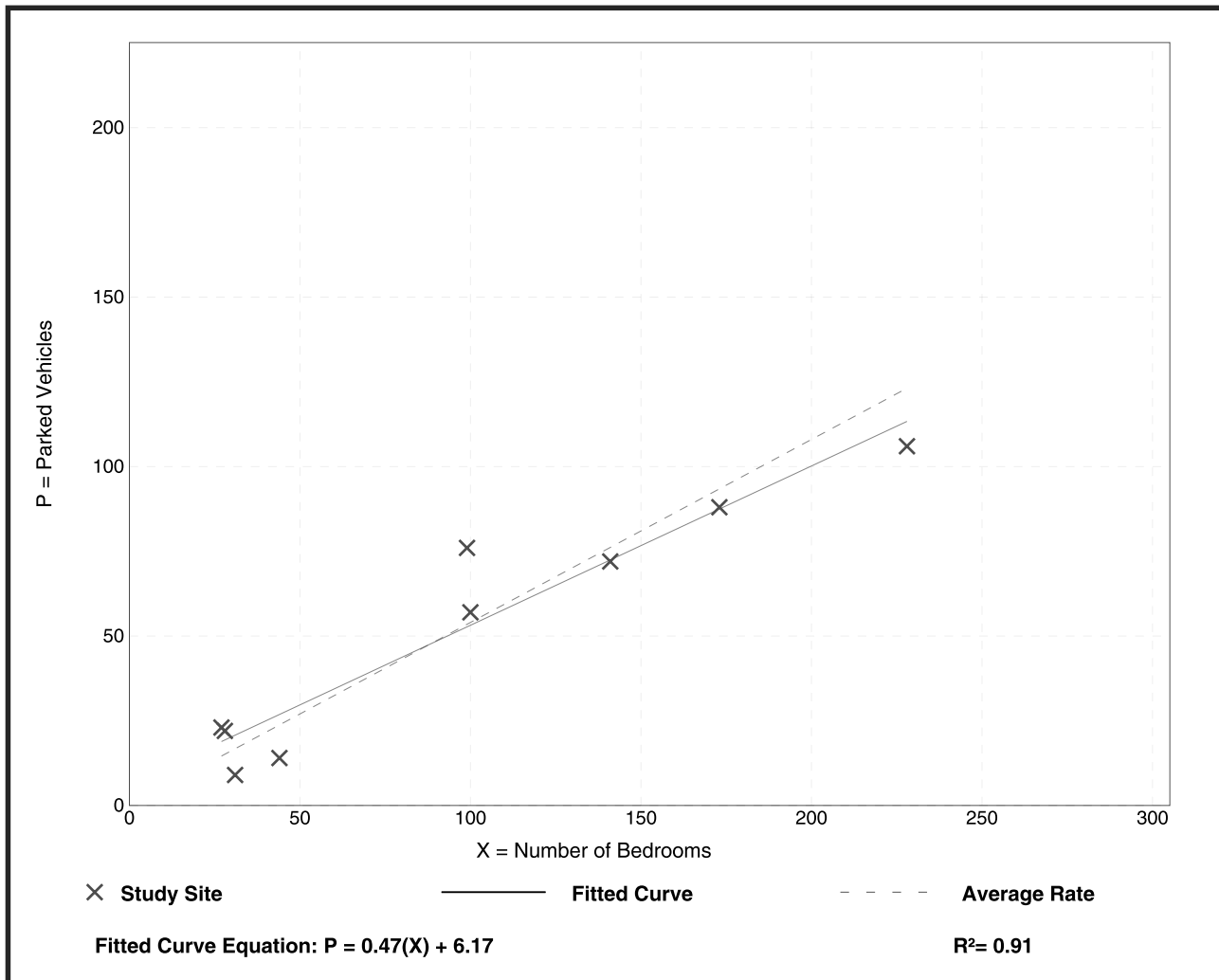
# Affordable Housing - Income Limits (223)

Peak Period Parking Demand vs: Bedrooms  
 On a: Weekday (Monday - Friday)  
 Setting/Location: General Urban/Suburban  
 Peak Period of Parking Demand: 10:00 p.m. - 5:00 a.m.  
 Number of Studies: 9  
 Avg. Num. of Bedrooms: 97

## Peak Period Parking Demand per Bedroom

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.54	0.29 - 0.85	0.48 / 0.82	***	0.14 (26%)

## Data Plot and Equation



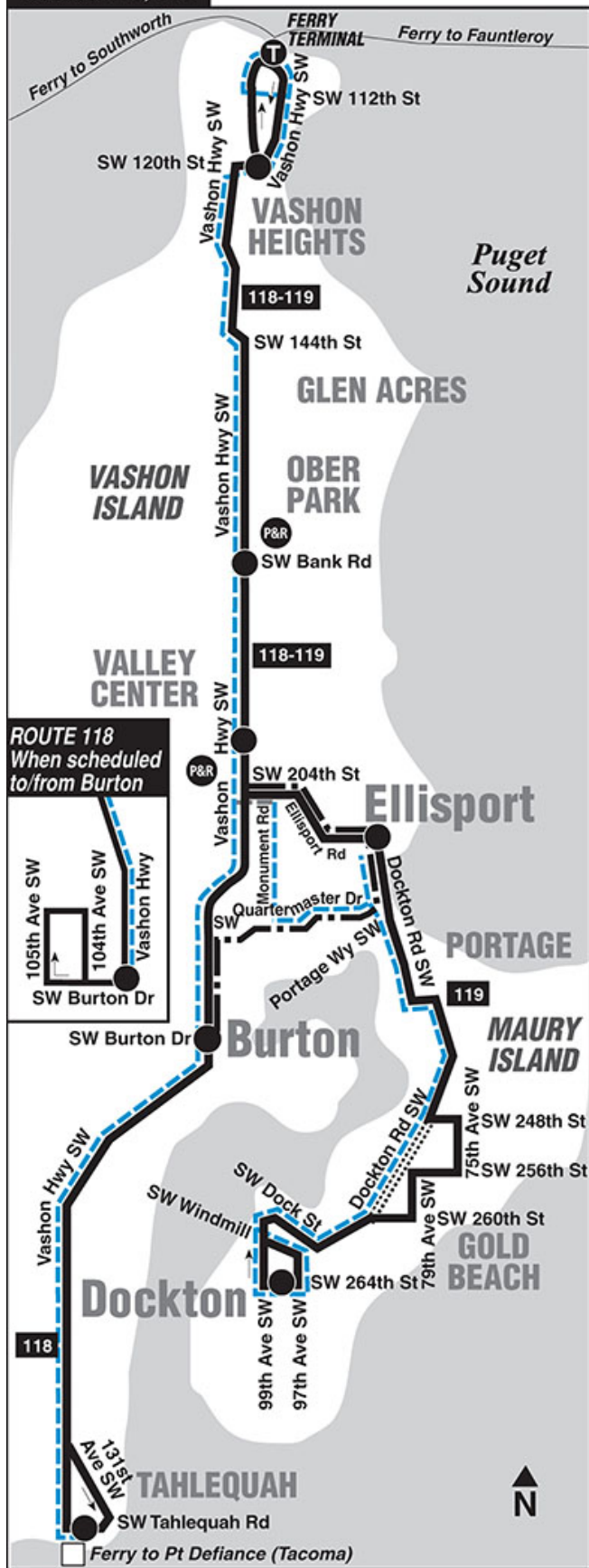
# Collision Data

COUNTY	PRIMARY TRAFFICWAY	INTERSECTING TRAFFICWAY/REFERENCE POINT NAME	MILEPOST	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# I	# F	# A	# J	# T	# H	# S	# N	# A	# E	# D	# I	# S	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)
King	94700	43620	8.19	3419082	2014-08-04	09:11	Suspected Minor Injury	1	0	1	0	0	0	0	0	0	0	0	0	0	Vehicle overturned	Overtaking and Passing		Inattention
King	94700	43620	8.19	3184107	2014-10-30	17:28	No Apparent Injury	0	0	2	0	0	0	0	0	0	0	0	0	0	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	Driver Not Distracted
King	94700	43620	8.19	E578083	2016-07-02	01:13	Suspected Minor Injury	1	0	1	0	0	0	0	0	0	0	0	0	0	Vehicle overturned	Going Straight Ahead		None
King	94700	43620	8.19	E551076	2016-06-07	15:22	No Apparent Injury	0	0	2	0	0	0	0	0	0	0	0	0	0	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped in Roadway	None
King	94700	43620	8.19	E759814	2018-01-17	17:32	Suspected Minor Injury	1	0	2	0	0	0	0	0	0	0	0	0	0	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped for Traffic	Follow Too Closely



# Transit Data

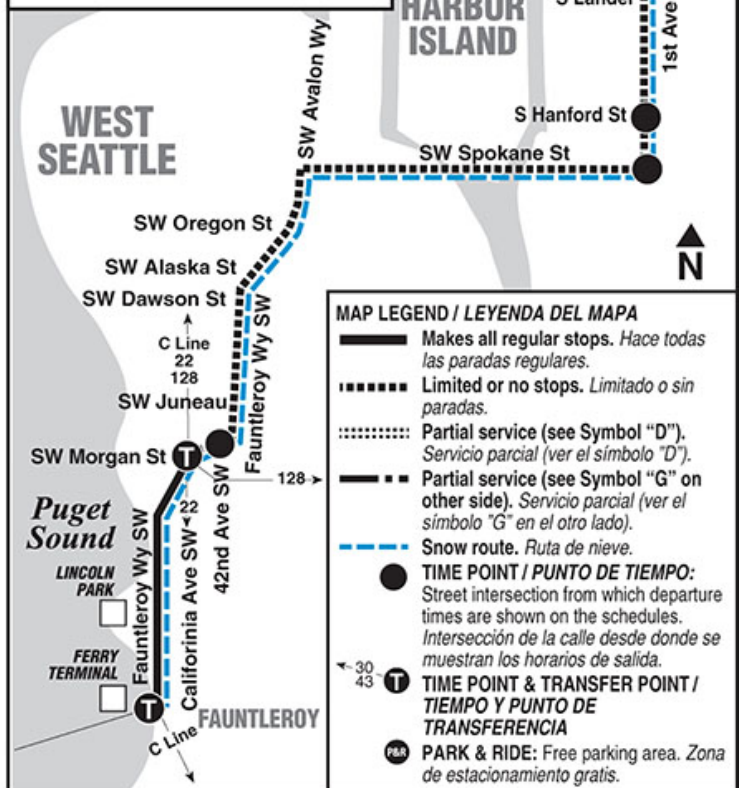
## Routes 118, 119



### Routes 116, 118, 119

## Route 116-118-119 Express Information

Routes 116, 118 and 119 make no stops between 3rd Ave S & S Main St and Fauntleroy Ave SW & 42nd Ave SW EXCEPT on 1st Ave S at S Atlantic St, S Lander St and S Hanford St and on Fauntleroy Way SW at SW Oregon St, SW Alaska St, SW Dawson St and SW Juneau St.



## Emergency Service/Snow

## Routes 118, 119

# Tahlequah Ferry to Vashon Ferry

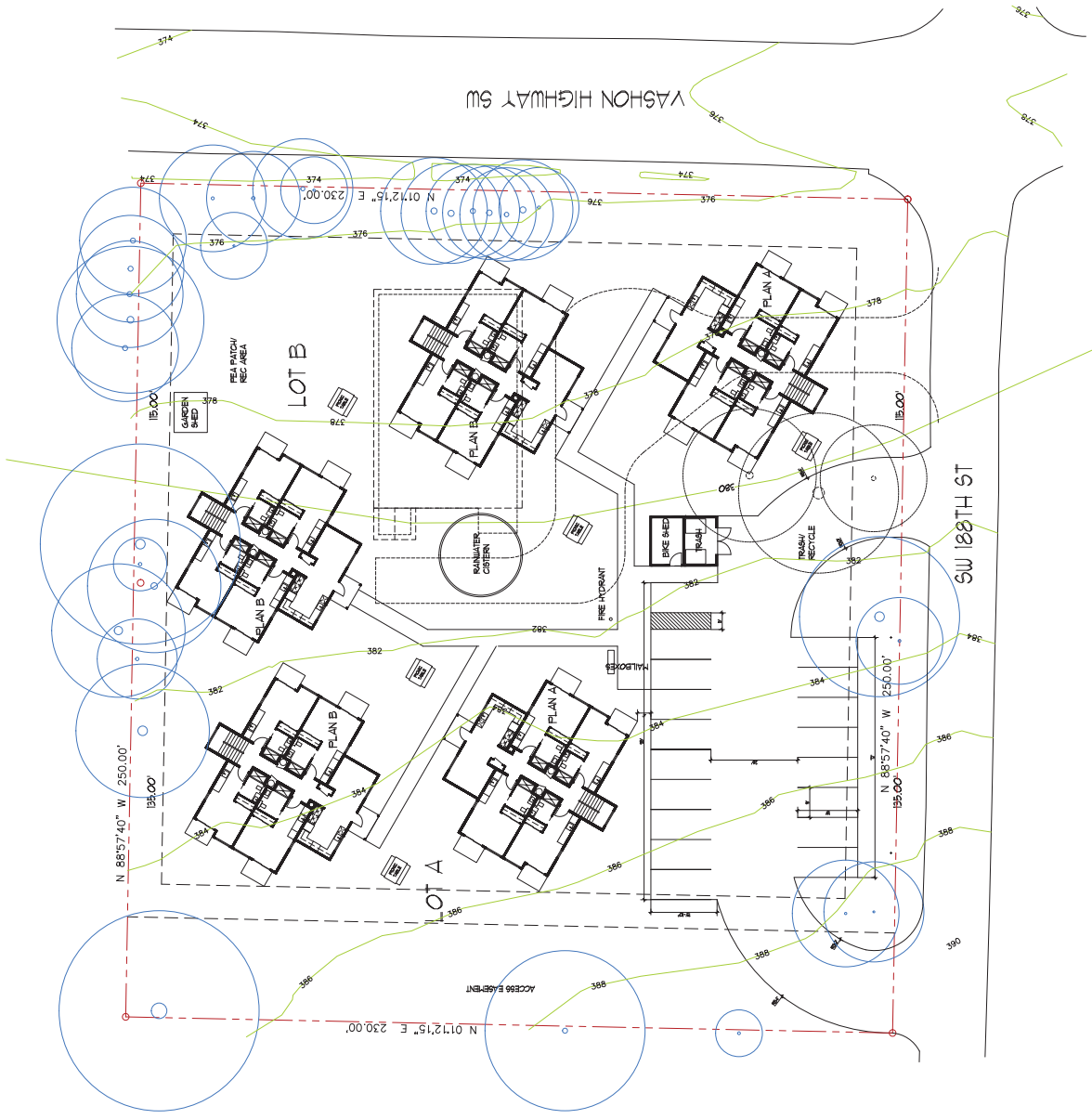
Effective 3-30-19 thru 9-20-19

### Weekday: To Vashon Ferry

Route	Tahlequah Tahlequah Ferry Terminal	Dockton 99th Ave SW & SW 264th St	Burton Vashon Hwy SW & SW Burton Dr	Ellisport Dockton Rd SW & SW Ellisport Rd	Valley Center P&R Vashon Hwy SW & SW 204th St	Vashon Vashon Hwy SW & SW Bank Rd	Vashon Heights Vashon Hwy SW & SW 120th St	Vashon Ferry Terminal
118	---	---	4:04 AM	---	4:09 AM	4:13 AM	4:18 AM	4:23 AM
118	4:20 AM	---	4:31 AM	---	4:36 AM	4:41 AM	4:48 AM	4:52 AM
119	---	5:00 AM	---	5:11 AM	5:14 AM	5:19 AM	5:29 AM	5:33 AM
118	5:28 AM	---	5:39 AM	---	5:44 AM	5:49 AM	5:59 AM	6:03 AM
118	---	---	6:01 AM	---	6:06 AM	6:11 AM	6:21 AM	6:25 AM
118	---	---	6:27 AM	---	6:32 AM	6:37 AM	6:46 AM	6:50 AM
118	7:09 AM	---	7:21 AM	---	7:26 AM	7:31 AM	7:40 AM	7:45 AM
119	---	7:23 AM	---	7:39 AM	7:42 AM	7:47 AM	7:56 AM	8:01 AM
119	---	8:54 AM	---	9:08 AM	9:11 AM	9:16 AM	9:25 AM	9:30 AM
119	---	9:54 AM D	---	10:03 AM	10:06 AM	10:11 AM	10:20 AM	10:25 AM
118	10:33 AM	---	10:42 AM	---	10:48 AM	10:53 AM	11:02 AM	11:05 AM
118	11:30 AM	---	11:41 AM	---	11:46 AM	11:51 AM	<b>12:00 PM</b>	<b>12:03 PM</b>
119	---	<b>1:00 PM</b> D	---	<b>1:09 PM</b>	<b>1:12 PM</b>	<b>1:17 PM</b>	<b>1:26 PM</b>	<b>1:31 PM</b>
118	<b>2:40 PM</b>	---	<b>2:48 PM</b>	---	<b>2:53 PM</b>	<b>2:58 PM</b>	<b>3:06 PM</b>	<b>3:11 PM</b>
118	---	---	---	---	---	<b>3:28 PM</b>	<b>3:35 PM</b>	<b>3:40 PM</b>
118	<b>4:00 PM</b>	---	<b>4:08 PM</b>	---	<b>4:13 PM</b>	<b>4:18 PM</b>	<b>4:25 PM</b>	<b>4:30 PM</b>
119	---	<b>4:00 PM</b>	---	<b>4:14 PM</b>	<b>4:17 PM</b>	<b>4:22 PM</b>	<b>4:30 PM</b>	<b>4:35 PM</b>
118	<b>4:55 PM</b>	---	<b>5:03 PM</b>	---	<b>5:08 PM</b>	<b>5:13 PM</b>	<b>5:20 PM</b>	<b>5:25 PM</b>
118	<b>5:30 PM</b> F	---	<b>5:38 PM</b> F	---	<b>5:43 PM</b> F	---	---	---
119	---	<b>5:52 PM</b>	---	<b>6:05 PM</b>	<b>6:08 PM</b>	<b>6:13 PM</b>	<b>6:20 PM</b>	<b>6:25 PM</b>
118	---	---	<b>6:17 PM</b>	---	<b>6:22 PM</b>	<b>6:26 PM</b>	<b>6:33 PM</b>	<b>6:38 PM</b>
118	<b>6:58 PM</b>	---	<b>7:06 PM</b>	---	<b>7:11 PM</b>	<b>7:15 PM</b>	<b>7:22 PM</b>	<b>7:28 PM</b>
119	---	<b>7:36 PM</b>	---	<b>7:49 PM</b>	<b>7:52 PM</b>	<b>7:56 PM</b>	<b>8:03 PM</b>	<b>8:08 PM</b>
118	<b>7:43 PM</b>	---	<b>7:51 PM</b>	---	<b>7:56 PM</b>	<b>8:00 PM</b>	<b>8:06 PM</b>	<b>8:12 PM</b>
118	<b>8:43 PM</b>	---	<b>8:50 PM</b>	---	<b>8:55 PM</b>	<b>8:59 PM</b>	<b>9:05 PM</b>	<b>9:09 PM</b>
118	<b>9:57 PM</b> F	---	<b>10:05 PM</b> F	---	<b>10:11 PM</b> F	---	---	---

\*This is an estimated time.

# Site Plan



SITE PLAN  
 VASHON ISLAND  
 9914 SW 188TH ST  
 VASHON ISLAND, WA  
 98010

PARCEL # 310303-9108 & 310303-9138  
 ZONE: R-83  
 LOT AREA: 36,250 SF & 21,250 SF  
 LEGAL DESCRIPTION: N 85 FT OF S 105 FT OF W 250 FT OF E 280 FT OF NE 1/4 &  
 N 145 FT OF S 250 FT OF W 250 FT OF E 280 FT OF NE 1/4 OF SE 1/4