

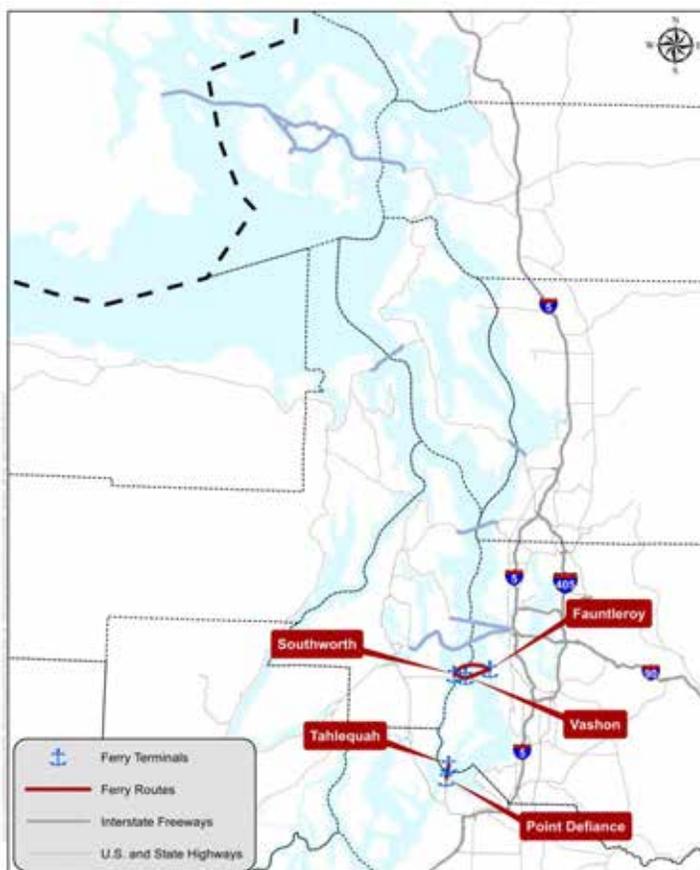
## 7 SOUTH SOUND CORRIDOR

### 7.1 Description

The routes in the South Sound Corridor include Fauntleroy–Vashon, Fauntleroy–Southworth, Southworth–Vashon, and Point Defiance–Tahlequah, as shown in Figure 7-1. The corridor provides connectivity between Fauntleroy in West Seattle, the north end of Vashon Island, and Southworth in Kitsap County. This corridor also connects the south end of Vashon Island with Tacoma. This corridor is the third-highest traveled corridor in the Washington State Ferries (WSF) system, with 3.6 million riders per year, or 9,900 riders per day. This is a decrease from 11,000 riders per day in 2006 and a high of 13,000 riders per day in 1999. It should be noted that both the 2006 and 1999 report included passenger-only ferry service between Downtown Seattle and Vashon Island, facilitating transfers to Southworth at Vashon. Historically, WSF operated this route; however, King County officially took over operation of this service in 2008. Since the transition to King County as the operator, fares have increased and schedule frequency increased. For 2013, ridership on the King County-operated passenger-only route was approximately 500 riders per day.

The tabulations and percentage share distributions of results herein represent the survey responses as expanded to the survey period ridership. More information regarding expansion methods can be found in Chapter 8.

**Figure 7-1. South Sound Corridor Routes**



### 7.1.1 Frequency of Travel

Table 7-1 and Figure 7-2 show the frequency of travel for weekdays and Saturdays by trip purpose for 2006 and 2013. On weekdays in 2013, the corridor was heavily commuter-oriented, with 61 percent of trips made for work/school. This is similar to 2006, when 62 percent of weekday trips were for work/school. In contrast, Saturday trips are primarily for recreation/ shopping, with 62 percent of trips. This is an increase from 59 percent in 2006.

The distribution of trip frequency on weekdays is relatively evenly distributed, with the highest percentage of riders making one trip per week, followed closely by three to four trips per week. This is a change from 2006, when a higher percentage of trips were made more frequently; for example, those reporting that they made a trip nine to ten times per week decreased from 23 percent in 2006 to 16 percent in 2013. When comparing Saturday trips for 2006 and 2013, a similar overall percentage of riders (72 percent) traveled between one and four times per week; however, in 2013 a higher percentage of riders (35 percent) only took one trip per week compared with 2006 (26 percent).

**Table 7-1. South Sound Corridor one-way trips by purpose and frequency, weekday 8-hour and Saturday survey periods (2006 and 2013)**

One-Way Trips	Work/ School	Personal Business/ Other	Recreation / Shopping	Total	All Purposes		Work/School	
					2013	2006	2013	2006
<b>Weekday</b>								
1	293	213	291	797	17.5%	8.6%	10.4%	2.7%
2	142	207	172	521	11.4%	13.7%	5.0%	7.2%
3 to 4	318	235	188	741	16.3%	16.2%	11.3%	12.1%
5 to 6	453	140	65	658	14.4%	14.2%	16.0%	13.4%
7 to 8	594	65	18	677	14.9%	10.2%	21.0%	12.0%
9 to 10	634	36	51	721	15.9%	23.4%	22.4%	34.1%
11+	393	23	20	435	9.6%	13.8%	13.9%	18.4%
Total	2,828	918	805	4,551	100%	100%	100%	100%
2013 Distribution	62.1%	20.2%	17.7%	100%				
2006 Distribution	63.5%	15.2%	21.3%	100%				
<b>Saturday</b>								
1	131	316	1,150	1,597	35.3%	26.4%		
2	76	210	500	786	17.4%	28.9%		
3 to 4	105	296	503	904	20.0%	17.3%		
5 to 6	116	134	288	538	11.9%	6.9%		
7 to 8	70	32	136	238	5.3%	7.2%		
9 to 10	58	43	74	176	3.9%	3.2%		
11+	71	49	163	283	6.2%	10.1%		
Total	627	1,080	2,814	4,522	100%	100%		
2013 Distribution	13.9%	23.9%	62.2%	100%				
2006 Distribution	13.0%	28.2%	58.7%	100%				

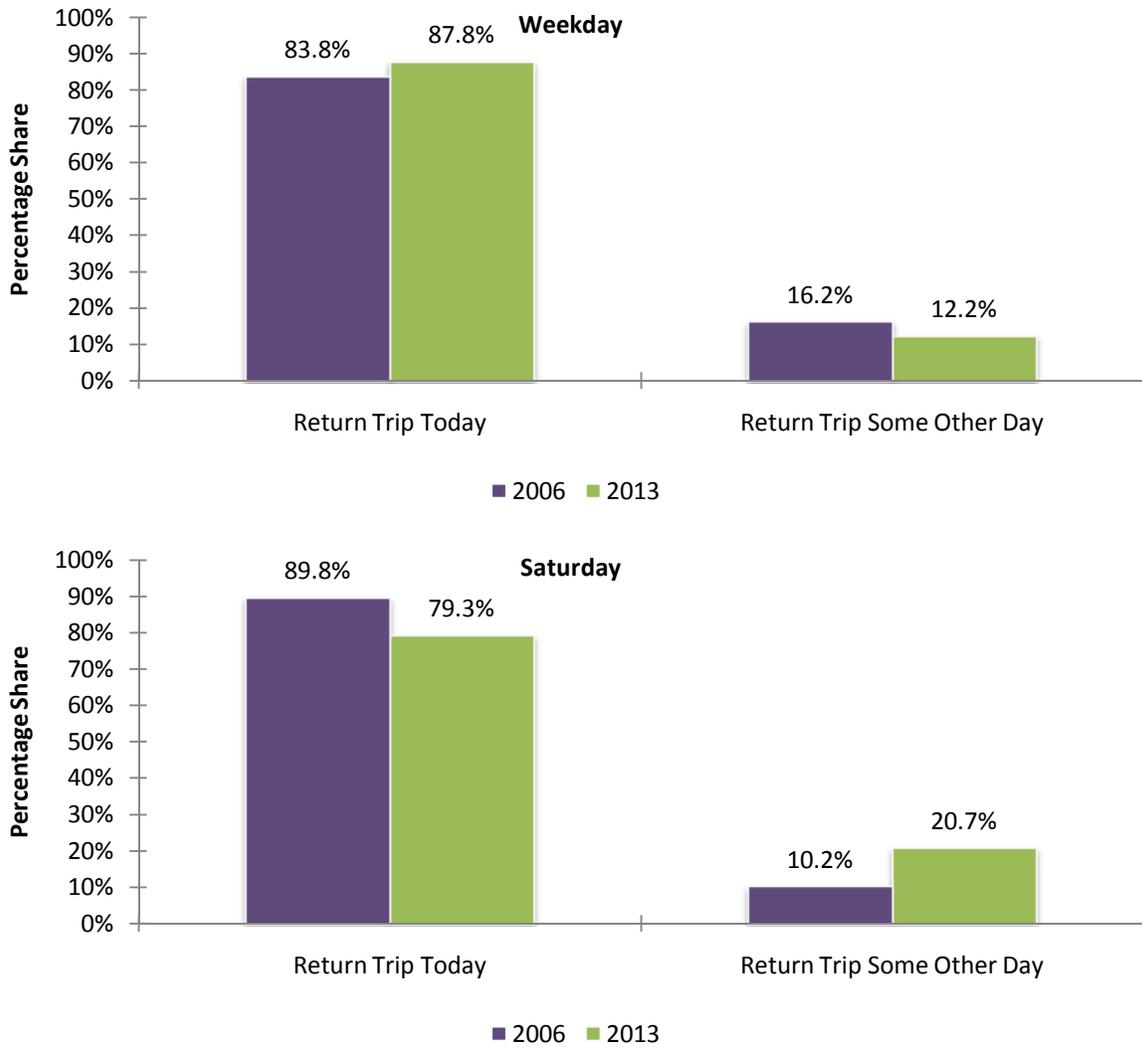
Figure 7-2. South Sound Corridor trip purpose, weekday 8-hour and Saturday survey periods (2006 and 2013)



### 7.1.2 Round-Trip Patterns

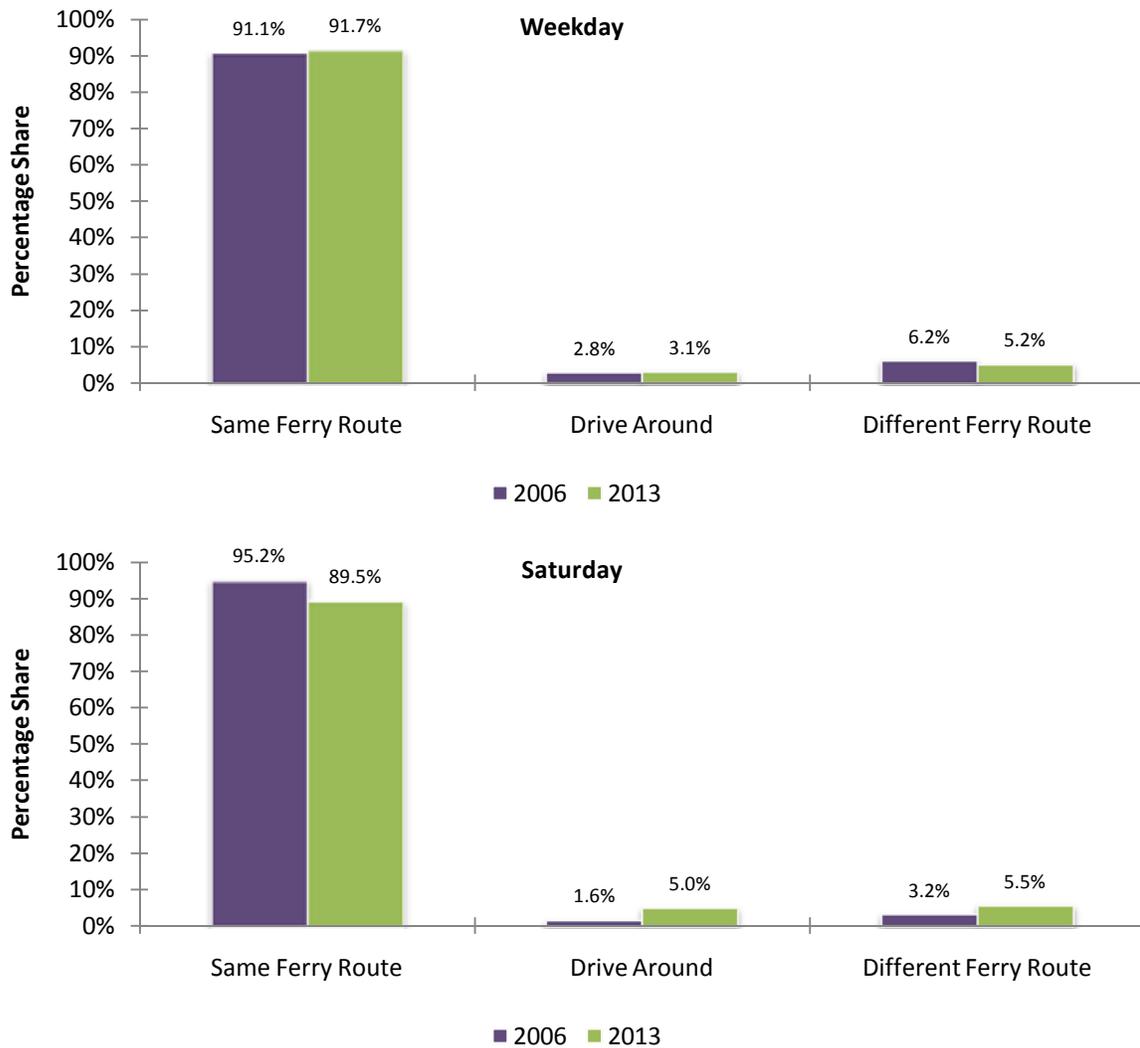
The percentage of weekday ferry travelers making a round-trip on the same day versus some other day grew from 84 percent in 2006 to 88 percent in 2013, as shown in Figure 7-3. Conversely, the shift in the Saturday round-trip pattern resulted in a decrease of same-day round-trips from 90 percent in 2006 to 80 percent in 2013.

**Figure 7-3. South Sound Corridor round-trip patterns by day, weekday 8-hour and Saturday survey periods (2006 and 2013)**



As shown in Figure 7-4, the vast majority (92 percent) of round-trip ferry travelers used the same route for both legs of the trip. A similar percentage of Saturday travelers (90 percent) reported the same. The results are relatively unchanged from 2006 for both weekday and Saturday, although the Saturday percentage decreased from 95 percent in 2006.

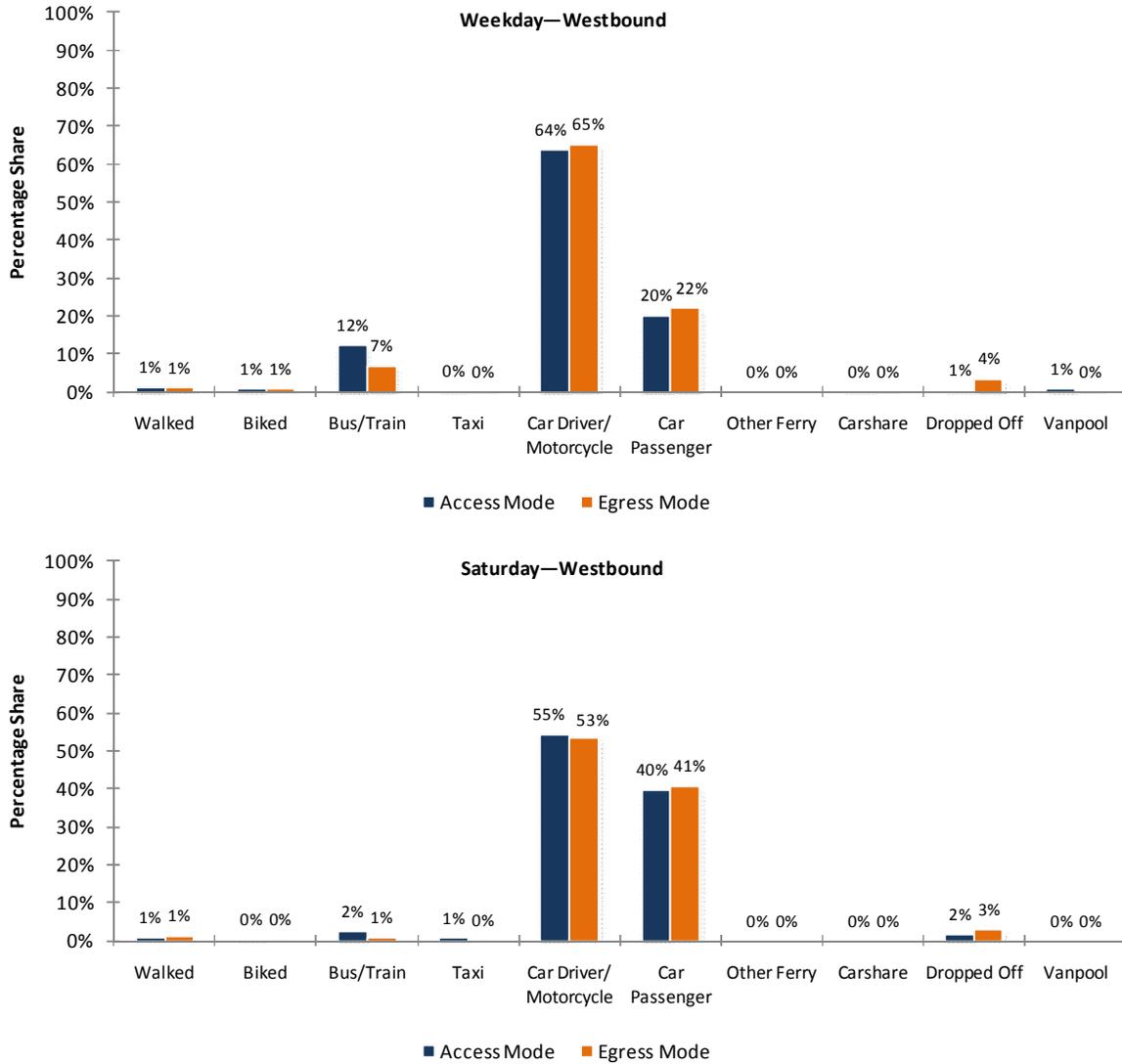
**Figure 7-4. South Sound Corridor round-trip patterns by route, weekday 8-hour and Saturday survey periods (2006 and 2013)**



**7.1.3 Access, Egress, and Boarding Modes**

Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant mode of access and egress for westbound trips in 2013, as shown in Figure 7-5. On weekdays, 65 percent of ferry travelers drove to the ferry, and an additional 22 percent were passengers in a private vehicle. Egress patterns were similar. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-5. South Sound Corridor westbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**



Similar to the westbound direction, travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant mode of access and egress for eastbound trips in 2013, as shown in Figure 7-6. On weekdays, 63 percent of ferry travelers drove to the ferry, and an additional 25 percent were passengers in a private vehicle. Saturday access and egress modes for eastbound are similar to westbound, with a significantly higher percentage of car passengers compared with weekday travel.

**Figure 7-6. South Sound Corridor eastbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**

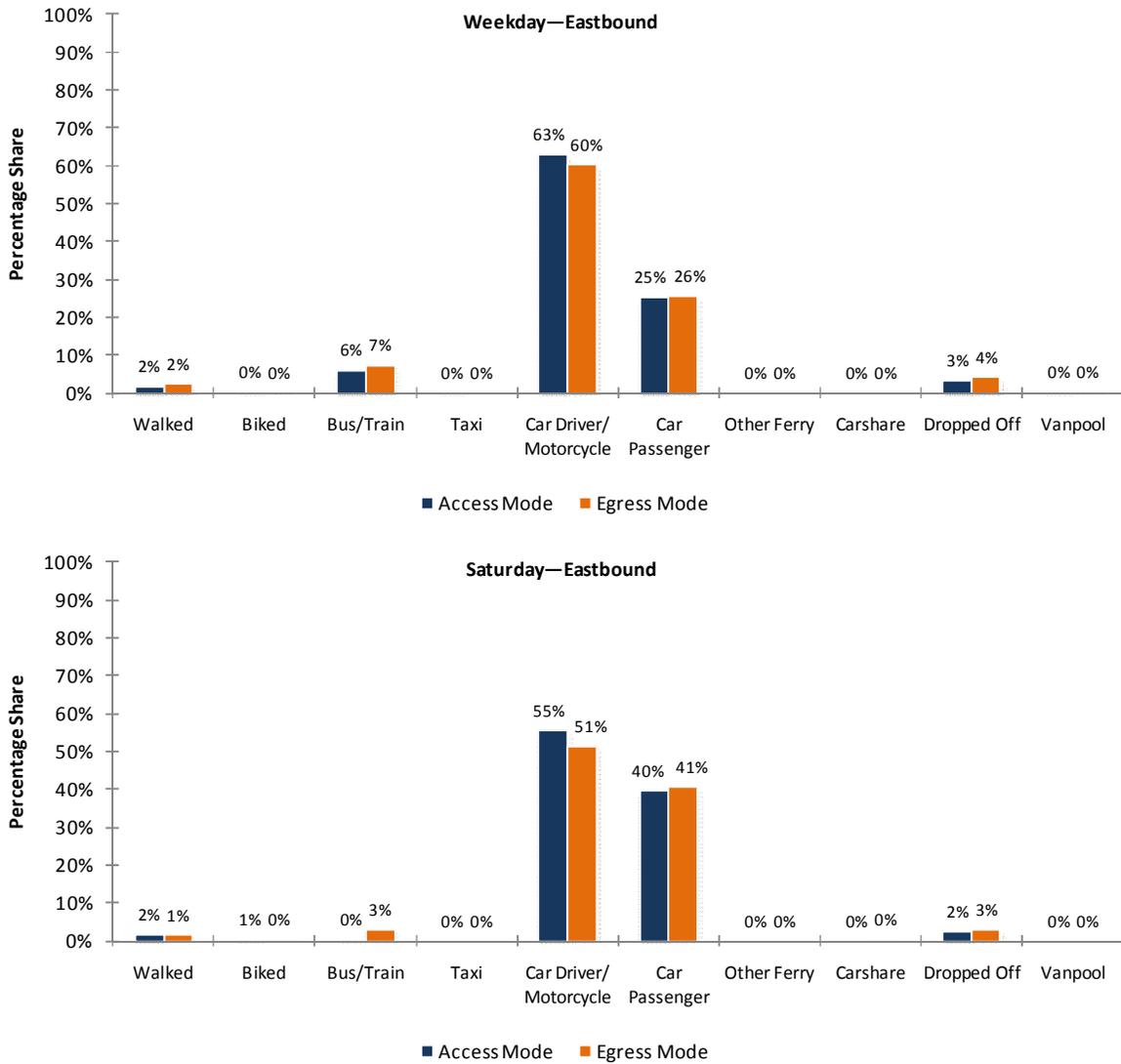


Table 7-2 shows the access mode and boarding method for weekdays and Saturdays in 2006 and 2013. As shown in the table, most travelers boarded the ferry by driving on. In 2013, this method accounted for 82 percent and 90 percent of boardings on weekdays and Saturdays, respectively. On weekdays, the walk-on share of boardings decreased between 2006 and 2013, while it remained similar on Saturdays.

**Table 7-2. South Sound Corridor access mode and boarding method, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Access Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	70	0	70	1.4%	7.9%
Biked	0	0	28	28	0.6%	2.0%
Bus/Train	20	470	2	492	10.0%	7.8%
Taxi	0	8	0	8	0.2%	0.1%
Car Driver/Motorcycle	2,971	137	3	3,111	63.5%	60.2%
Car Passenger	1,011	70	0	1,081	22.1%	22.1%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	5	0	5	0.1%	
Dropped Off	0	76	0	76	1.5%	
Vanpool	0	31	0	31	0.6%	
<b>Total</b>	<b>4,002</b>	<b>866</b>	<b>33</b>	<b>4,901</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	81.7%	17.7%	0.7%	100%		
2006 Distribution	78.6%	19.9%	1.5%	100%		
<b>Saturday</b>						
Walked	0	69	0	69	1.2%	1.3%
Biked	0	4	22	26	0.5%	1.6%
Bus/Train	0	71	4	75	1.3%	0.9%
Taxi	0	18	0	18	0.3%	0.2%
Car Driver/Motorcycle	2,955	184	3	3,142	55.0%	64.0%
Car Passenger	2,172	93	0	2,265	39.7%	32.0%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	117	0	117	2.0%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>5,127</b>	<b>555</b>	<b>29</b>	<b>5,711</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	89.8%	9.7%	0.5%	100%		
2006 Distribution	88.6%	9.8%	1.5%	100%		

Table 7-3 shows the egress mode and boarding method for weekdays and Saturdays in 2006 and 2013. Similar to the access method, the walk-off share of boardings for weekdays decreased between 2006 and 2013, while it remained similar for Saturdays.

**Table 7-3. South Sound Corridor egress mode and boarding method, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Egress Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	79	0	79	1.6%	5.4%
Biked	5	0	20	24	0.5%	1.9%
Bus/Train	2	340	6	348	7.1%	7.8%
Taxi	0	3	0	3	0.1%	0.0%
Car Driver/Motorcycle	2,916	187	6	3,109	63.4%	64.5%
Car Passenger	1,062	81	0	1,142	23.3%	20.5%
Other Ferry	0	0	0	0	0.0%	
Carshare	3	2	0	5	0.1%	
Dropped Off	12	169	1	183	3.7%	
Vanpool	3	5	0	8	0.2%	
<b>Total</b>	<b>4,002</b>	<b>866</b>	<b>33</b>	<b>4,901</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	81.7%	17.7%	0.7%	100%		
2006 Distribution	78.5%	20.0%	1.5%	100%		
<b>Saturday</b>						
Walked	2	78	0	80	1.4%	4.2%
Biked	2	0	21	23	0.4%	1.7%
Bus/Train	0	112	4	116	2.0%	1.5%
Taxi	0	3	0	3	0.1%	0.0%
Car Driver/Motorcycle	2,894	96	4	2,994	52.4%	64.8%
Car Passenger	2,222	98	0	2,320	40.6%	27.8%
Other Ferry	0	0	0	0	0.0%	
Carshare	4	3	0	7	0.1%	
Dropped Off	3	165	0	168	2.9%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>5,127</b>	<b>555</b>	<b>29</b>	<b>5,711</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	89.8%	9.7%	0.5%	100%		
2006 Distribution	88.6%	9.8%	1.6%	100%		

Table 7-4, Table 7-5, and Table 7-6 show access and egress modes used across the entire ferry trip for the weekday PM peak period, the weekday non-PM peak period, and Saturdays, respectively. For walk-on boardings during the weekday PM peak period, the percentage of travelers leaving the destination terminal on foot was lower than the percentage arriving at the origin terminal on foot. This was also true for travelers using bus or other transit modes to/from the terminal. However, for weekday non-PM peak period and Saturday travel, the percentage of travelers leaving the destination terminal on foot was higher than the percentage arriving on foot.

**Table 7-4. South Sound Corridor access mode to ferry—boarding method—egress mode from ferry, weekday PM peak period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (21.0% of total boardings)					
Pedestrian	7.2%	Pedestrian	96.2%	Pedestrian	5.6%
Bicycle	3.3%	Pedestrian w/ Bicycle	3.8%	Bicycle	1.9%
By Bus/Transit	56.4%			By Bus/Transit	40.7%
By Vehicle	28.1%			By Vehicle	50.9%
Vanpool	4.3%			Vanpool	0.7%
Carshare	0.7%			Carshare	0.3%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (79.0% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	74.1%	In-Vehicle	100.0%
		Vehicle Passengers	25.9%		

Note: Average vehicle occupancy (AVO) was 1.35 for the weekday PM peak period.

**Table 7-5. South Sound Corridor trips by access mode to ferry—boarding method—egress mode from ferry, Weekday Non-PM Peak Period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (12.2% of total boardings)					
Pedestrian	10.2%	Pedestrian	96.8%	Pedestrian	21.5%
Bicycle	2.2%	Pedestrian w/ Bicycle	3.3%	Bicycle	3.3%
By Bus/Transit	36.6%			By Bus/Transit	29.7%
By Vehicle	51.0%			By Vehicle	45.6%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (87.8% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	75.1%	In-Vehicle	100.0%
		Vehicle Passengers	24.9%		

Note: Average vehicle occupancy (AVO) was 1.33 for the weekday non-PM peak period.

**Table 7-6. South Sound Corridor trips by access mode to ferry—boarding method—egress mode from ferry, Saturday survey period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
<b>Walk-On Boardings (10.2% of total boardings)</b>					
Pedestrian	11.7%	Pedestrian	95.0%	Pedestrian	13.3%
Bicycle	4.5%	Pedestrian w/ Bicycle	5.0%	Bicycle	3.6%
By Bus/Transit	12.9%			By Bus/Transit	19.9%
By Vehicle	70.9%			By Vehicle	62.6%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.5%
Other Ferry	0.0%			Other Ferry	0.0%
<b>In-Vehicle Boardings (89.8% of total boardings)</b>					
In-Vehicle	100.0%	Vehicle Drivers	57.6%	In-Vehicle	100.0%
		Vehicle Passengers	42.4%		

Note: Average vehicle occupancy (AVO) was 1.74 for the Saturday survey period.

As shown in Figure 7-7, the majority of drive-on travelers indicated that the reason they took a vehicle was because they needed it at their destination (54 percent on weekdays, 69 percent on Saturdays). The second-most prevalent response was that their final destination was too far from the ferry terminal to allow for walking (37 percent on weekdays, 34 percent on Saturdays). Other common responses included transit not being convenient or not going to the destination, carrying baggage or heavy loads, and the need for a vehicle for business.

**Figure 7-7. South Sound Corridor reasons for taking a vehicle, weekday 8-hour and Saturday survey periods (2013)**

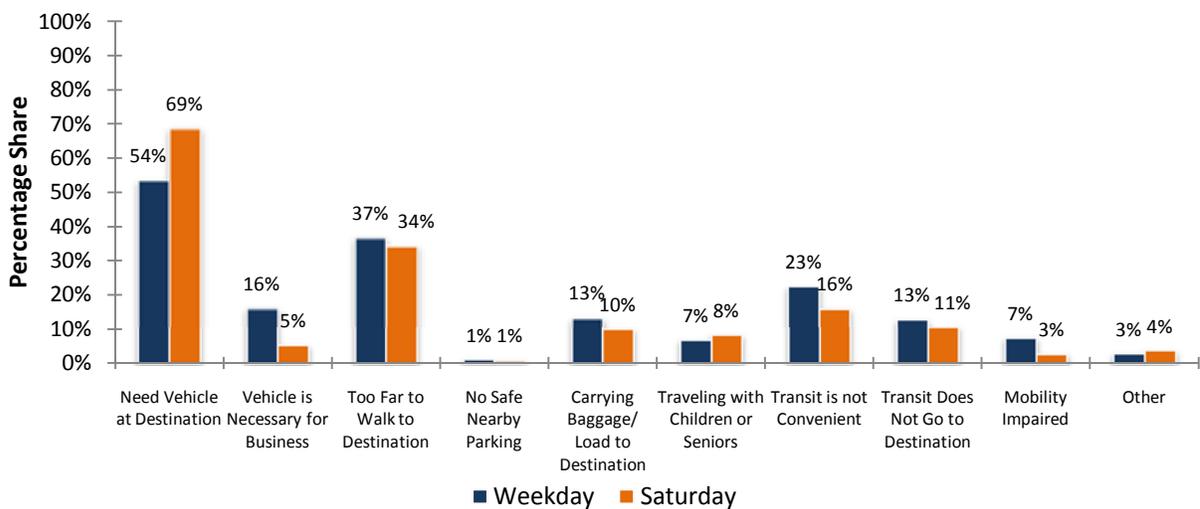
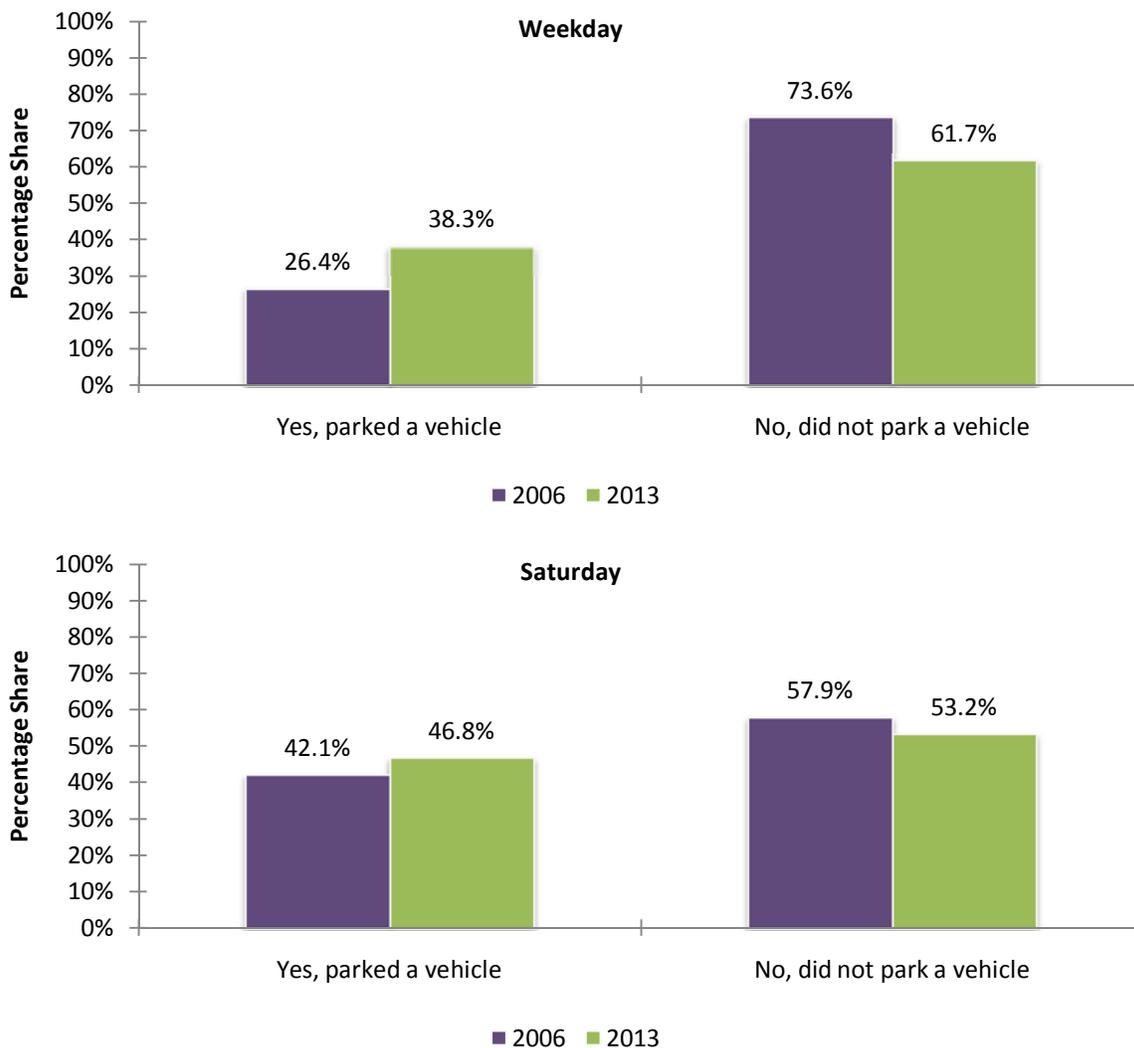


Figure 7-8 illustrates the percentage of riders who boarded by foot or bicycle who parked or did not park a vehicle at the terminal. About 39 percent of weekday ferry passengers parked a vehicle in the 2013 survey, compared with only 26 percent in 2006. On Saturdays, those who parked a vehicle increased moderately from 42 percent to 47 percent.

**Figure 7-8. South Sound Corridor non-motorized boardings that parked a vehicle at terminal, weekday 8-hour and Saturday survey periods (2006 and 2013)**



#### 7.1.4 Other Travel Characteristics

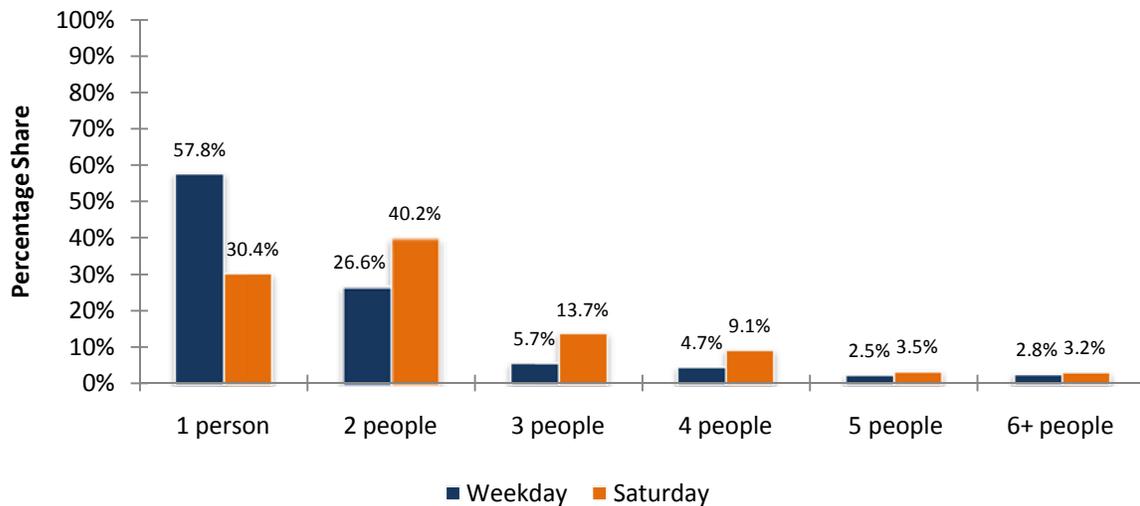
As shown on Table 7-7, the percentage of travelers who were on their preferred sailing increased between 2006 and 2013. On weekdays, the percentage increased from 73 percent to 90 percent, while on Saturdays the percentage increased from 81 percent to 96 percent.

**Table 7-7. South Sound Corridor trips preferred sailing, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Preferred Sailing	Drive	Walk/Bike	Total	All Boardings	
				2013	2006
<b>Weekday</b>					
Yes	3,599	829	4,428	90.4%	73.2%
No, different departure time	399	63	462	9.4%	21.4%
No, different route	2	7	9	0.2%	5.5%
Total	4,000	899	4,899	100%	100%
2013 Distribution	81.7%	18.3%	100%		
2006 Distribution	78.4%	21.6%	100%		
<b>Saturday</b>					
Yes	4,892	569	5,462	95.6%	80.6%
No, different departure time	219	15	234	4.1%	16.9%
No, different route	15	0	15	0.3%	2.5%
Total	5,127	584	5,711	100%	100%
2013 Distribution	89.8%	10.2%	100%		
2006 Distribution	88.8%	11.2%	100%		

As described in Figure 7-9, most travelers were either alone or with one other person. On weekdays, likely for work or school purposes, more people traveled alone than on Saturdays. Larger parties were more common on Saturdays, when recreation travel was higher.

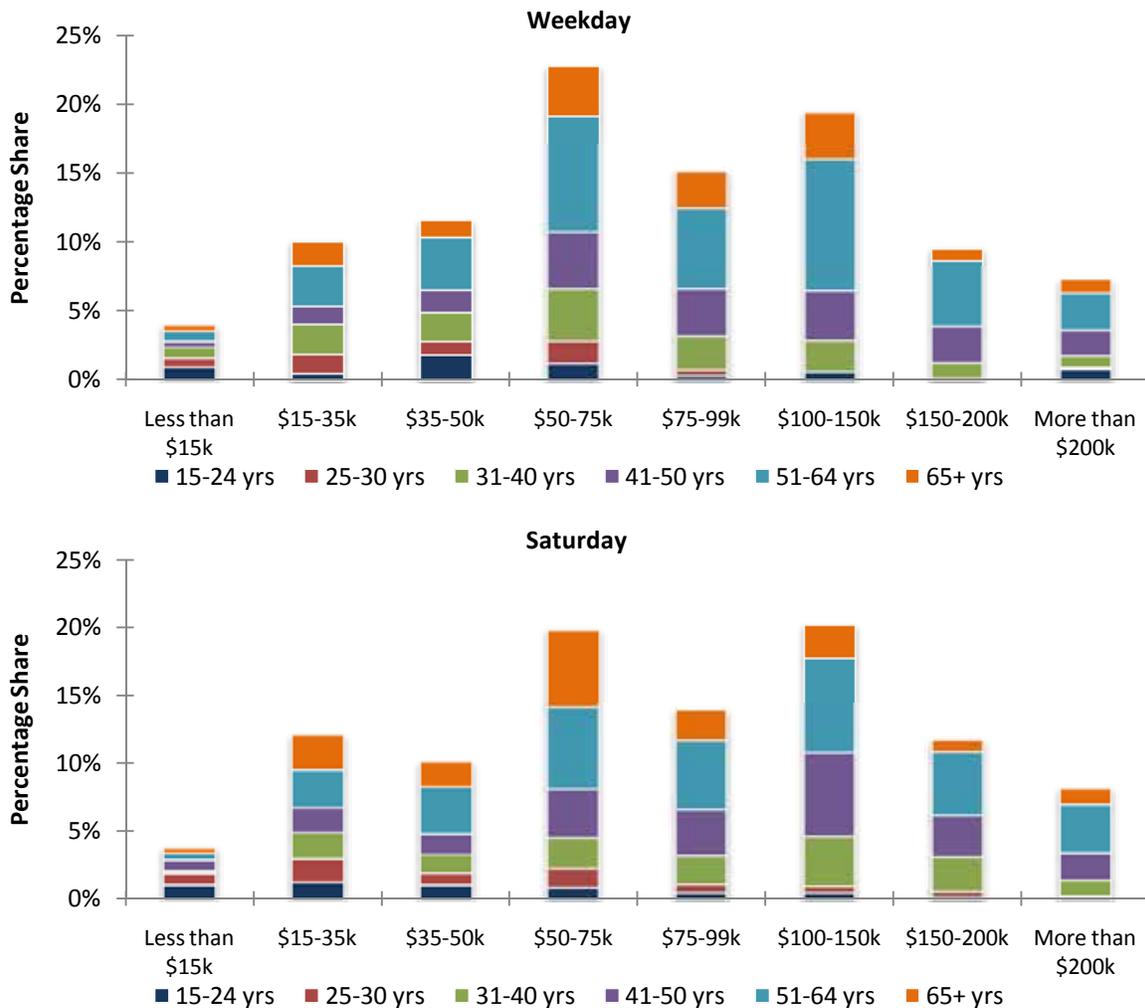
**Figure 7-9. South Sound Corridor party size, weekday 8-hour and Saturday survey periods (2013)**



### 7.1.5 Demographic Characteristics

The average age of travelers in the Central Sound Corridor is 52 years old, and the average self-reported household income range is \$75,000 to \$100,000 annually. Figure 7-10 presents the age and self-reported income of survey respondents for weekday and Saturday trips. Traveler age for weekday travel generally decreases as income increases up to \$150,000, after which age ranges remain more stable. A similar trend is seen for Saturday travel, except the decrease in age only occurs up to \$75,000.

**Figure 7-10. South Sound Corridor traveler age and income, weekday 8-hour and Saturday survey periods (2013)**



## 7.2 Fauntleroy–Vashon

### 7.2.1 Route Description

The Fauntleroy–Vashon route connects Fauntleroy and Vashon on the southern tip of Vashon Island south of Seattle. It takes about 20 minutes to ride this ferry route one way. The crossing is approximately 2.8 nautical miles. It runs seven days per week. For 2013, the annual total ridership was 820,000 passengers plus 1.1 million vehicles and drivers for a total of 1.9 million people, or about 5,200 riders per day. This compares to 5,600 riders per day in 2006 and 5,700 riders per day in 1999. The Fauntleroy-Vashon route has 33 weekday sailings per day each direction. The one-way fare in 2013 for a vehicle 14 to 22 feet was \$17.25 for vehicles and \$5.10 for passengers.

This section provides some key trip-making characteristics of ferry riders on this route. In addition, the 2013 survey results are compared with key characteristics from the previous 2006 survey data to identify trends in trip-making on this route.

### 7.2.2 Trips by Purpose

As shown in Table 7-8, the most frequent weekday trip purpose was work/school (57 percent), which is similar to 2006. Recreation/shopping remains the predominant trip purpose for Saturday trips.

**Table 7-8. Fauntleroy–Vashon trips by purpose and direction, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Direction	Work/ School	Personal Business/ Other	Recreation/ Shopping	Total	All Purposes	
					2013	2006
<b>Weekday</b>						
Eastbound	418	233	204	856	37.1%	49.7%
Westbound	901	318	231	1,450	62.9%	50.3%
Total	1,320	551	435	2,306	100%	100%
2013 Distribution	57.2%	23.9%	18.9%	100%		
2006 Distribution	58.3%	16.7%	25.1%	100%		
<b>Saturday</b>						
Eastbound	173	429	797	1,399	52.4%	50.1%
Westbound	170	274	827	1,270	47.6%	49.9%
Total	343	703	1,624	2,669	100%	100%
2013 Distribution	12.8%	26.3%	60.8%	100%		
2006 Distribution	11.2%	29.8%	58.9%	100%		

### 7.2.3 Frequency of Travel

Table 7-9 shows the frequency of travel for weekdays and Saturdays by trip purpose for 2006 and 2013. The highest percentage of weekday travelers traveled on the ferry only once in the past week (19 percent), a significant increase from 2006 when only 9 percent of travelers reported one trip in the past week. On Saturdays, those reporting one trip in the past week was also the highest percentage at 31 percent.

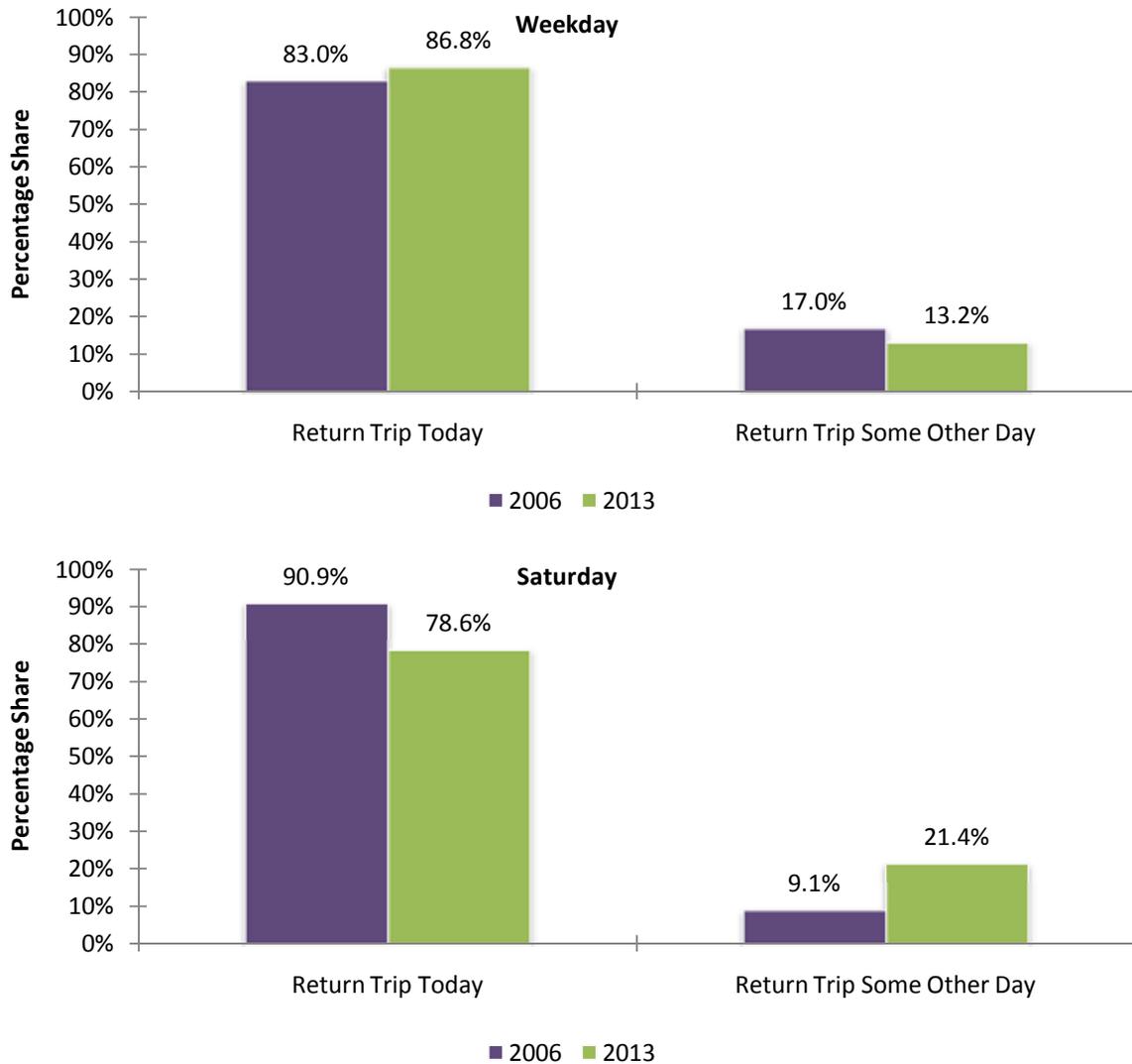
**Table 7-9. Fauntleroy–Vashon one-way trips by purpose and frequency, weekday 8-hour and Saturday survey periods (2006 and 2013)**

One-Way Trips	Work/ School	Personal Business/ Other	Recreation / Shopping	Total	All Purposes		Work/School	
					2013	2006	2013	2006
<b>Weekday</b>								
1	136	118	157	411	19.1%	8.8%	10.9%	2.8%
2	79	108	97	283	13.1%	17.2%	6.3%	8.7%
3 to 4	145	110	77	332	15.4%	15.7%	11.6%	13.0%
5 to 6	218	106	19	342	15.9%	11.8%	17.4%	10.0%
7 to 8	214	32	11	256	11.9%	12.1%	17.1%	14.6%
9 to 10	248	18	17	283	13.2%	19.0%	19.9%	28.8%
11+	209	18	20	247	11.5%	15.6%	16.8%	22.1%
Total	1,249	509	397	2,155	100%	100%	100%	100%
2013 Distribution	58.0%	23.6%	18.4%	100%				
2006 Distribution	58.8%	16.6%	24.7%	100%				
<b>Saturday</b>								
1	50	163	464	677	30.6%	21.8%		
2	42	112	260	415	18.7%	38.9%		
3 to 4	66	137	265	468	21.1%	13.3%		
5 to 6	45	99	143	287	13.0%	5.9%		
7 to 8	33	19	83	135	6.1%	7.8%		
9 to 10	38	29	49	116	5.2%	3.3%		
11+	27	38	50	115	5.2%	8.9%		
Total	300	599	1,314	2,213	100%	100%		
2013 Distribution	13.6%	27.1%	59.4%	100%				
2006 Distribution	10.8%	30.0%	59.1%	100%				

### 7.2.4 Round-Trip Patterns

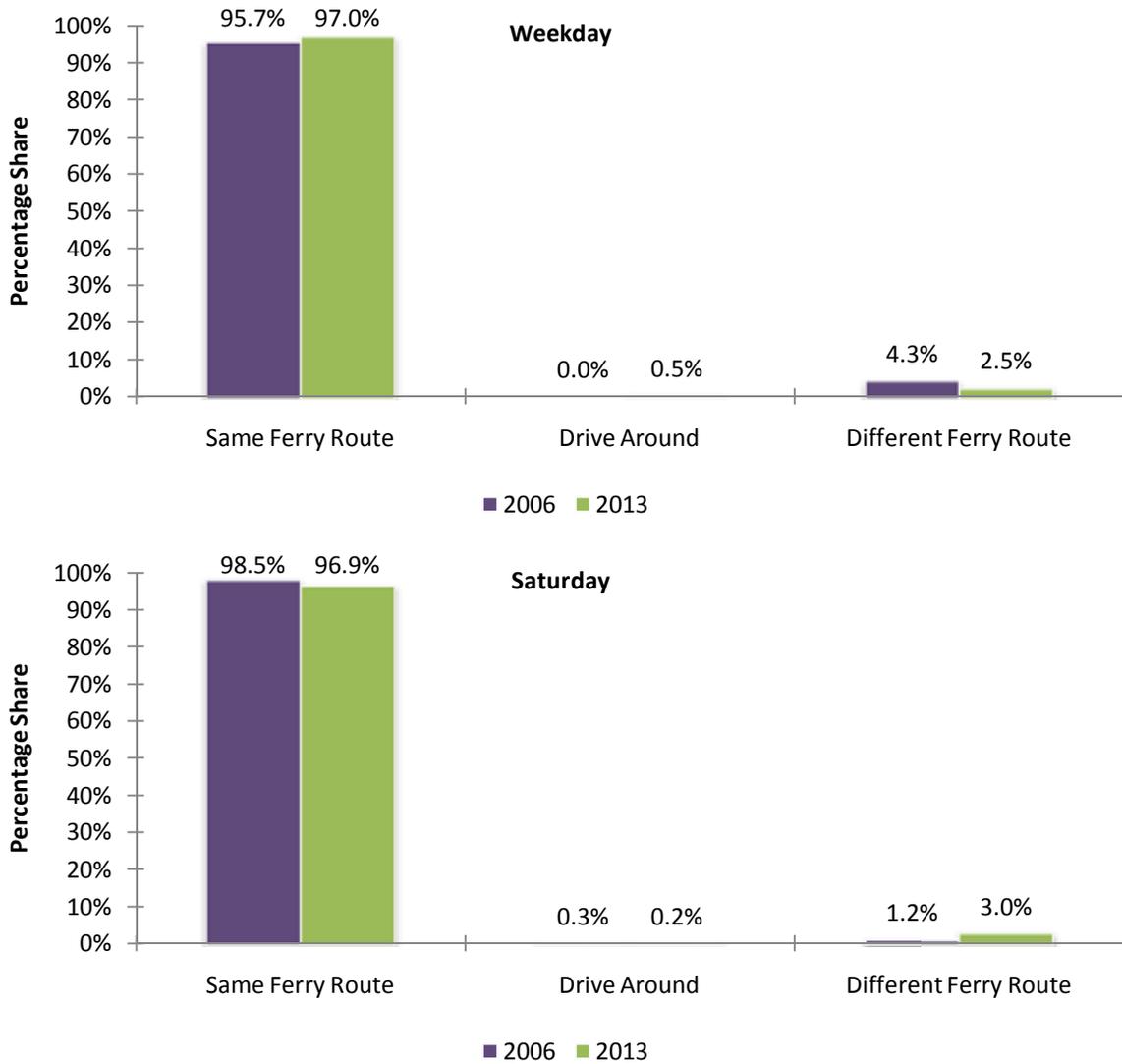
The percentage of weekday ferry travelers making a round-trip on the same day versus some other day grew moderately from 83 percent in 2006 to 87 percent in 2013, as shown in Figure 7-11. Conversely, the shift in the Saturday round-trip pattern resulted in a decrease of same-day round-trips from 91 percent in 2006 to 79 percent in 2013.

**Figure 7-11. Fauntleroy–Vashon round-trip patterns by day, weekday 8-hour and Saturday survey periods (2006 and 2013)**



As shown in Figure 7-12, the vast majority (over 95 percent) of round-trip ferry travelers used the same route for both legs of the trip. This situation was true for both weekday and Saturday travelers, and the results are relatively unchanged from 2006.

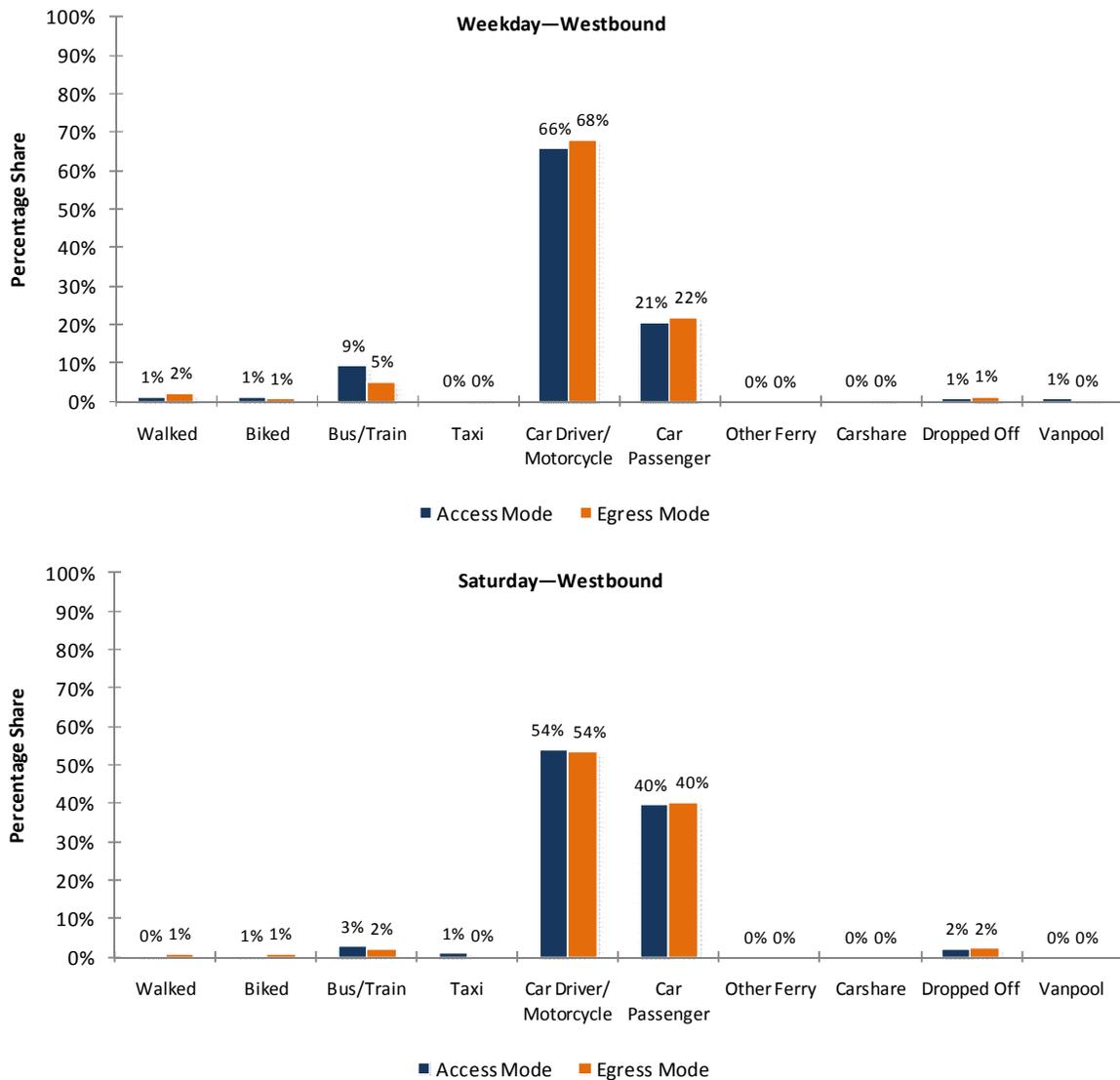
**Figure 7-12. Fauntleroy–Vashon round-trip patterns by route, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.2.5 Access, Egress, and Boarding Modes

Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant westbound mode of access and egress in 2013, as shown in Figure 7-13. On weekdays, 66 percent of ferry travelers drove to the ferry, and an additional 22 percent were passengers in a private vehicle. Egress percentages were similar to access. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-13. Fauntleroy–Vashon Westbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**



Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant eastbound mode of access and egress in 2013, as shown in Figure 7-14. On weekdays, 60 percent of ferry travelers drove to the ferry, and an additional 21 percent were passengers in a private vehicle. Egress percentages were similar to access. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-14. Fauntleroy–Vashon eastbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**

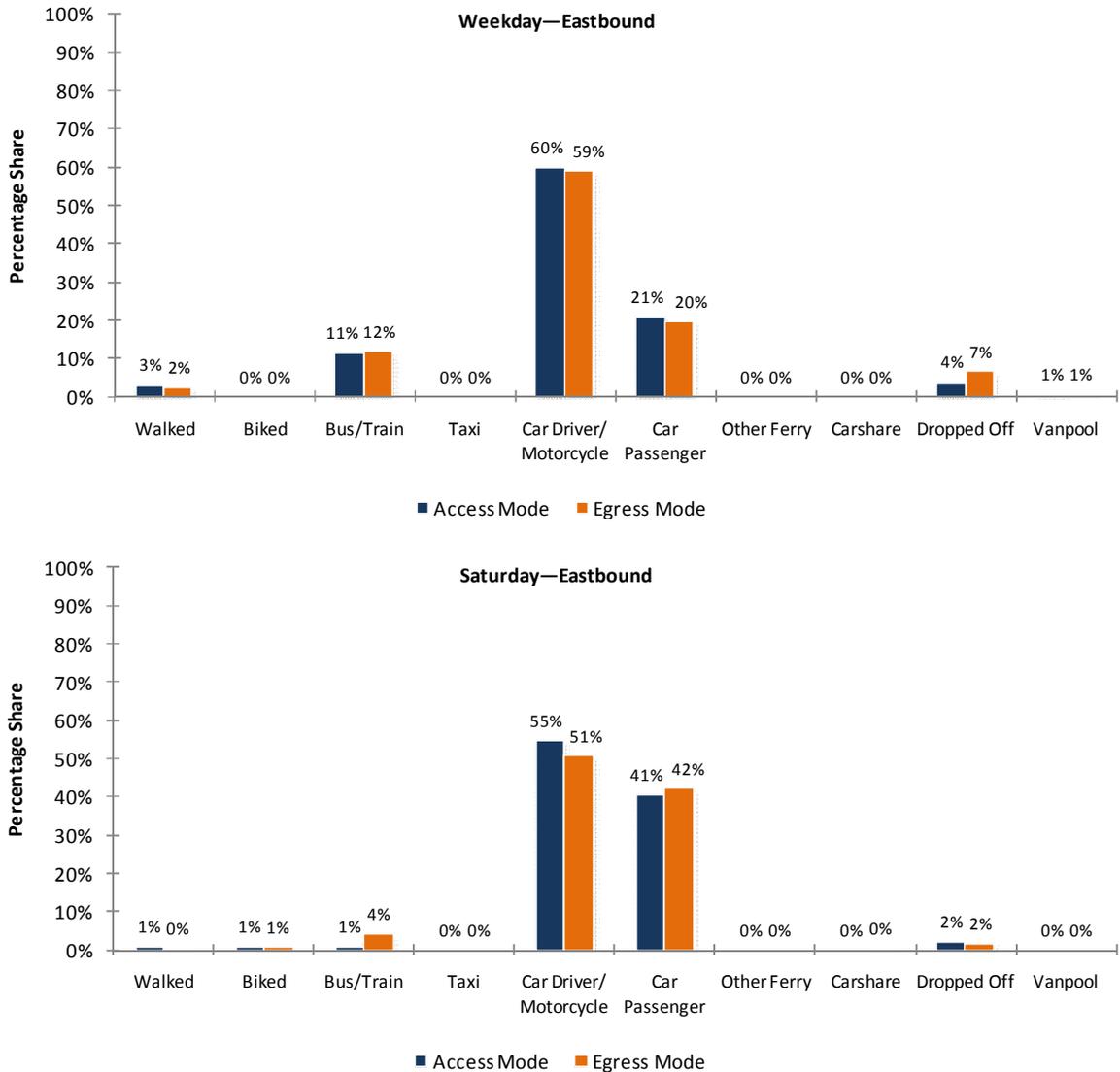


Table 7-10 shows the access mode and boarding method for weekdays and Saturdays in 2006 and 2013. As shown in the table, most travelers boarded the ferry by driving on. In 2013, this method accounted for 80 percent and 90 percent of boardings on weekdays and Saturdays, respectively. On both weekdays and Saturdays, the walk-on share of boardings increased between 2006 and 2013.

**Table 7-10. Fauntleroy–Vashon access mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Access Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	43	0	43	1.9%	9.1%
Biked	0	0	19	19	0.8%	1.3%
Bus/Train	11	223	0	234	10.2%	8.5%
Taxi	0	5	0	5	0.2%	0.1%
Car Driver/Motorcycle	1,402	62	2	1,466	63.6%	60.1%
Car Passenger	417	61	0	478	20.7%	20.9%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	3	0	3	0.1%	
Dropped Off	0	44	0	44	1.9%	
Vanpool	0	13	0	13	0.6%	
<b>Total</b>	<b>1,831</b>	<b>454</b>	<b>21</b>	<b>2,306</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	79.4%	19.7%	0.9%	100%		
2006 Distribution	81.9%	16.7%	1.4%	100%		
<b>Saturday</b>						
Walked	0	16	0	16	0.6%	1.1%
Biked	0	4	15	19	0.7%	3.0%
Bus/Train	0	44	4	48	1.8%	0.5%
Taxi	0	13	0	13	0.5%	0.0%
Car Driver/Motorcycle	1,371	74	3	1,448	54.3%	61.2%
Car Passenger	1,029	42	0	1,071	40.1%	34.2%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	55	0	55	2.1%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>2,400</b>	<b>247</b>	<b>22</b>	<b>2,669</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	89.9%	9.3%	0.8%	100%		
2006 Distribution	88.8%	8.2%	3.0%	100%		

Table 7-11 shows the egress mode and boarding method for weekdays and Saturdays in 2006 and 2013. Similar to the access mode, on both weekdays and Saturdays, the walk-off share of boardings increased between 2006 and 2013.

**Table 7-11. Fauntleroy–Vashon egress mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Egress Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	51	0	51	2.2%	5.4%
Biked	0	0	12	12	0.5%	1.3%
Bus/Train	0	169	6	175	7.6%	7.4%
Taxi	0	3	0	3	0.1%	0.0%
Car Driver/Motorcycle	1,378	111	3	1,492	64.7%	64.1%
Car Passenger	444	43	0	487	21.1%	21.7%
Other Ferry	0	0	0	0	0.0%	
Carshare	3	0	0	3	0.1%	
Dropped Off	3	74	0	76	3.3%	
Vanpool	3	5	0	8	0.3%	
<b>Total</b>	<b>1,831</b>	<b>454</b>	<b>21</b>	<b>2,306</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	79.4%	19.7%	0.9%	100%		
2006 Distribution	81.4%	17.0%	1.5%	100%		
<b>Saturday</b>						
Walked	0	14	0	14	0.5%	4.9%
Biked	0	0	18	18	0.7%	3.1%
Bus/Train	0	80	4	84	3.1%	1.9%
Taxi	0	3	0	3	0.1%	0.0%
Car Driver/Motorcycle	1,336	54	0	1,390	52.1%	62.5%
Car Passenger	1,060	43	0	1,103	41.3%	27.7%
Other Ferry	0	0	0	0	0.0%	
Carshare	4	0	0	4	0.2%	
Dropped Off	0	54	0	54	2.0%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>2,400</b>	<b>247</b>	<b>22</b>	<b>2,669</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	89.9%	9.3%	0.8%	100%		
2006 Distribution	88.9%	8.1%	3.1%	100%		

Table 7-12, Table 7-13, and Table 7-14 show access and egress modes used across the entire ferry trip for the weekday PM peak period, the weekday non-PM peak period, and Saturdays, respectively. For walk-on boardings during the non-PM peak period, the percentage of travelers leaving the destination terminal on foot was significantly higher than the percentage arriving at the origin terminal on foot (19 percent versus 8 percent). This was also true for travelers using bus or other transit modes to/from the terminal.

**Table 7-12. Fauntleroy–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, weekday PM peak period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (20.7% of total boardings)					
Pedestrian	9.0%	Pedestrian	96.0%	Pedestrian	8.2%
Bicycle	4.0%	Pedestrian w/ Bicycle	4.0%	Bicycle	1.6%
By Bus/Transit	46.4%			By Bus/Transit	37.3%
By Vehicle	36.2%			By Vehicle	51.7%
Vanpool	3.6%			Vanpool	1.3%
Carshare	0.8%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (79.3% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	74.8%	In-Vehicle	100.0%
		Vehicle Passengers	25.2%		

Note: Average vehicle occupancy (AVO) was 1.34 for the weekday PM peak period.

**Table 7-13. Fauntleroy–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, Weekday Non-PM Peak Period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (14.7% of total boardings)					
Pedestrian	9.4%	Pedestrian	94.4%	Pedestrian	19.4%
Bicycle	3.8%	Pedestrian w/ Bicycle	5.6%	Bicycle	5.6%
By Bus/Transit	48.8%			By Bus/Transit	35.0%
By Vehicle	38.1%			By Vehicle	40.0%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (85.3% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	80.8%	In-Vehicle	100.0%
		Vehicle Passengers	19.2%		

Note: Average vehicle occupancy was 1.24 for the weekday non-PM peak period.

**Table 7-14. Fauntleroy–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, Saturday survey period (2013)**

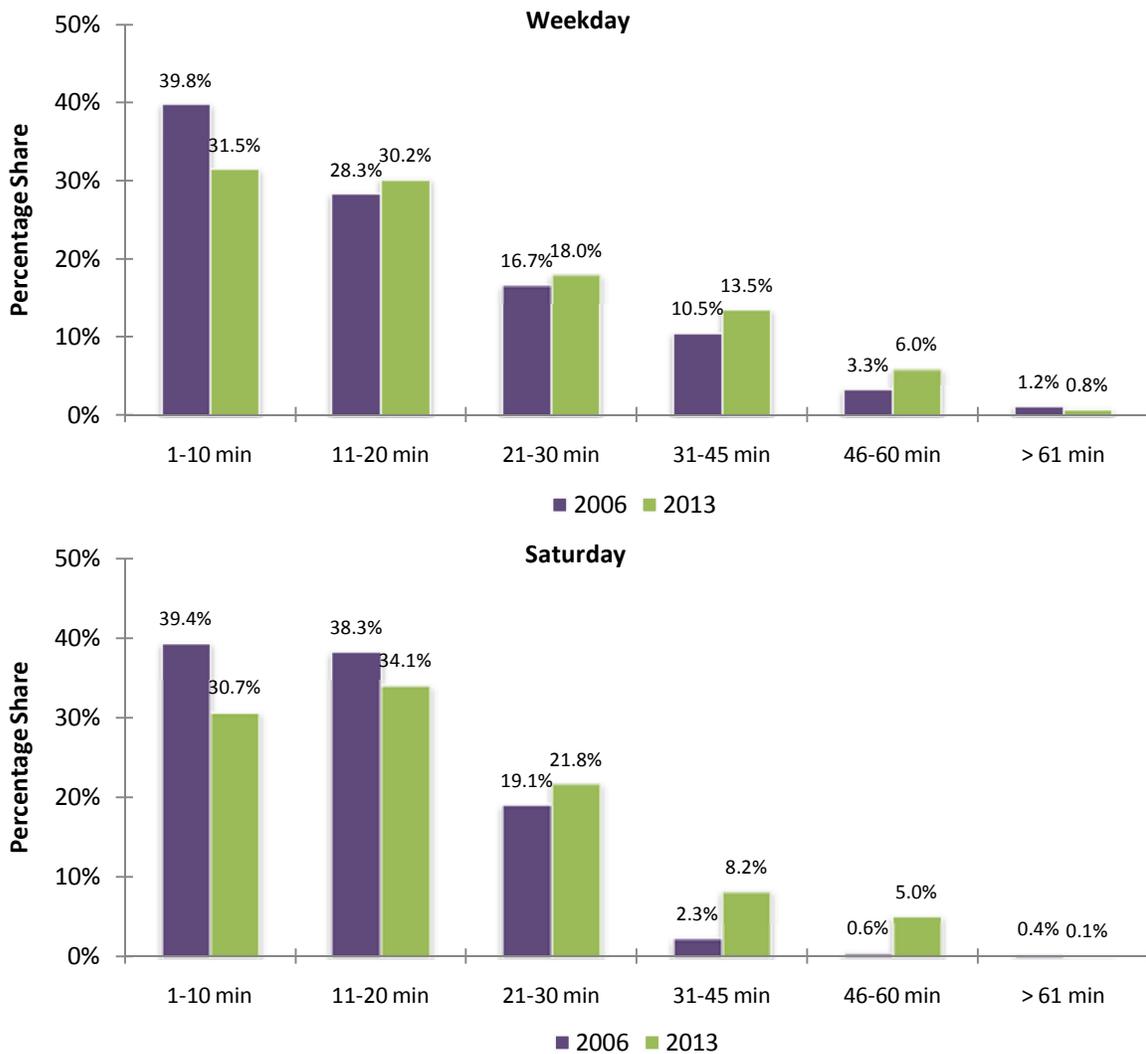
Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (10.1% of total boardings)					
Pedestrian	5.8%	Pedestrian	91.8%	Pedestrian	5.1%
Bicycle	7.0%	Pedestrian w/ Bicycle	8.2%	Bicycle	6.7%
By Bus/Transit	17.8%			By Bus/Transit	31.1%
By Vehicle	69.4%			By Vehicle	57.1%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (89.9% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	57.1%	In-Vehicle	100.0%
		Vehicle Passengers	42.9%		

*Note: Average vehicle occupancy (AVO) was 1.75 for the Saturday survey period.*

### 7.2.6 Wait Time

Respondents were asked the amount of time they spent waiting before boarding the ferry. Figure 7-15 shows the frequency distribution of perceived wait time (in minutes) for 2006 and 2013. In 2013, 20 percent of weekday ferry passengers waited for more than 30 minutes, which was an increase from 2006, when 15 percent of weekday riders waited for more than 30 minutes. A similar trend was seen on Saturdays, with 5 percent of ferry passengers waiting for more than 45 minutes in 2013 compared with only 1 percent in 2006.

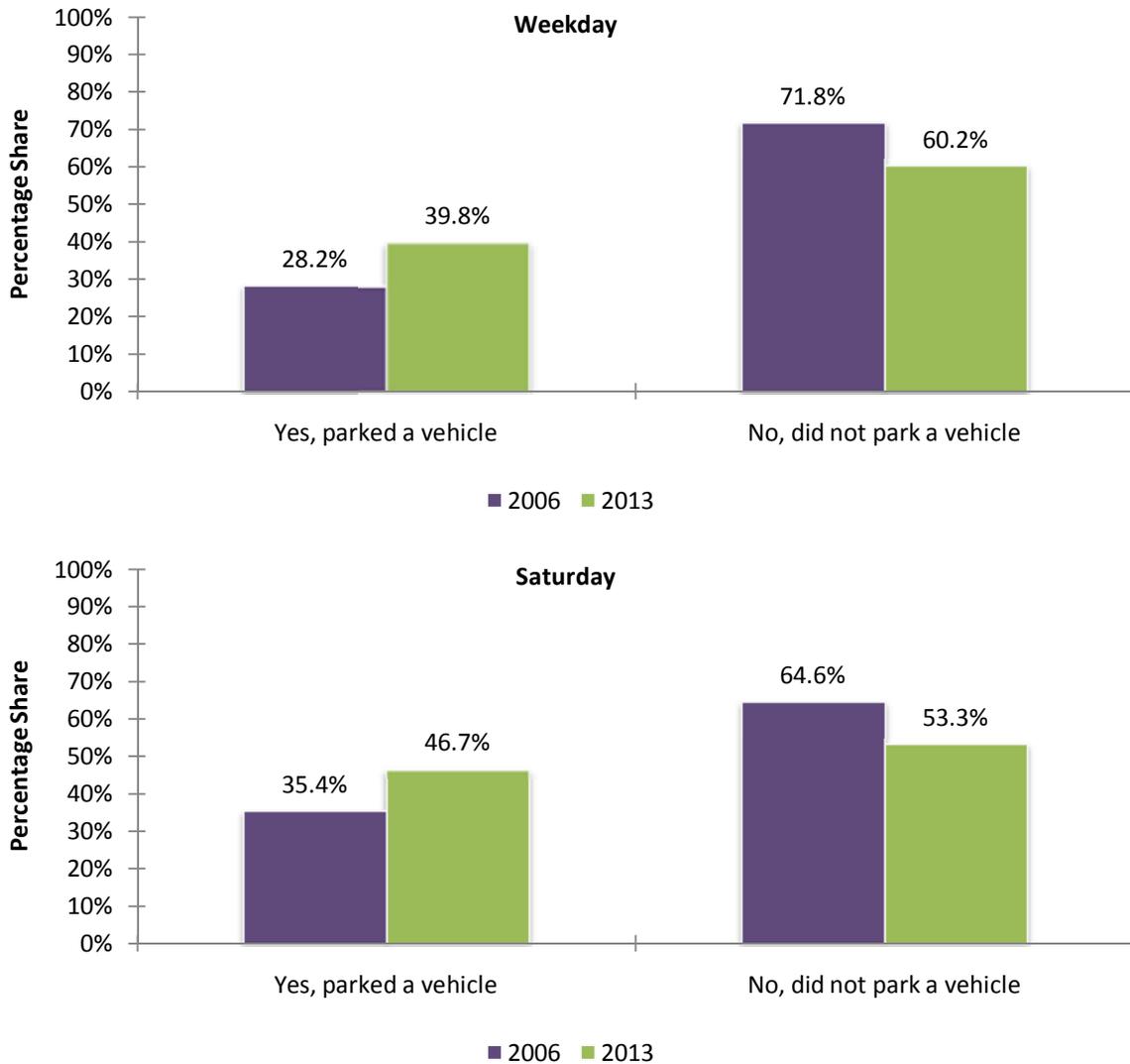
**Figure 7-15. Fauntleroy–Vashon trips by wait time, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.2.7 Parking

Figure 7-16 presents the percentage of riders who boarded by foot or bicycle who parked or did not park a vehicle at the terminal. About 40 percent of the weekday ferry passengers parked a vehicle in the 2013 survey, compared with about 28 percent in 2006. On Saturdays, those who parked a vehicle increased from 35 percent to 47 percent.

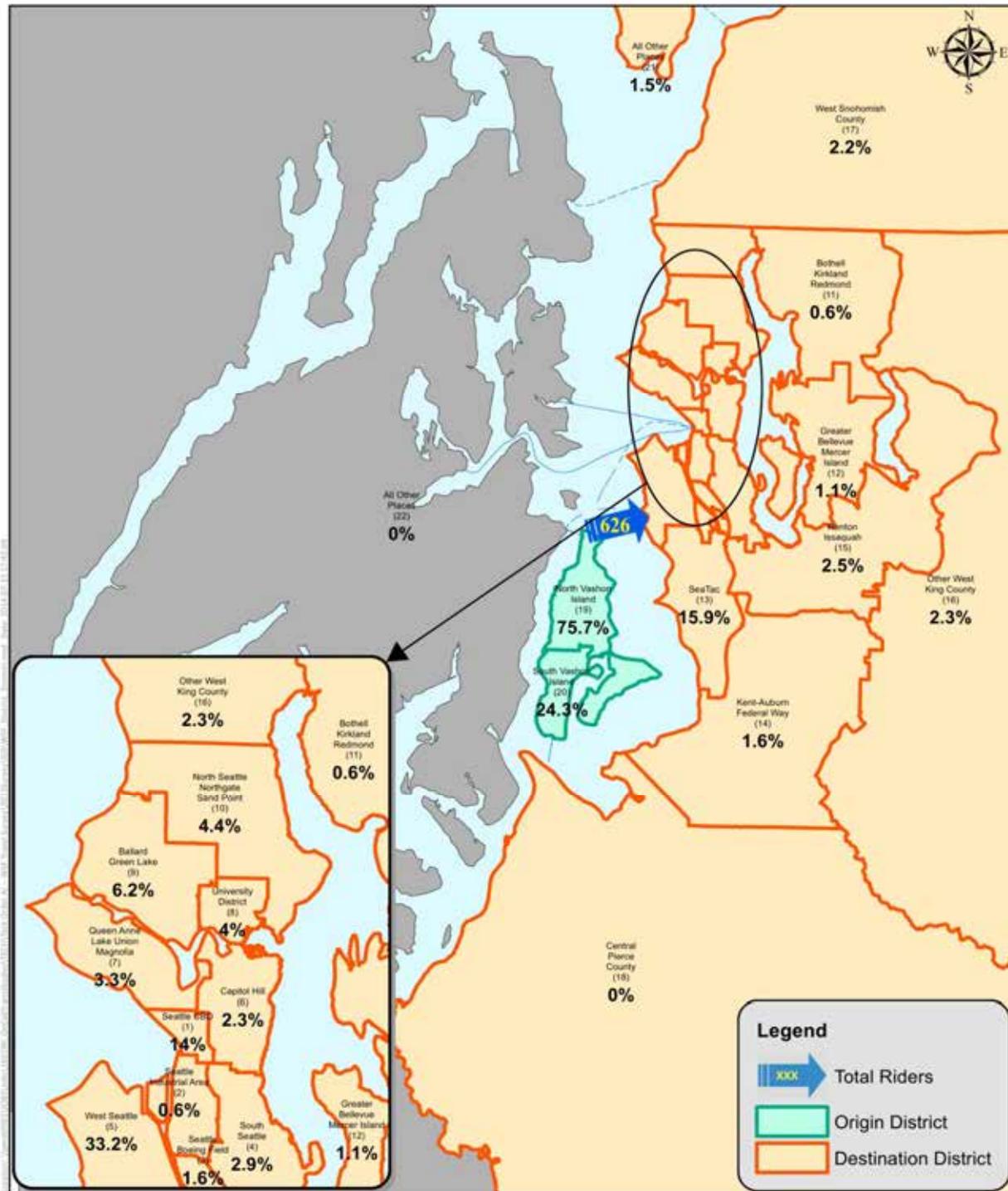
**Figure 7-16. Fauntleroy–Vashon non-motorized boardings that parked a vehicle at terminal, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.2.8 Weekday PM Peak-Period Travel Patterns—Eastbound

Figure 7-17 presents the origins and destinations of weekday PM peak-period eastbound trips by district. This information is presented in tabular format in Table 7-15. The majority of origins were located in North Vashon Island, while the major destinations were West Seattle, Sea-Tac, and the Seattle Central Business District (CBD). Origin and destination locations by boarding mode are shown in Figure 7-18. Walk boarding origins were somewhat spread out across Vashon Island, while the walk-off destinations were generally concentrated near the Fauntleroy ferry terminal.

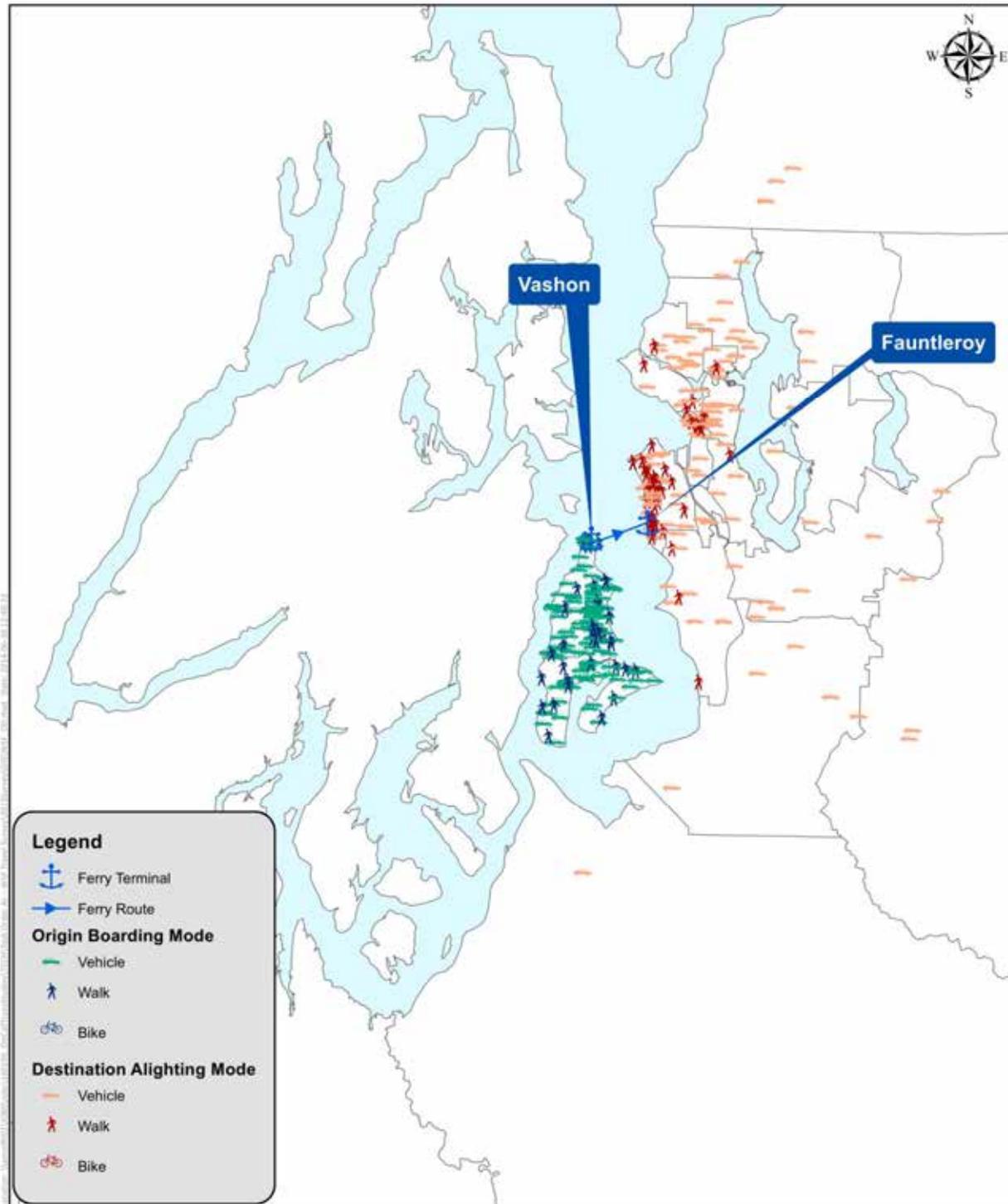
Figure 7-17. Fauntleroy–Vashon eastbound origin and destination districts, weekday PM peak period



**Table 7-15. Fauntleroy–Vashon eastbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►																			Origin Total	Origin Percent Share
		Seattle CBD	Seattle Industrial Area	Seattle Boeing Field	S Seattle	W Seattle	Capitol Hill	Queen Anne-Lake Union / Magnolia	University District	Ballard-Green Lake	N Seattle / Ngate / Sand Point	Bothell-Kirkland / Redmond	Greater Bellevue / Mercer Island	Sea Tac	Kent-Auburn / Federal Way	Renton / Issaquah	Other W King Co.	W Snohomish Co.	All Other Places			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	21			
N Vashon Island	19	70		6	14	168	14	17	22	27	14	4	7	76		10	11	14		474	75.7%	
S Vashon Island	20	18	4	4	4	39		4	4	12	13			23	10	6	4		9	152	24.3%	
Destination Total		87	4	10	18	208	14	21	25	39	28	4	7	99	10	16	14	14	9	626	100%	
Destination Percent Share		14.0%	0.6%	1.6%	2.9%	33.2%	2.3%	3.3%	4.0%	6.2%	4.4%	0.6%	1.1%	15.9%	1.6%	2.5%	2.3%	2.2%	1.5%	100%		

Figure 7-18. Fauntleroy–Vashon eastbound origin and destination locations by boarding mode, weekday 8-hour survey period



### 7.2.9 Weekday PM Peak-Period Travel Patterns—Westbound

Figure 7-19 presents the origins and destinations of weekday PM peak-period westbound trips by district. This information is presented in tabular format in Table 7-16. The major origins were the Seattle CBD, West Seattle, Sea-Tac, and the Seattle Industrial Area, while the majority of destinations were located in North Vashon Island. Figure 7-20 shows the change in travel patterns for westbound trips between 2006 and 2013. As shown in the figure, a larger percentage of trips originate in West Seattle and end in North Vashon Island compared with 2006.

Origin and destination locations by boarding mode are shown in Figure 7-21. Walk boarding origins were less concentrated compared with eastbound trips.

Figure 7-19. Fauntleroy–Vashon westbound origin and destination districts, weekday PM peak period

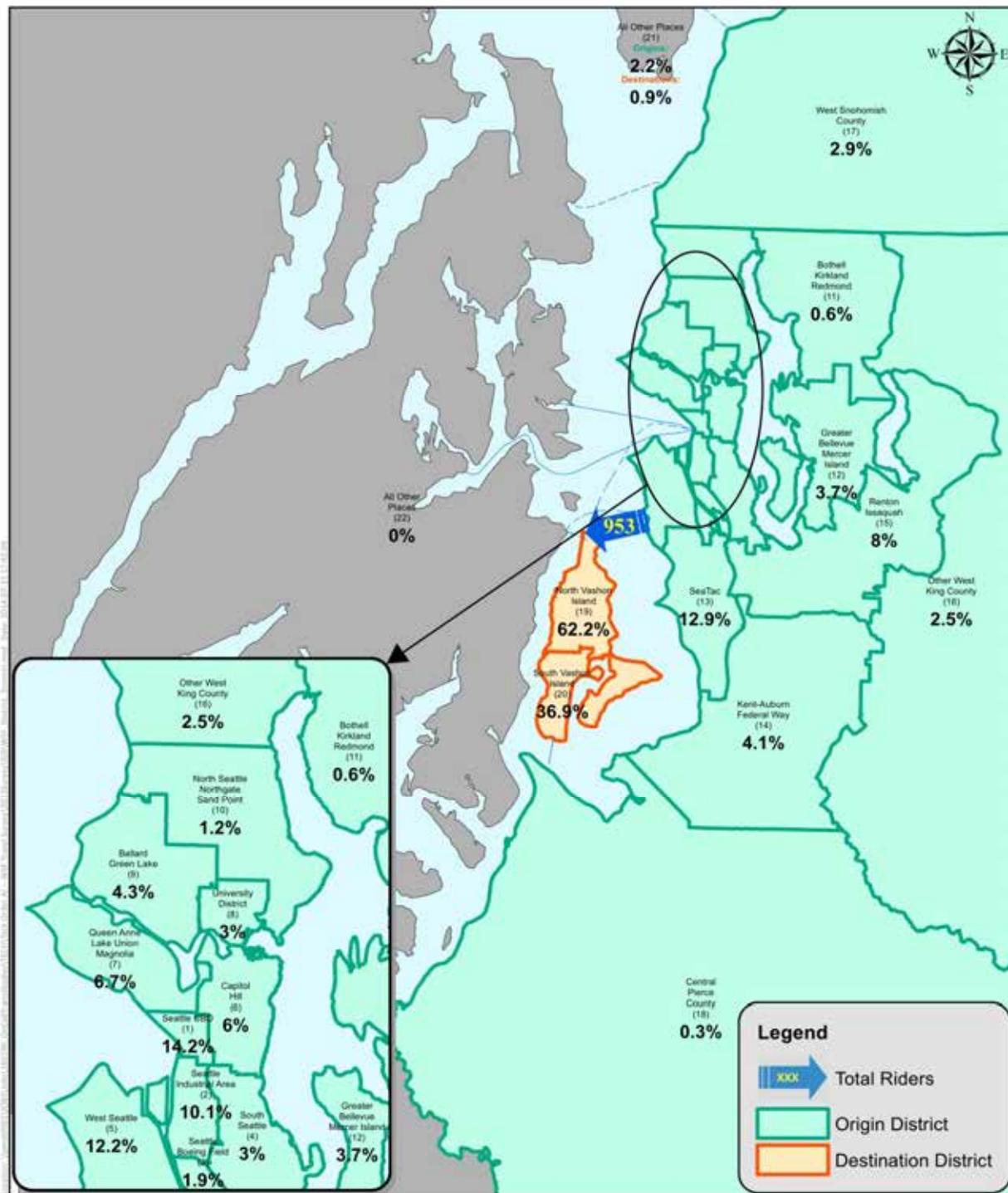
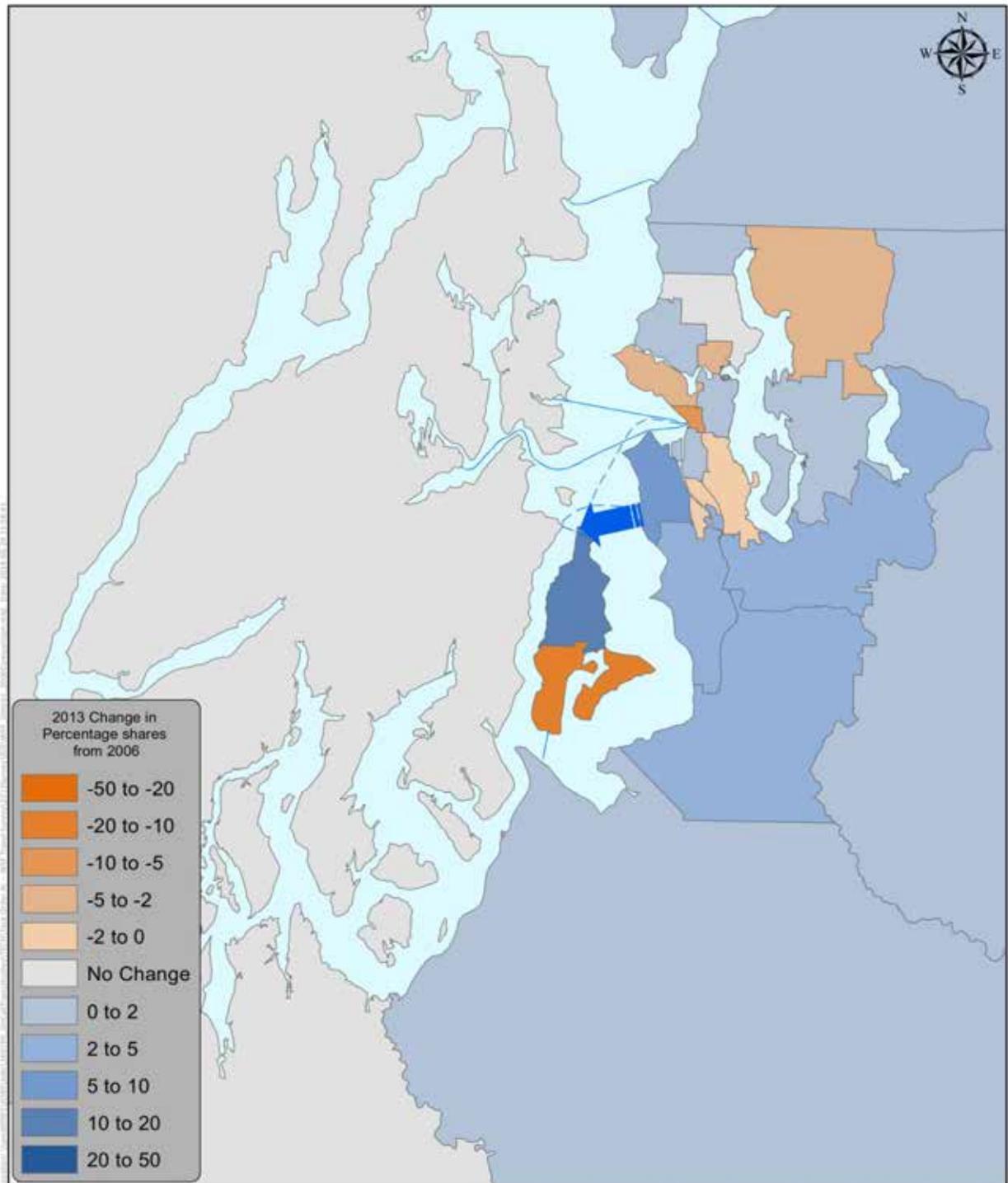


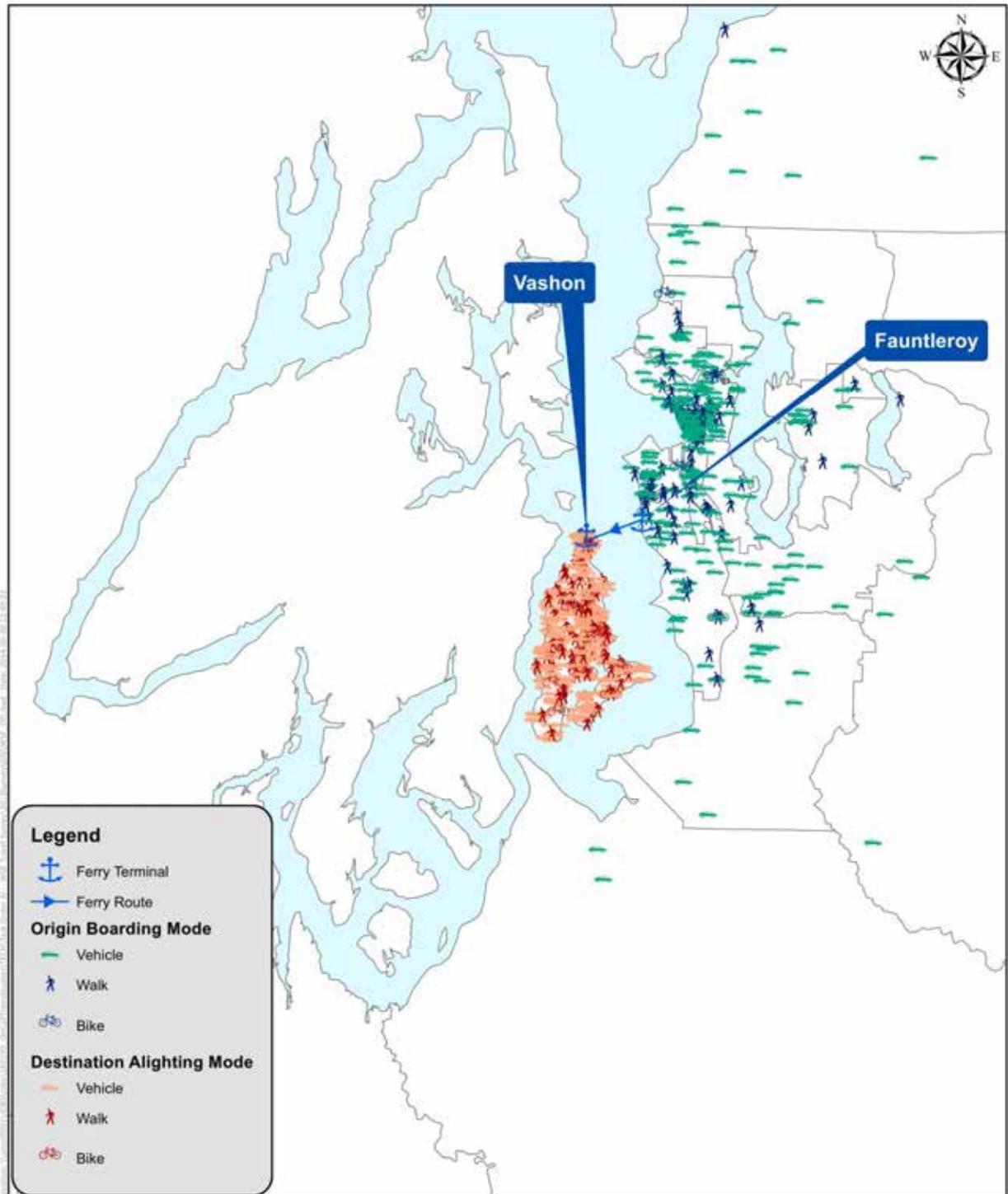
Figure 7-20. Fauntleroy–Vashon change in westbound travel patterns from 2006, weekday PM peak period



**Table 7-16. Fauntleroy–Vashon westbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►			Origin Total	Origin Percent Share
		N Vashon Island	S Vashon Island	All Other Places		
		19	20	21		
Seattle CBD	1	89	43	3	136	14.2%
Seattle Industrial Area	2	76	20		96	10.1%
Seattle Boeing Field	3	9	9		18	1.9%
S Seattle	4	9	20		29	3.0%
W Seattle	5	71	45		116	12.2%
Capitol Hill	6	33	24		57	6.0%
Queen Anne-Lake Union / Magnolia	7	36	28		63	6.7%
University District	8		29		29	3.0%
Ballard-Green Lake	9	33	9		41	4.3%
N Seattle / Ngate / Sand Point	10	3	9		12	1.2%
Bothell-Kirkland / Redmond	11	3	3		6	0.6%
Greater Bellevue / Mercer Island	12	29	6		35	3.7%
SeaTac	13	74	49		123	12.9%
Kent-Auburn / Federal Way	14	28	6	6	39	4.1%
Renton / Issaquah	15	43	33		76	8.0%
Other W King County	16	15	9		24	2.5%
W Snohomish County	17	21	6		27	2.9%
Central Pierce County	18	3			3	0.3%
All Other Places	21	18	3		21	2.2%
Destination Total		593	351	9	953	100.0%
Destination Percent Share		62.2%	36.9%	0.9%	100%	

**Figure 7-21. Fauntleroy–Vashon westbound origin and destination locations by boarding mode, weekday 8-hour survey period**

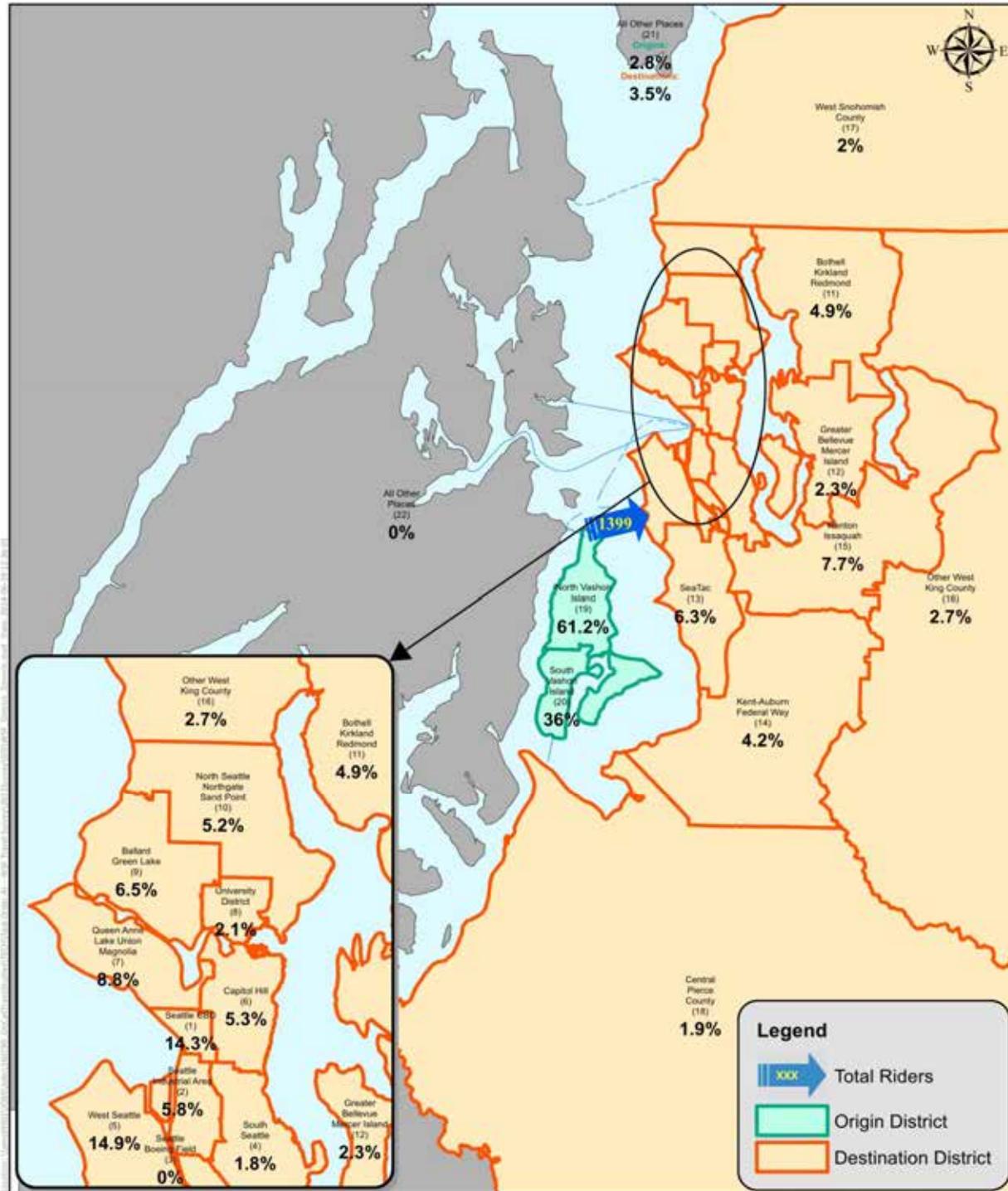


### 7.2.10 Saturday Travel Patterns—Eastbound

Figure 7-22 presents the origins and destinations of Saturday eastbound trips by district. This information is presented in tabular format in Table 7-17. The majority of origins were in North

Vashon Island, while the major destinations were West Seattle and the Seattle CBD. Origin and destination locations by boarding mode are shown in Figure 7-23. Boarding origins and modes were dispersed.

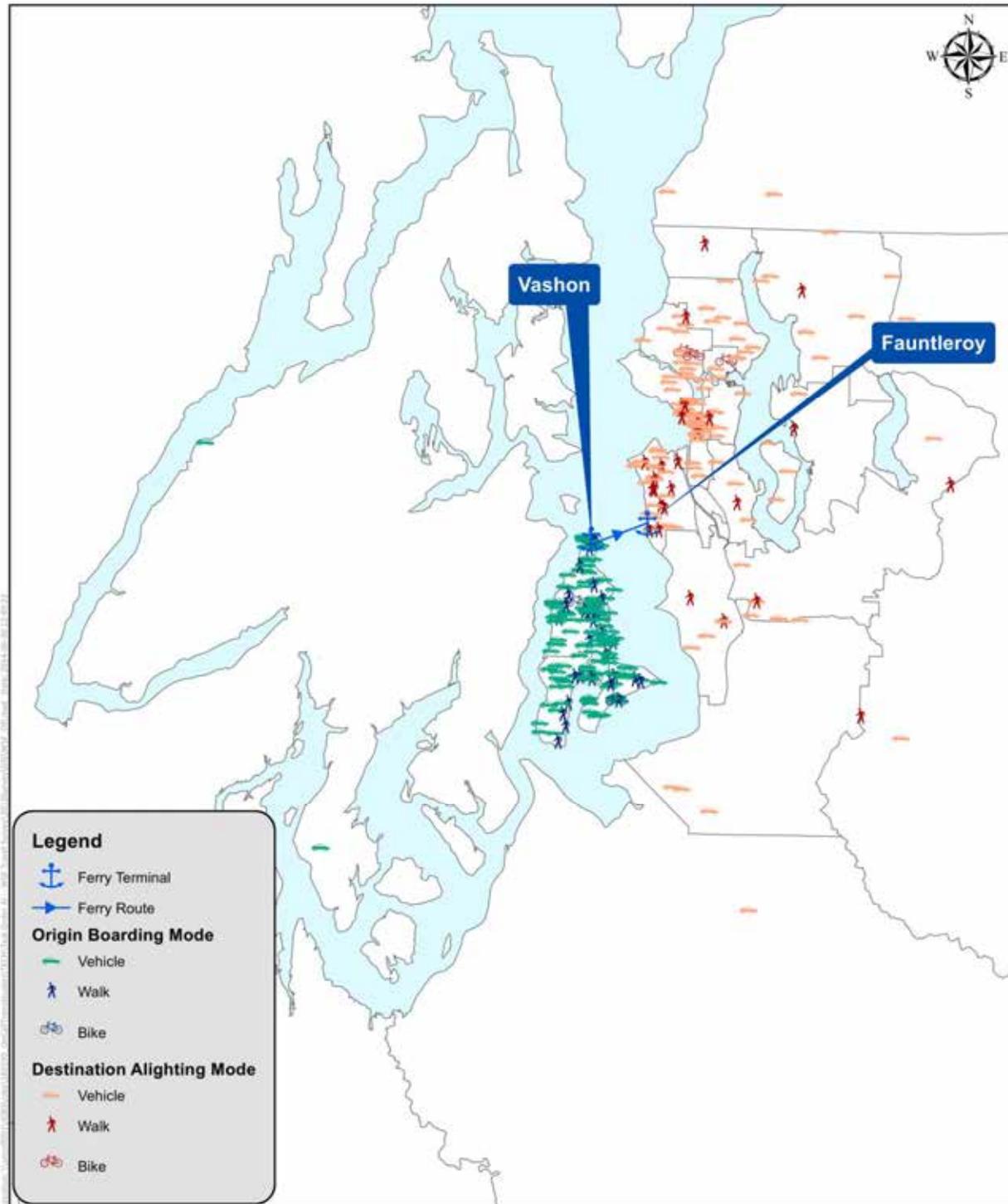
**Figure 7-22. Fauntleroy–Vashon eastbound origin and destination districts, Saturday survey period**



**Table 7-17. Fauntleroy–Vashon eastbound total boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ►																		Origin Total	Origin Percent Share
		Seattle CBD	Seattle Industrial Area	South Seattle	West Seattle	Capitol Hill	Queen Anne-Lake Union / Magnolia	University District	Ballard-Green Lake	North Seattle / Northgate / Sand Point	Bothell-Kirkland / Redmond	Greater Bellevue / Mercer Island	SeaTac	Kent-Auburn / Federal Way	Renton / Issaquah	Other West King County	West Snohomish County	Central Pierce County	All Other Places_East		
		1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21		
N Vashon Island	19	107	56	25	156	53	45	17	75	25	37	9	41	46	73	17	20	26	29	856	61.2%
S Vashon Island	20	74	17		53	21	78	12	17	47	31	24	47	12	35	17	8		12	504	36.0%
All Other Places	21	19	8													4			8	39	2.8%
Destination Total		200	81	25	208	74	123	30	91	72	68	33	88	58	108	38	28	26	49	1,399	100%
Destination Percent Share		14.3%	5.8%	1.8%	14.9%	5.3%	8.8%	2.1%	6.5%	5.2%	4.9%	2.3%	6.3%	4.2%	7.7%	2.7%	2.0%	1.9%	3.5%	100%	

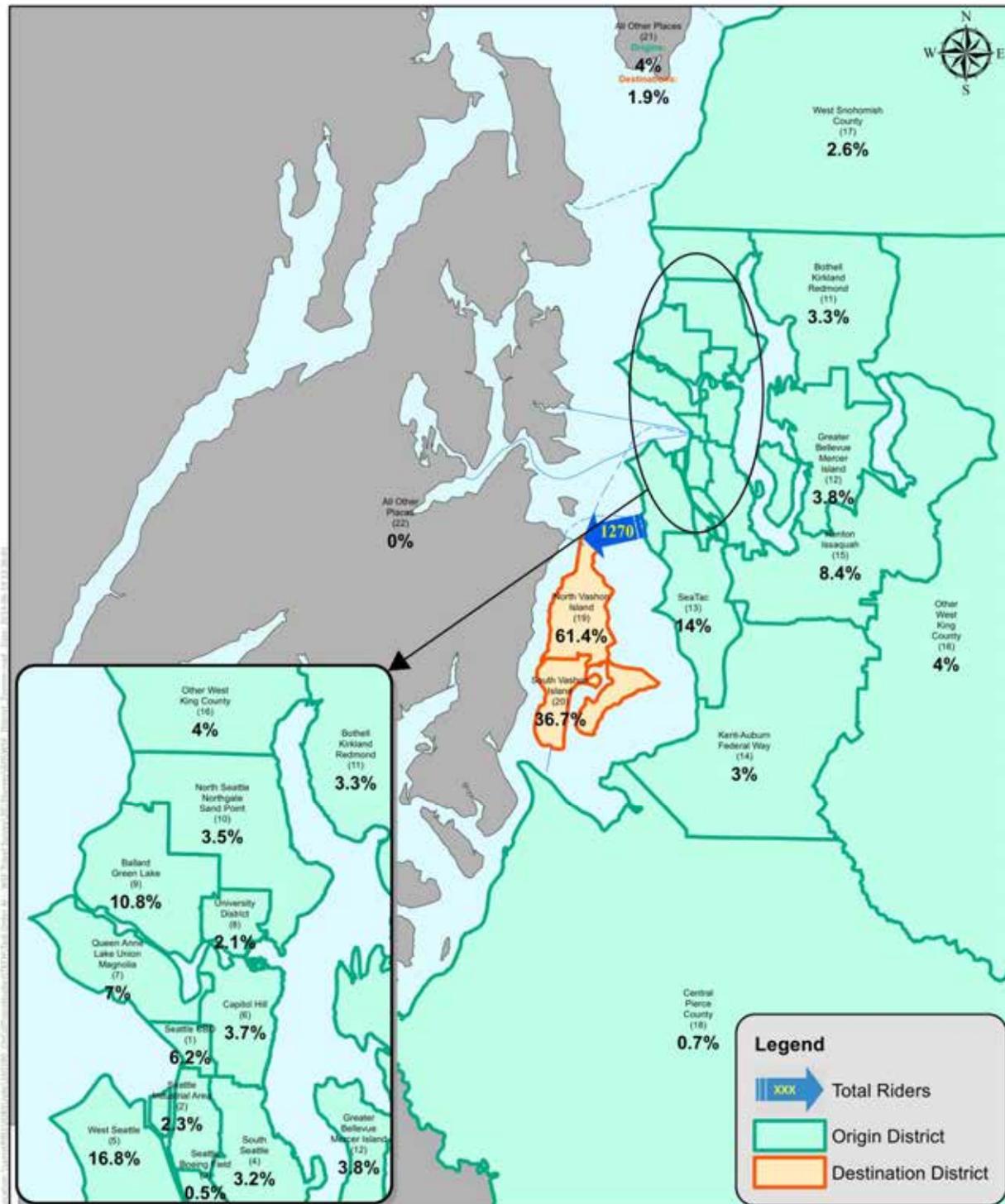
Figure 7-23. Fauntleroy–Vashon eastbound origin and destination locations by boarding mode, Saturday survey period



### 7.2.11 Saturday Travel Patterns—Westbound

Figure 7-24 presents the origins and destinations of Saturday westbound trips by district. This information is presented in tabular format in Table 7-18. The major origins were West Seattle, Sea-Tac, and Ballard–Green Lake, while the majority of destinations were in North Vashon Island. Origin and destination locations by boarding mode are shown in Figure 7-25. Boarding origins and modes were dispersed.

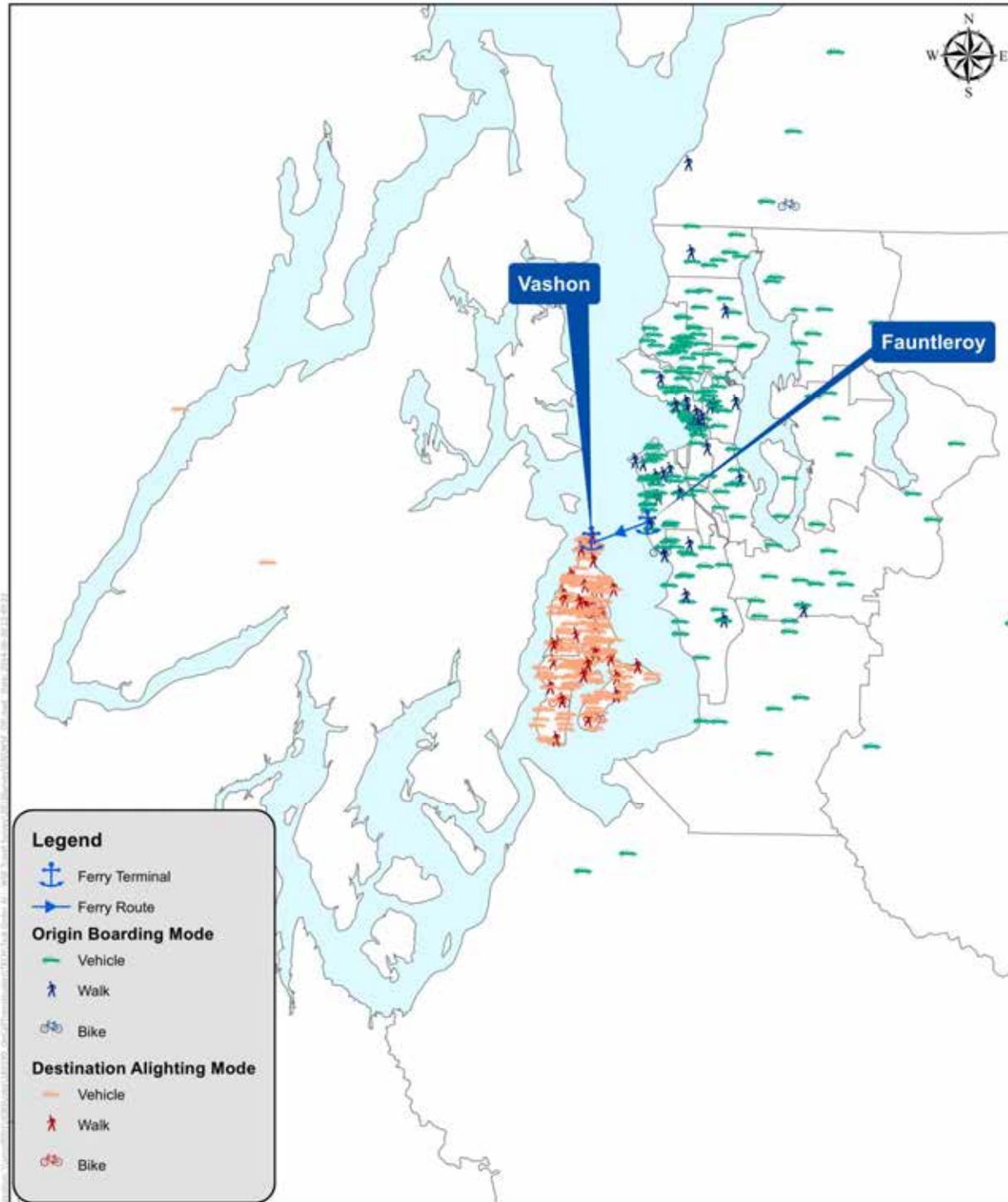
Figure 7-24. Fauntleroy–Vashon westbound origin and destination districts, Saturday survey period



**Table 7-18. Fauntleroy–Vashon westbound total boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ▶	N Vashon Island	S Vashon Island	All Other Places	Origin Total	Origin Percent Share
			19	20	21		
Seattle CBD	1		63	17		79	6.2%
Seattle Industrial Area	2		26	3		29	2.3%
Seattle Boeing Field	3		3	3		7	0.5%
S Seattle	4		35	6		41	3.2%
W Seattle	5		123	85	6	214	16.8%
Capitol Hill	6		32	12	3	47	3.7%
Queen Anne-Lake Union / Magnolia	7		60	29		89	7.0%
University District	8		6	20		26	2.1%
Ballard-Green Lake	9		80	57		137	10.8%
N Seattle / Ngate / Sand Point	10		22	22		44	3.5%
Bothell-Kirkland / Redmond	11		3	39		42	3.3%
Greater Bellevue / Mercer Island	12		23	22	3	48	3.8%
SeaTac	13		98	74	6	177	14.0%
Kent-Auburn / Federal Way	14		29	9		38	3.0%
Renton / Issaquah	15		77	29		106	8.4%
Other W King County	16		39	13		51	4.0%
W Snohomish County	17		21	6	6	33	2.6%
Central Pierce County	18		9			9	0.7%
All Other Places	21		33	18		50	4.0%
Destination Total			780	466	24	1,270	100.0%
Destination Percent Share			61.4%	36.7%	1.9%	100%	

Figure 7-25. Fauntleroy–Vashon westbound origin and destination locations by boarding mode, Saturday survey period



## 7.3 Fauntleroy–Southworth

### 7.3.1 Route Description

The Fauntleroy–Southworth route connects Fauntleroy (West Seattle) and Southworth, located south of Seattle, and crosses Puget Sound just north of Vashon Island. It takes about 40 minutes to ride this ferry route one way when the ferry stops at Vashon along the way, and 30 minutes for a direct crossing with no stop at Vashon. The crossing is approximately 4.1 nautical miles. It runs seven days a week. For 2013, the annual total ridership was 320,000 passengers plus 480,000 vehicles and drivers for a total of 800,000 riders, or about 2,200 riders per day. This compares to 2,700 riders per day in 2006 and 2,600 riders per day in 1999. The Fauntleroy–Southworth route has 26 weekday sailings per day for each direction. The fare in October 2013 for a vehicle 14 to 22 feet including driver was \$10.50. The full fare for passengers was \$6.05.

This section provides some key trip-making characteristics of ferry riders on this route. In addition, the 2013 survey results are compared with key characteristics from the previous 2006 survey data to identify trends in trip-making on this route.

### 7.3.2 Trips by Purpose

As shown in Table 7-19, the most frequent weekday trip purpose was work/school (69 percent), which is unchanged from 2006. More than half (60 percent) of Saturday trips were for recreation/shopping in 2013, an increase from 49 percent in 2006.

**Table 7-19. Fauntleroy–Southworth trips by purpose and direction, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Direction	Work/ School	Personal Business/ Other	Recreation/ Shopping	Total	All Purposes	
					2013	2006
<b>Weekday</b>						
Eastbound	179	101	99	379	32.5%	51.5%
Westbound	620	95	70	785	67.5%	48.5%
Total	799	197	168	1,164	100%	100%
2013 Distribution	68.7%	16.9%	14.4%	100%		
2006 Distribution	68.6%	15.6%	15.8%	100%		
<b>Saturday</b>						
Eastbound	90	176	484	750	57.3%	54.0%
Westbound	84	180	295	559	42.7%	46.0%
Total	174	357	779	1,309	100%	100%
2013 Distribution	13.3%	27.2%	59.5%	100%		
2006 Distribution	15.2%	35.8%	49.0%	100%		

### 7.3.3 Frequency of Travel

Table 7-20 shows the frequency of travel for weekdays and Saturdays by trip purpose for 2006 and 2013. The highest percentage of weekday users (22 percent) in 2013 made nine to ten trips per week, a decrease from 28 percent in 2006. The percentage of travelers using ferries once per week increased from 22 percent to 55 percent, while those using the ferry twice per week decreased from 39 percent to 17 percent.

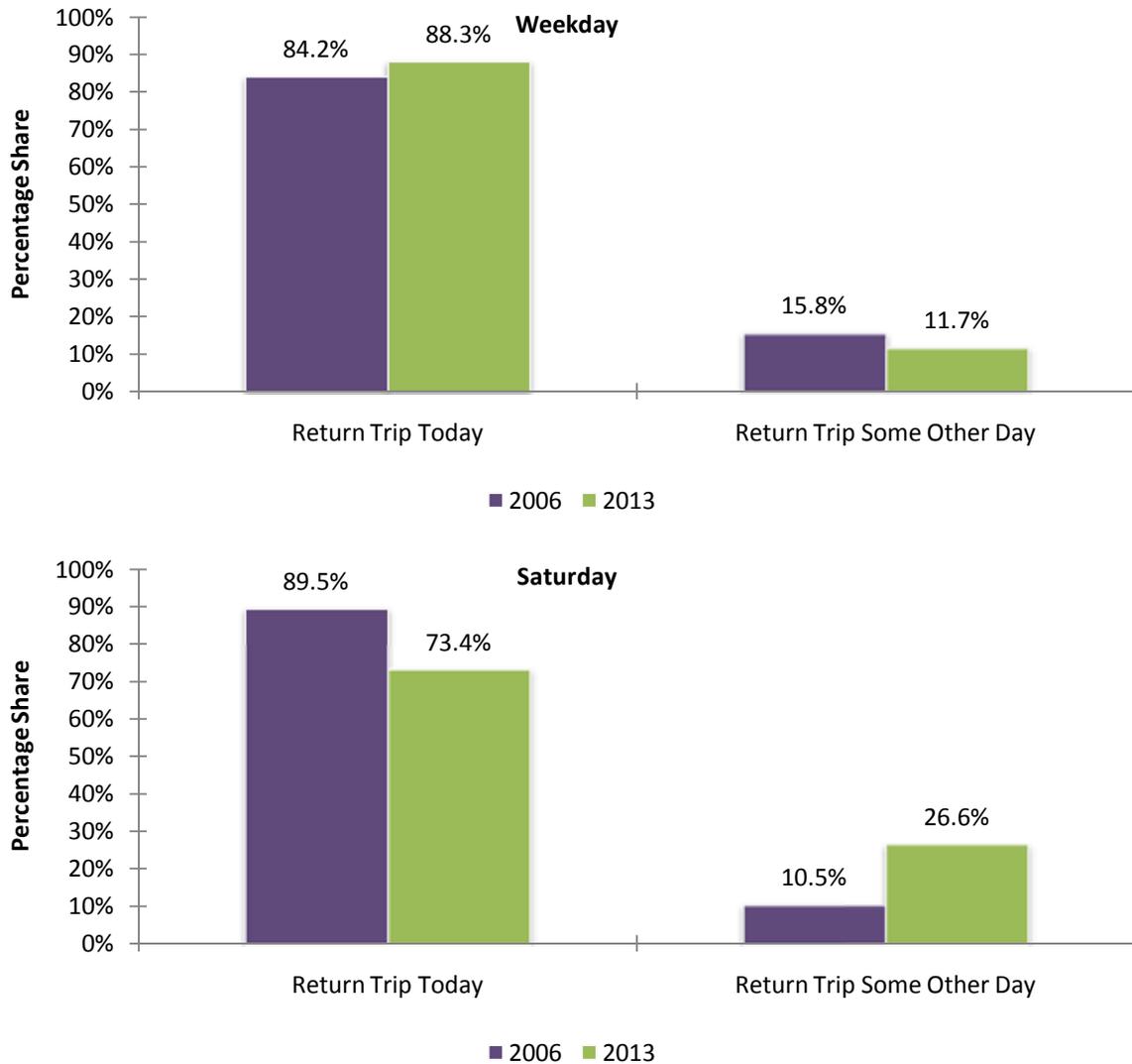
**Table 7-20. Fauntleroy–Southworth one-way trips by purpose and frequency, weekday 8-hour and Saturday survey periods (2006 and 2013)**

One-Way Trips	Work/ School	Personal Business/ Other	Recreation / Shopping	Total	All Purposes		Work/School	
					2013	2006	2013	2006
<b>Weekday</b>								
1	71	48	58	177	16.9%	10.6%	9.8%	3.7%
2	47	68	44	159	15.2%	12.1%	6.6%	7.8%
3 to 4	50	53	27	131	12.5%	17.1%	7.0%	12.7%
5 to 6	106	7	10	123	11.7%	14.5%	14.7%	14.6%
7 to 8	152	10	3	165	15.7%	8.4%	21.1%	10.4%
9 to 10	232	1	0	234	22.3%	28.2%	32.3%	39.5%
11+	60	0	0	60	5.7%	9.1%	8.4%	11.3%
Total	719	188	141	1,048	100%	100%	100%	100%
2013 Distribution	68.5%	18.0%	13.5%	100%				
2006 Distribution	70.0%	14.0%	16.0%	100%				
<b>Saturday</b>								
1	49	128	399	576	55.0%	21.8%		
2	29	40	106	174	16.6%	38.9%		
3 to 4	9	62	63	133	12.7%	13.3%		
5 to 6	14	21	16	51	4.9%	5.9%		
7 to 8	28	2	9	39	3.7%	7.8%		
9 to 10	5	2	14	21	2.0%	3.3%		
11+	23	4	24	52	5.0%	8.9%		
Total	156	260	630	1,046	100%	100%		
2013 Distribution	14.9%	24.8%	60.3%	100%				
2006 Distribution	15.7%	35.5%	48.8%	100%				

### 7.3.4 Round-Trip Patterns

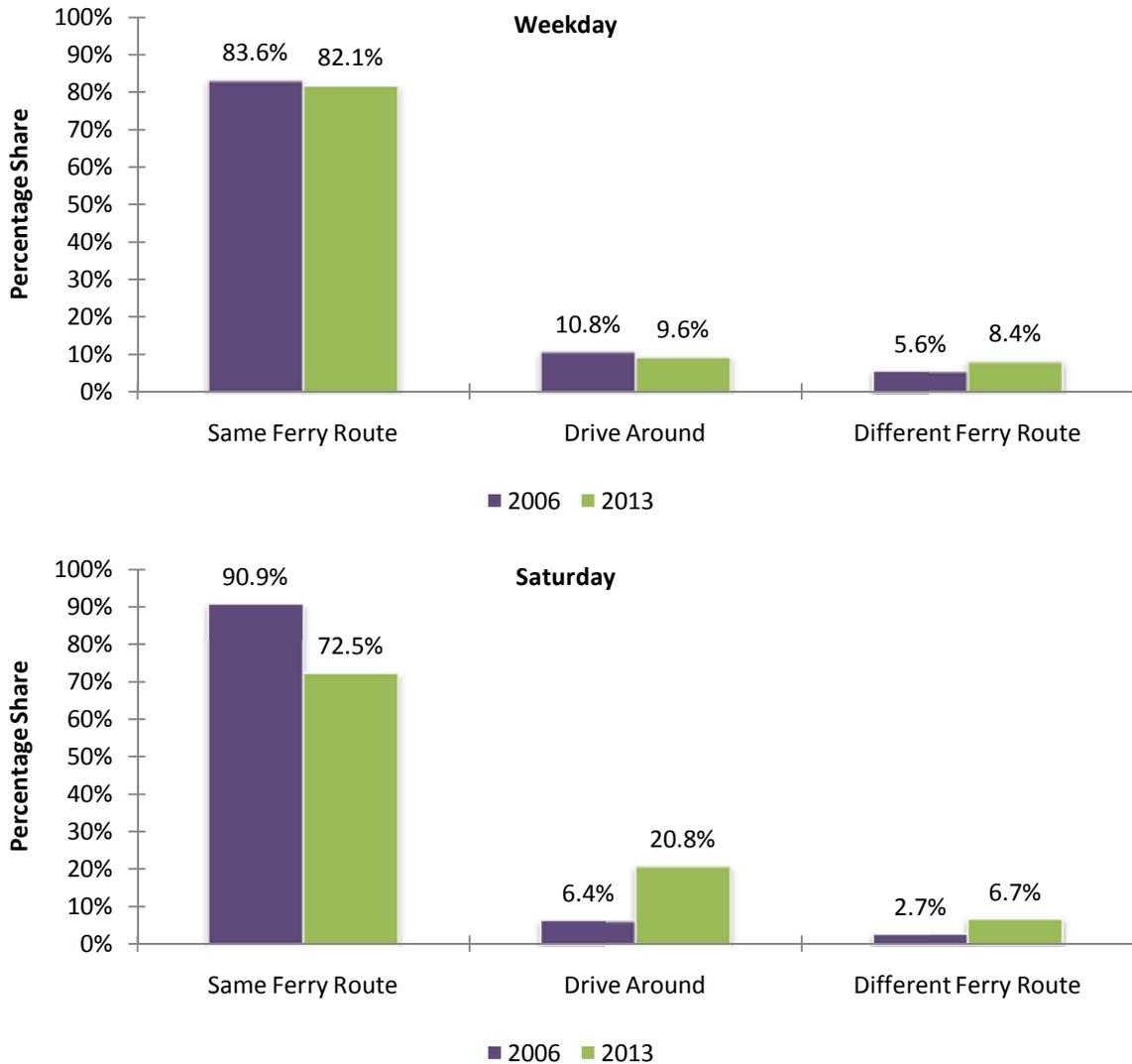
The percentage of weekday ferry travelers making a round-trip on the same day versus some other day grew slightly from 84 percent in 2006 to 88 percent in 2013, as shown in Figure 7-26. Conversely, those making a round-trip on the same day on Saturdays decreased sharply from 90 percent in 2006 to 73 percent in 2013.

**Figure 7-26. Fauntleroy–Southworth round-trip patterns by day, weekday 8-hour and Saturday survey periods (2006 and 2013)**



As shown in Figure 7-27, the majority of round-trip ferry travelers used the same route for both legs of the trip. This situation was true for both weekday and Saturday travelers. While the results are relatively unchanged from 2006 for weekdays, there was a significant decrease on Saturdays from 91 percent in 2006 to 73 percent in 2013.

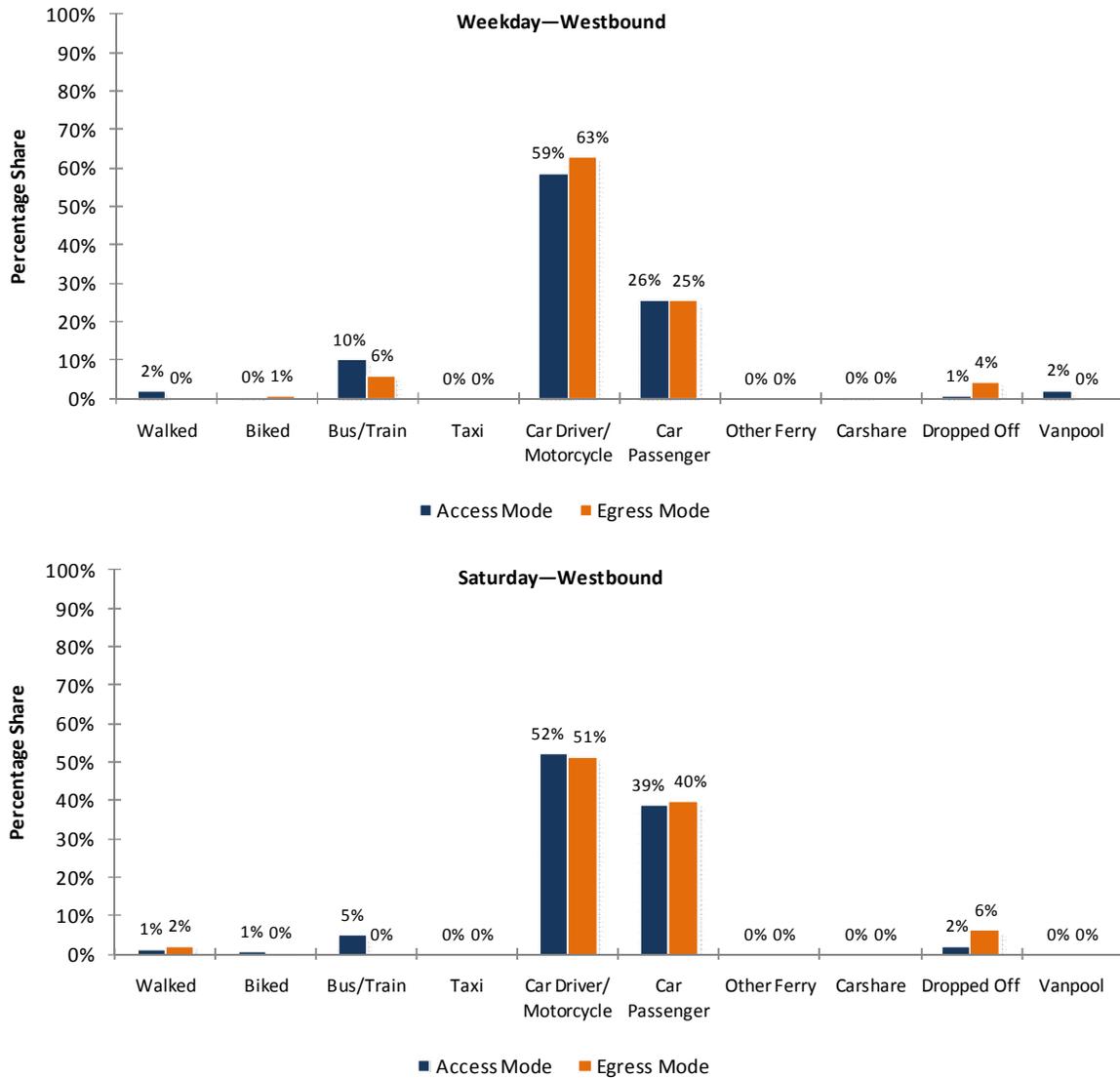
**Figure 7-27. Fauntleroy–Southworth round-trip patterns by route, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.3.5 Access, Egress, and Boarding Modes

Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant westbound mode of access and egress in 2013, as shown in Figure 7-28. On weekdays, 59 percent of ferry travelers drove to the ferry, and an additional 26 percent were passengers in a private vehicle. Leaving the ferry, 63 percent were drivers while 25 percent were passengers. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-28. Fautleroy–Southworth westbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**



Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant eastbound mode of access and egress in 2013, as shown in Figure 7-29. On weekdays, 71 percent of ferry travelers drove to the ferry, and an additional 23 percent were passengers in a private vehicle. Leaving the ferry, 65 percent were drivers while 24 percent were passengers. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-29. Fauntleroy–Southworth eastbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**

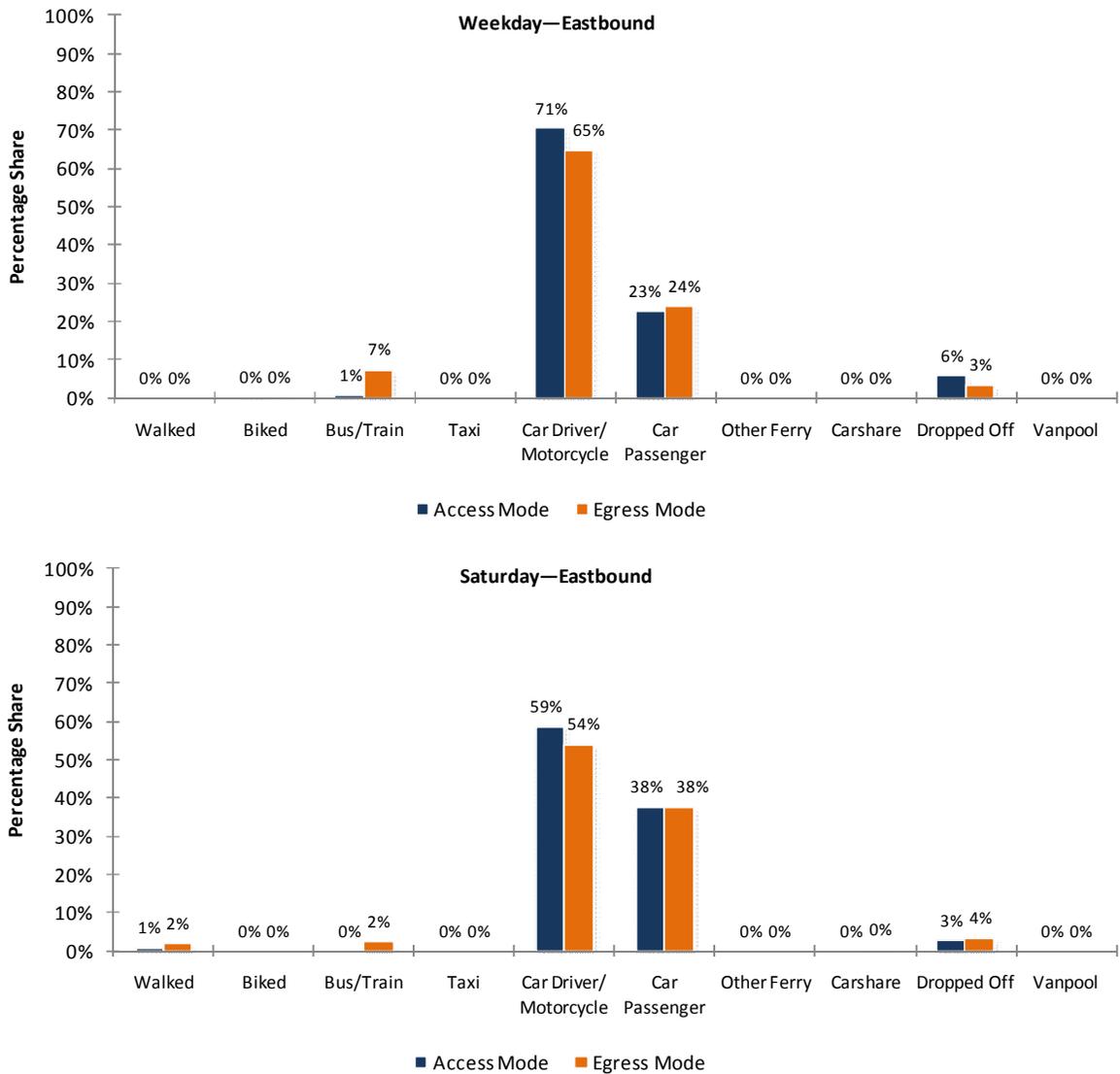


Table 7-21 shows the access mode and boarding method for weekdays and Saturdays in 2006 and 2013. As shown in the table, most travelers boarded the ferry by driving on. In 2013, this method accounted for 81 percent and 89 percent of boardings on weekdays and Saturdays, respectively. On weekdays, the walk-on share of boardings increased between 2006 and 2013, while it remained similar on Saturdays.

**Table 7-21. Fauntleroy–Southworth access mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Access Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	15	0	15	1.3%	3.6%
Biked	0	0	5	5	0.5%	2.2%
Bus/Train	5	77	0	82	7.0%	6.6%
Taxi	0	0	0	0	0.0%	0.2%
Car Driver/Motorcycle	703	24	1	729	62.6%	61.1%
Car Passenger	283	4	0	287	24.7%	26.4%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	2	0	2	0.2%	
Dropped Off	0	27	0	27	2.3%	
Vanpool	0	18	0	18	1.5%	
<b>Total</b>	<b>991</b>	<b>166</b>	<b>7</b>	<b>1,164</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	85.1%	14.3%	0.6%	100%		
2006 Distribution	80.5%	17.8%	1.7%	100%		
<b>Saturday</b>						
Walked	0	14	0	14	1.0%	1.5%
Biked	0	0	4	4	0.3%	0.0%
Bus/Train	0	27	0	27	2.1%	1.8%
Taxi	0	0	0	0	0.0%	0.2%
Car Driver/Motorcycle	689	44	0	733	56.0%	68.6%
Car Passenger	471	28	0	499	38.1%	27.8%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	32	0	32	2.5%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>1,160</b>	<b>145</b>	<b>4</b>	<b>1,309</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	88.6%	11.1%	0.3%	100%		
2006 Distribution	89.1%	10.9%	0.0%	100%		

Table 7-22 shows the egress mode and boarding method for weekdays and Saturdays in 2006 and 2013. Egress mode shares are similar to the access mode shares.

**Table 7-22. Fauntleroy–Southworth egress mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Egress Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	2	0	2	0.2%	4.6%
Biked	5	0	3	8	0.7%	2.3%
Bus/Train	2	74	0	76	6.5%	6.4%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	698	39	2	739	63.5%	65.6%
Car Passenger	277	13	0	291	25.0%	21.1%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	2	0	2	0.2%	
Dropped Off	9	36	1	47	4.0%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>991</b>	<b>166</b>	<b>7</b>	<b>1,164</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	85.1%	14.3%	0.6%	100%		
2006 Distribution	80.7%	17.5%	1.8%	100%		
<b>Saturday</b>						
Walked	0	26	0	26	2.0%	2.4%
Biked	2	0	0	2	0.1%	0.0%
Bus/Train	0	18	0	18	1.3%	1.2%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	681	8	4	693	52.9%	70.1%
Car Passenger	474	32	0	506	38.7%	26.3%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	3	0	3	0.2%	
Dropped Off	3	58	0	61	4.7%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>1,160</b>	<b>145</b>	<b>4</b>	<b>1,309</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	88.6%	11.1%	0.3%	100%		
2006 Distribution	89.3%	10.7%	0.0%	100%		

Table 7-23, Table 7-24, and Table 7-25 show access and egress modes used across the entire ferry trip for the weekday PM peak period, the weekday non-PM peak period, and Saturdays, respectively. For walk-on boardings on the weekday, the percentage of travelers leaving the destination terminal on foot was lower than the percentage arriving at the origin terminal on foot. The reverse was true on Saturdays.

**Table 7-23. Fauntleroy–Southworth trips by access mode to ferry—boarding method—egress mode from ferry, weekday PM peak period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (15.9% of total boardings)					
Pedestrian	7.1%	Pedestrian	95.1%	Pedestrian	1.4%
Bicycle	3.9%	Pedestrian w/ Bicycle	4.9%	Bicycle	2.5%
By Bus/Transit	49.0%			By Bus/Transit	41.6%
By Vehicle	25.8%			By Vehicle	53.1%
Vanpool	12.8%			Vanpool	0.0%
Carshare	1.4%			Carshare	1.4%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (84.1% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	67.1%	In-Vehicle	100.0%
		Vehicle Passengers	32.9%		

Note: Average vehicle occupancy (AVO) was 1.49 for the weekday PM peak period.

**Table 7-24. Fauntleroy–Southworth trips by access mode to ferry—boarding method—egress mode from ferry, Weekday Non-PM Peak Period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (11.8% of total boardings)					
Pedestrian	13.9%	Pedestrian	100.0%	Pedestrian	0.0%
Bicycle	0.0%	Pedestrian w/ Bicycle	0.0%	Bicycle	0.0%
By Bus/Transit	27.8%			By Bus/Transit	47.2%
By Vehicle	58.3%			By Vehicle	52.8%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (88.2% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	81.3%	In-Vehicle	100.0%
		Vehicle Passengers	18.7%		

Note: Average vehicle occupancy (AVO) was 1.23 for the weekday non-PM peak period.

**Table 7-25. Fauntleroy–Southworth trips by access mode to ferry—boarding method—egress mode from ferry, Saturday survey period (2013)**

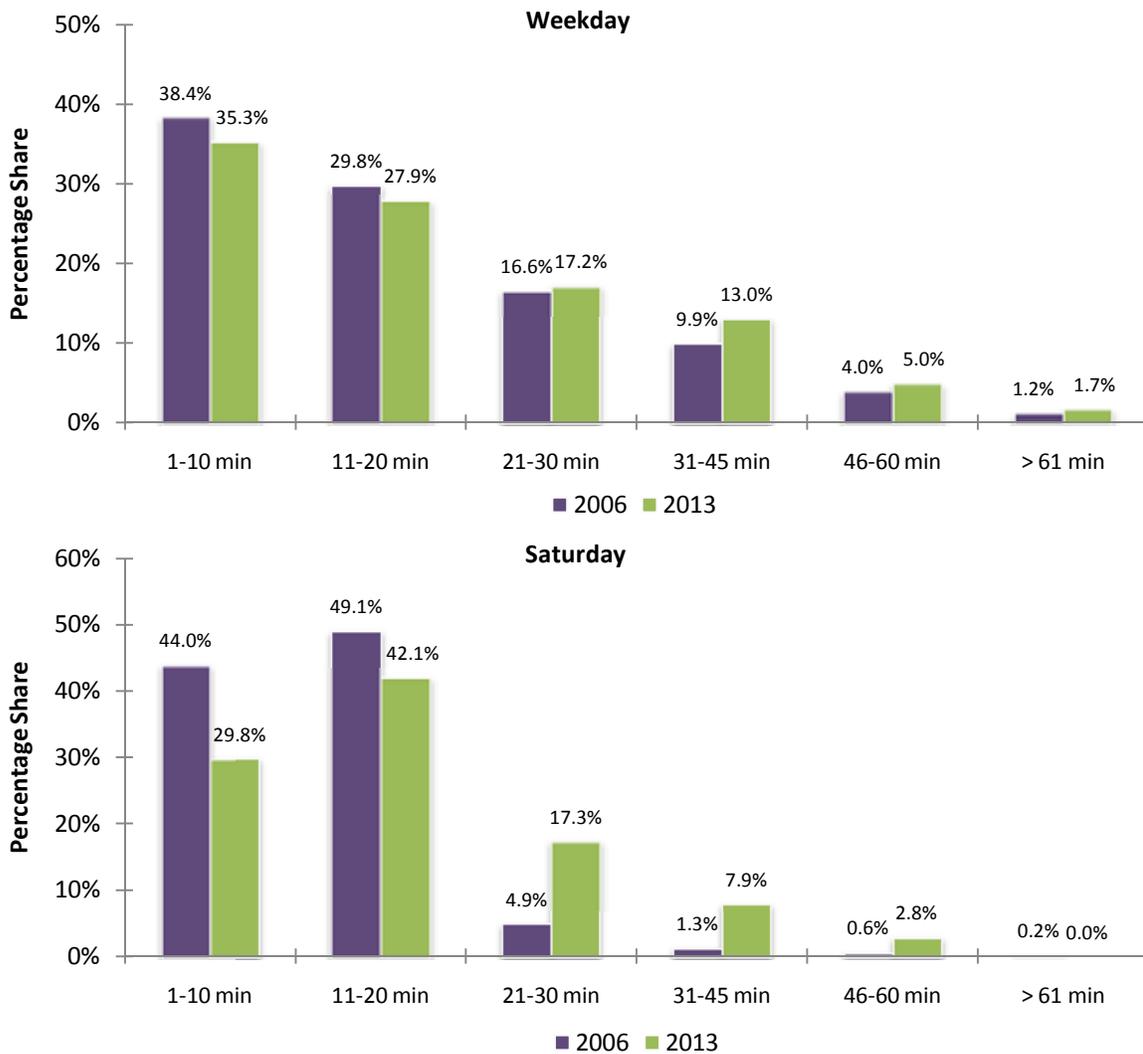
Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (11.4% of total boardings)					
Pedestrian	9.1%	Pedestrian	97.4%	Pedestrian	17.6%
Bicycle	2.6%	Pedestrian w/ Bicycle	2.6%	Bicycle	0.0%
By Bus/Transit	18.3%			By Bus/Transit	11.8%
By Vehicle	70.0%			By Vehicle	68.6%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	2.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (88.6% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	59.4%	In-Vehicle	100.0%
		Vehicle Passengers	40.6%		

*Note: Average vehicle occupancy (AVO) was 1.68 for the Saturday survey period.*

### 7.3.6 Wait Time

Respondents were asked the amount of time they spent waiting before boarding the ferry. Figure 7-30 shows the frequency distribution of perceived wait time (in minutes) for 2006 and 2013. In 2013, 20 percent of weekday ferry passengers waited for more than 30 minutes, which was an increase from 2006 when 15 percent of weekday riders waited for more than 30 minutes. A similar trend was seen on Saturdays, with 11 percent of ferry passengers waiting for more than 30 minutes in 2013 compared with 2 percent in 2006.

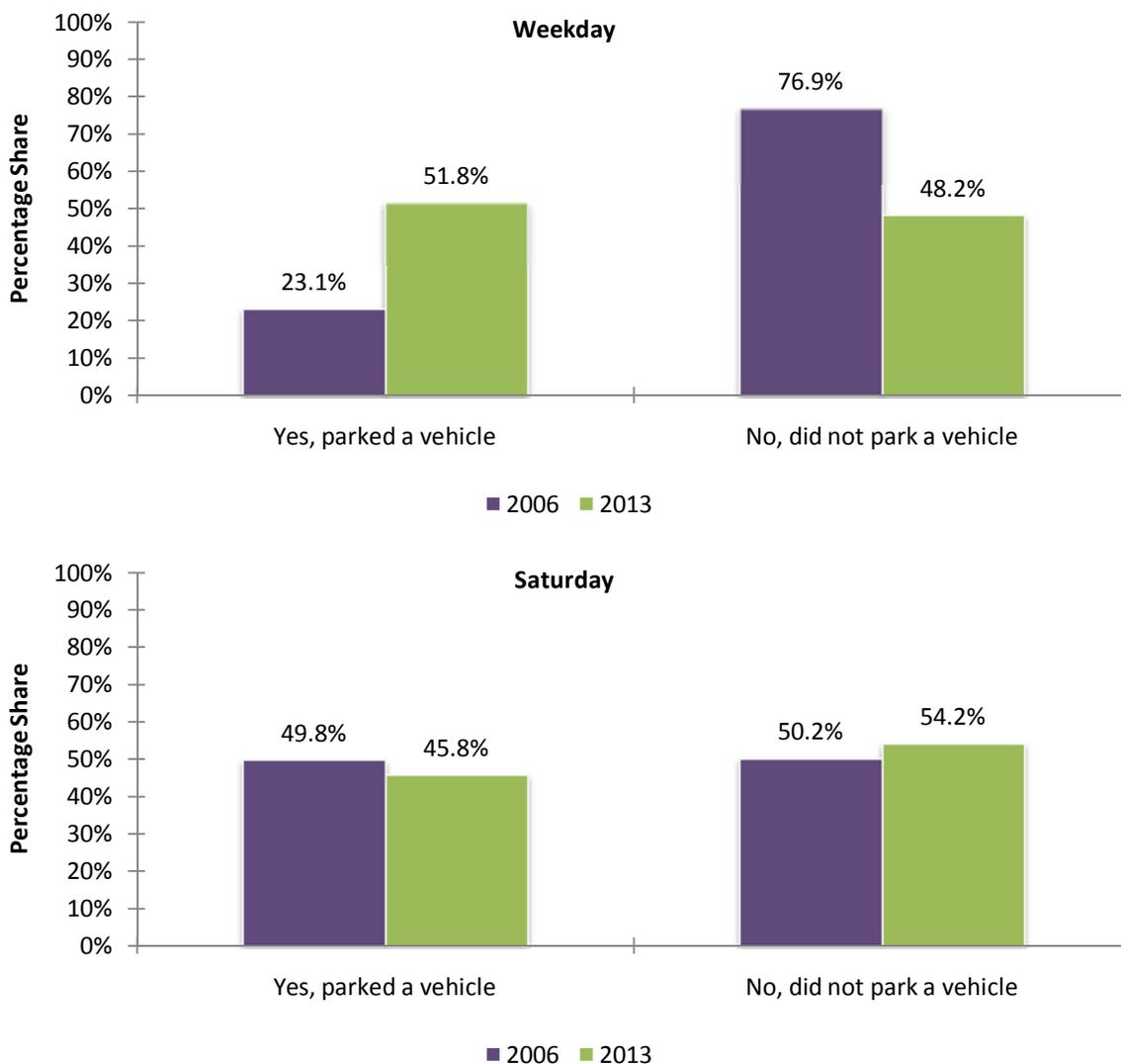
**Figure 7-30. Fauntleroy–Southworth trips by wait time, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.3.7 Parking

Figure 7-31 presents the percentage of riders who boarded by foot or bicycle who parked or did not park a vehicle at the terminal. About 52 percent of the weekday ferry passengers parked a vehicle in the 2013 survey, compared with only 23 percent in 2006. On Saturdays, those who parked a vehicle decreased slightly from 50 percent to 46 percent.

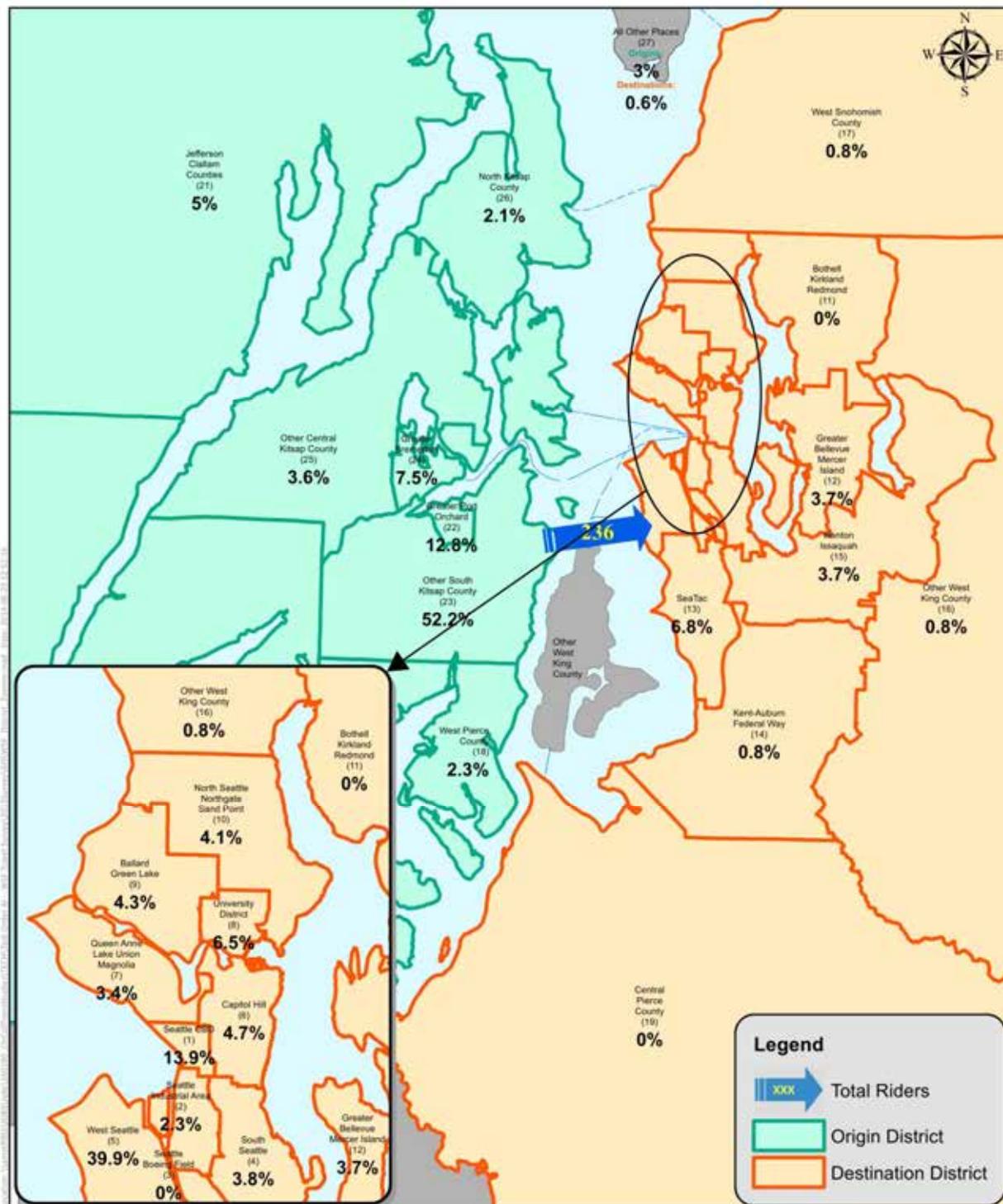
**Figure 7-31. Fauntleroy–Southworth non-motorized boardings that parked a vehicle at terminal, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.3.8 Weekday PM Peak-Period Travel Patterns—Eastbound

Figure 7-32 presents the origins and destinations of weekday PM peak-period eastbound trips by district. This information is presented in tabular format in Table 7-26. The major origins were South Kitsap County, Greater Port Orchard, and Mason County, while the major destinations were West Seattle and the Seattle CBD. Origin and destination locations by boarding mode are shown in Figure 7-33. Origin and destination locations were dispersed.

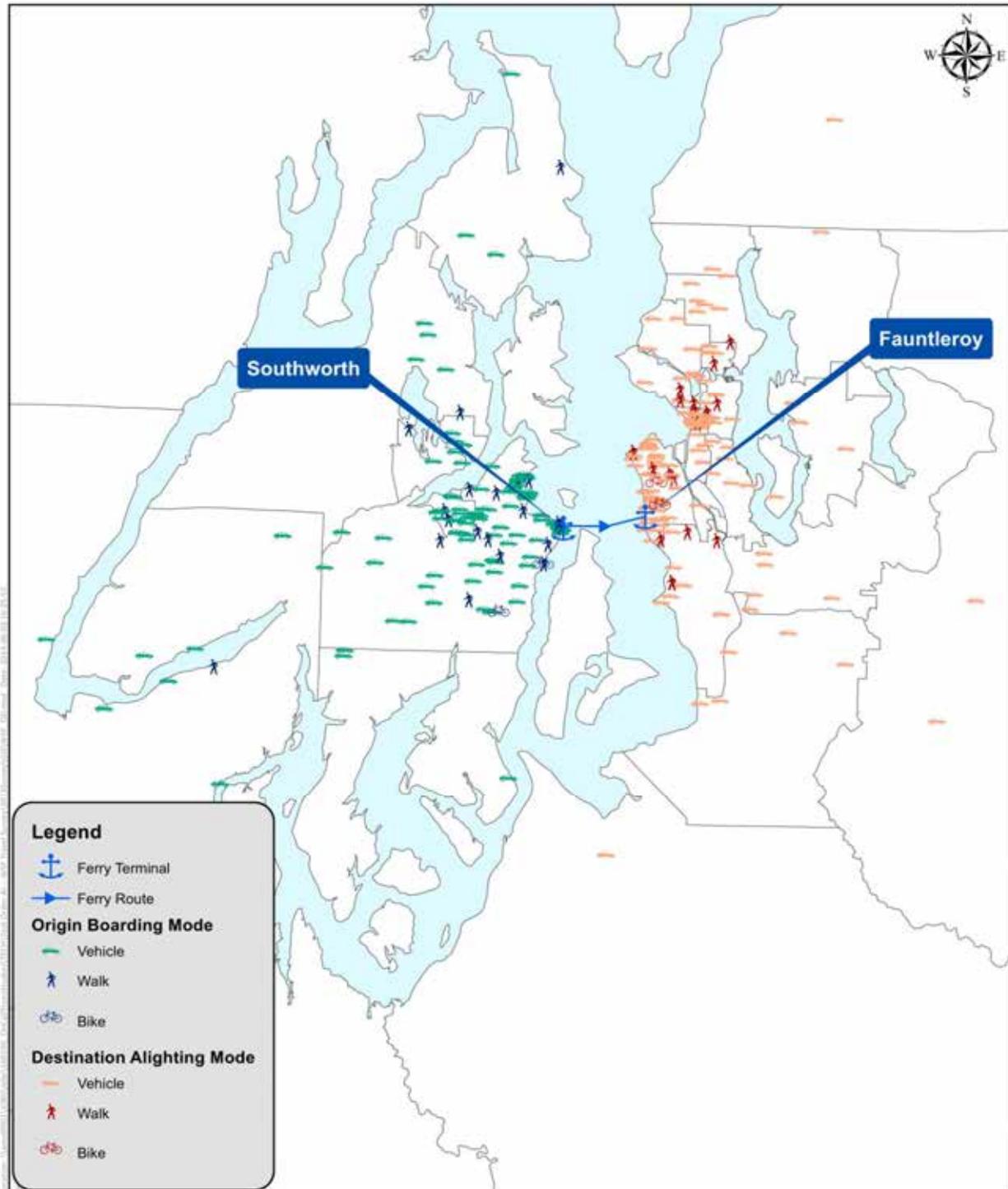
Figure 7-32. Fauntleroy–Southworth eastbound origin and destination districts, weekday PM peak period



**Table 7-26. Fauntleroy–Southworth eastbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►															Origin Total	Origin Percent Share	
		Seattle CBD	Seattle Industrial Area	S Seattle	W Seattle	Capitol Hill	Queen Anne-Lake Union / Magnolia	University District	Ballard-Green Lake	N Seattle / Ngate / Sand Point	Greater Bellevue / Mercer Island	SeaTac	Kent-Auburn / Federal Way	Renton / Issaquah	Other W King Co.	W Snohomish Co.			All Other Places_E
		1	2	4	5	6	7	8	9	10	12	13	14	15	16	17	27		
W Pierce Co.	18	2			4													5	2.3%
Mason Co.	20			5	2		2	14	2	1		1						27	11.5%
Jefferson/Clallam Counties	21				7							5						12	5.0%
Greater Port Orchard	22	4	2		11	4	1		4			2		2		2		30	12.8%
Other S Kitsap Co.	23	27	4	4	49	5		1	5	9	9	6	2	2			1	123	52.2%
Greater Bremerton	24				10	3	5											18	7.5%
Other Central Kitsap Co.	25				7							1						9	3.6%
N Kitsap Co.	26				5													5	2.1%
All Other Places_E	27													5	2			7	3.0%
Destination Total		33	5	9	94	11	8	15	10	10	9	16	2	9	2	2	1	236	100%
Destination Percent Share		13.9%	2.3%	3.8%	39.9%	4.7%	3.4%	6.5%	4.3%	4.1%	3.7%	6.8%	0.8%	3.7%	0.8%	0.8%	0.6%	100%	

Figure 7-33. Fauntleroy–Southworth eastbound origin and destination locations by boarding mode, Weekday 8-hour Survey Period



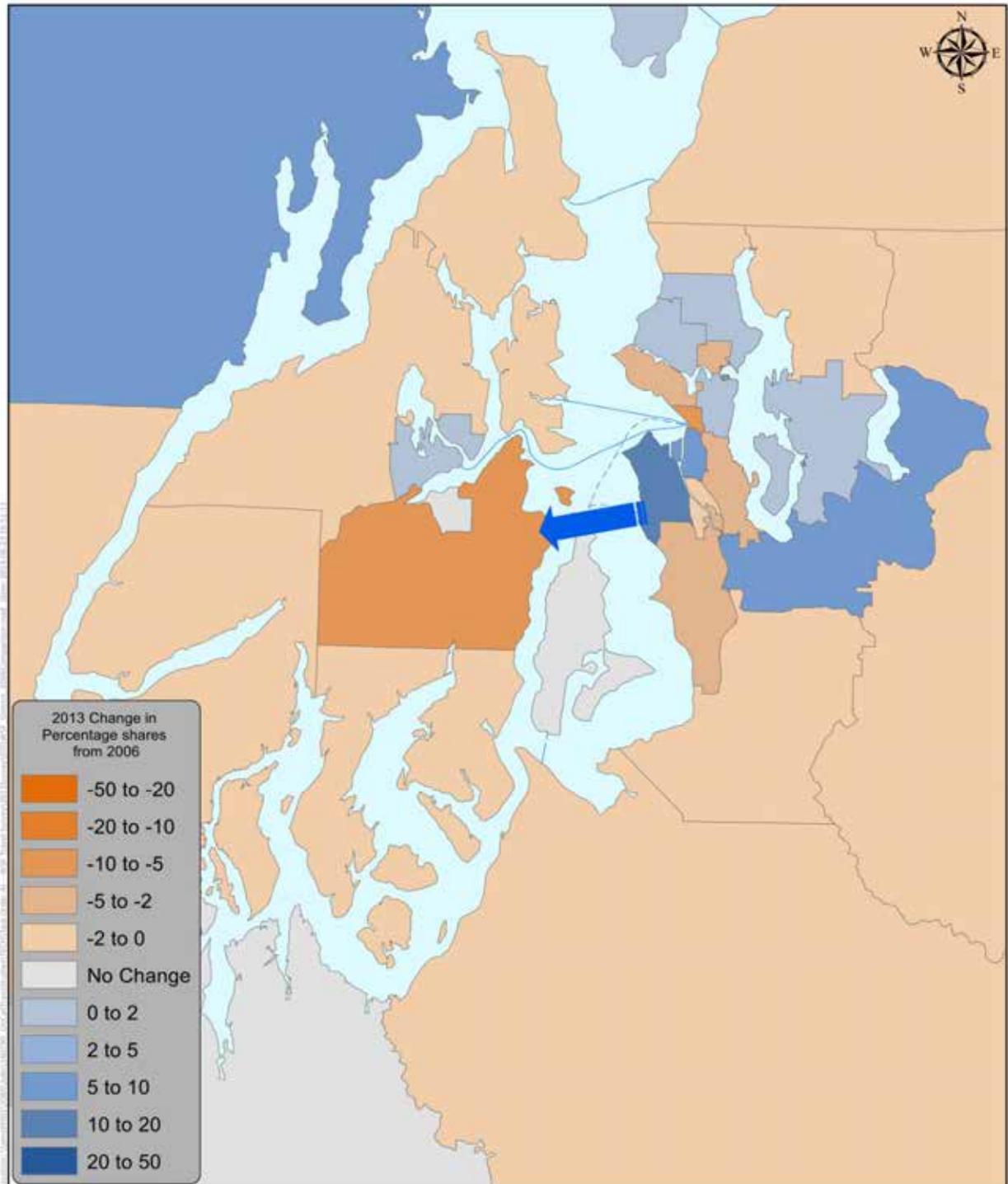
### 7.3.9 Weekday PM Peak-Period Travel Patterns—Westbound

Figure 7-34 presents the origins and destinations of weekday PM peak-period westbound trips by district. This information is presented in tabular format in Table 7-27. The major origins were the Seattle CBD, West Seattle, and the Seattle Industrial Area, while primary destinations were South Kitsap County and Jefferson/Clallam Counties. Figure 7-35 shows the change in travel patterns for westbound trips between 2006 and 2013. As shown in the figure, a larger percentage of trips originate in West Seattle and Renton/Issaquah compared with 2006, while a smaller percentage of trips end in South Kitsap County.

Origin and destination locations by boarding mode are shown in Figure 7-36. Walk boarding origins were concentrated in the Seattle CBD, while the walk-off destinations were fairly dispersed.



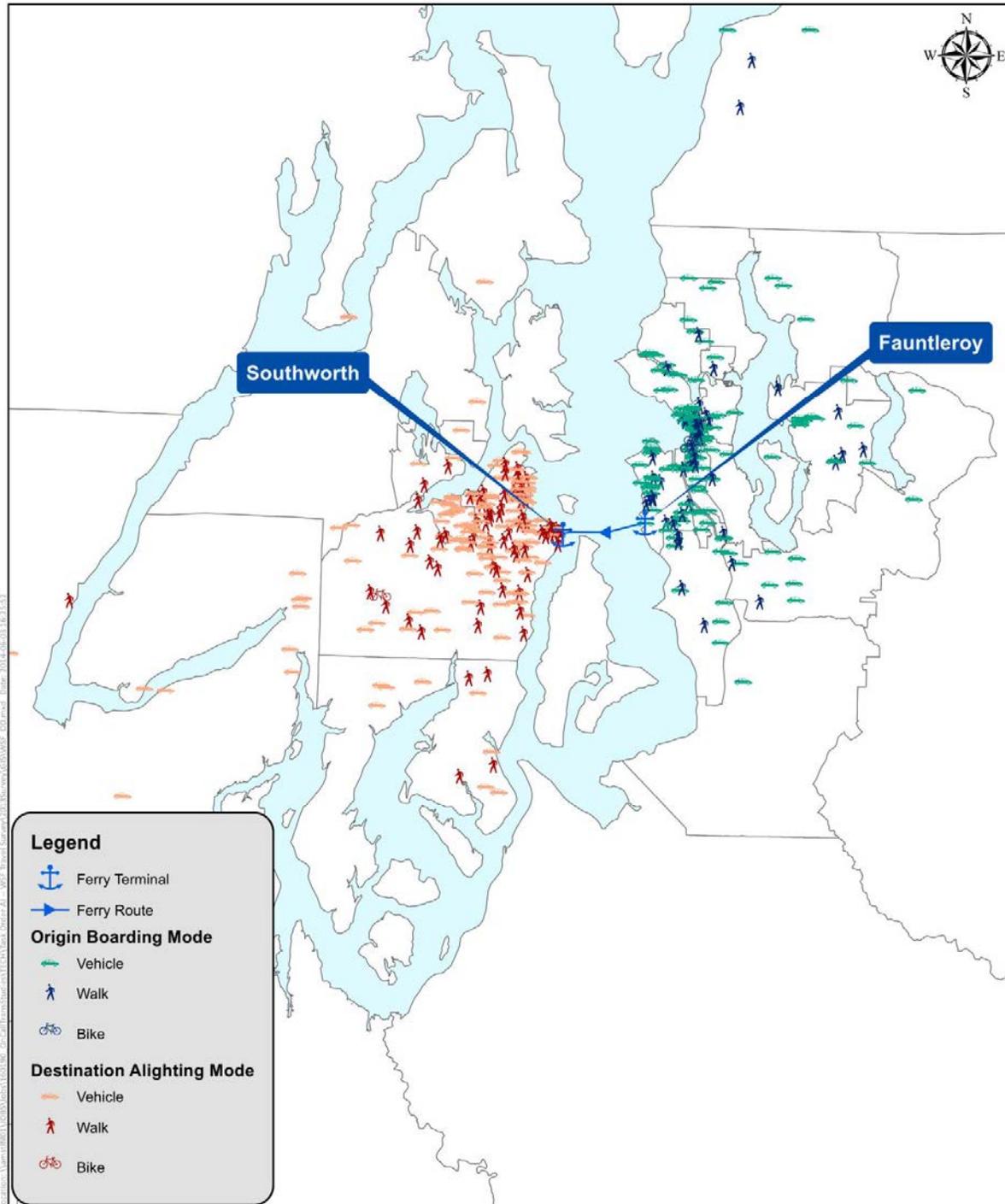
Figure 7-35. Fauntleroy–Southworth change in westbound travel patterns from 2006, weekday PM peak period



**Table 7-27. Fauntleroy–Southworth westbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ▶		W Pierce Co.	Mason Co.	Jefferson / Clallam Counties	Greater Port Orchard	Other S Kitsap Co.	Greater Bremerton	Other Central Kitsap Co.	Origin Total	Origin Percent Share
				18	20	21	22	23	24	25		
Seattle CBD	1	9	4					111	5		128	20.5%
Seattle Industrial Area	2		7				11	78			97	15.5%
Seattle Boeing Field	3							18			18	2.9%
S Seattle	4						4	10			14	2.2%
W Seattle	5	4		39	4			69	2		117	18.8%
Capitol Hill	6			17	8			6			31	5.0%
Queen Anne-Lake Union / Magnolia	7	4		8	4			18			34	5.5%
University District	8							2			2	0.3%
Ballard-Green Lake	9		12		4			7	4		27	4.2%
N Seattle / Ngate / Sand Point	10							7		5	12	1.9%
Bothell-Kirkland / Redmond	11		4					4			7	1.2%
Greater Bellevue / Mercer Island	12	2			4			35			41	6.6%
SeaTac	13		4					19			22	3.6%
Kent-Auburn / Federal Way	14							4			4	0.6%
Renton / Issaquah	15	7			8			43			59	9.4%
W Snohomish Co.	17							8			8	1.2%
All Other Places	27							4			4	0.6%
Destination Total		26	30	64	46			443	10	5	624	100.0%
Destination Percent Share		4.1%	4.8%	10.3%	7.3%			71.0%	1.6%	0.7%	100%	

**Figure 7-36. Fauntleroy–Southworth westbound origin and destination locations by boarding mode, Weekday 8-hour Survey Period**



**7.3.10 Saturday Travel Patterns—Eastbound**

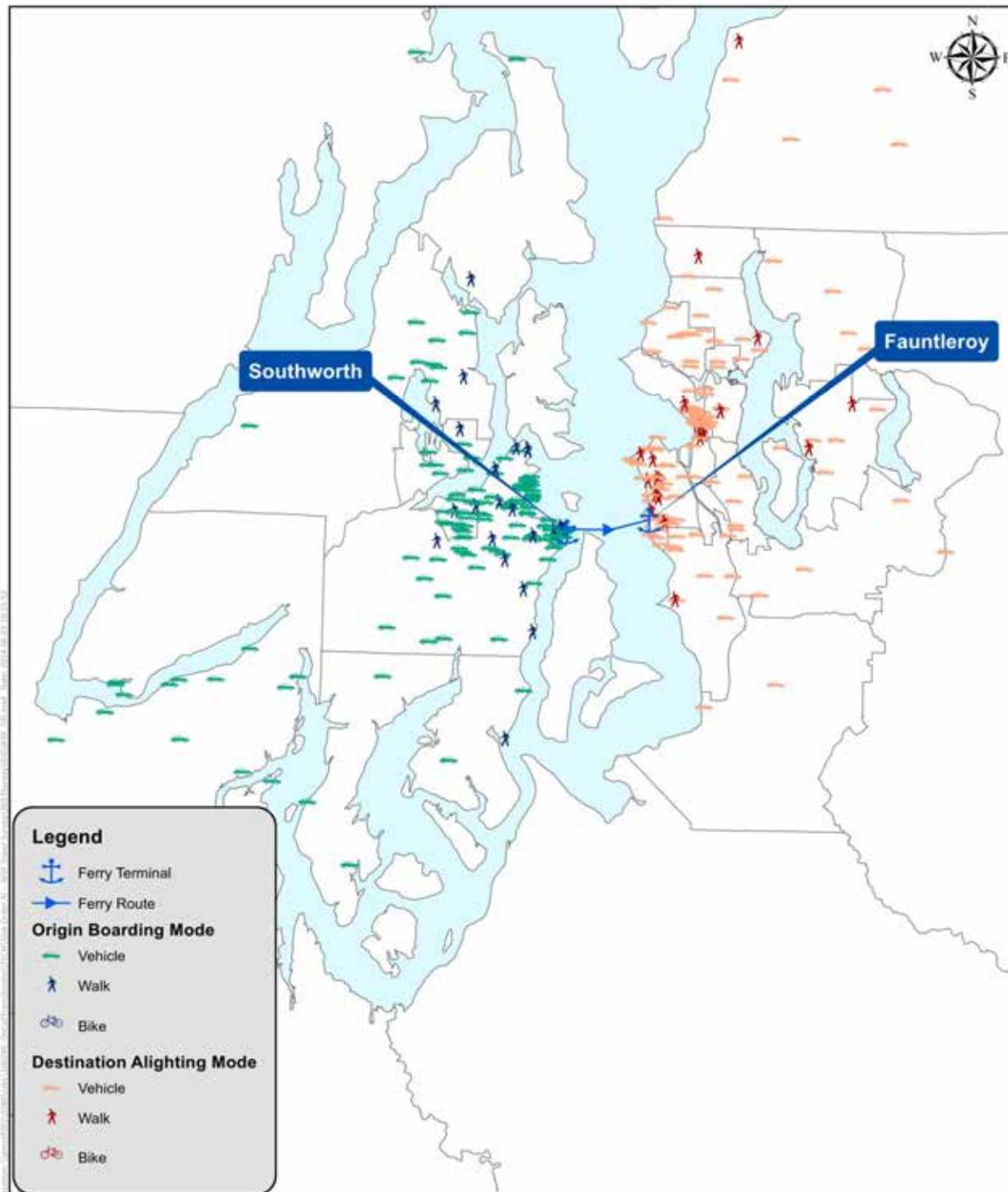
Figure 7-37 presents the origins and destinations of Saturday eastbound trips by district. This information is presented in tabular format in Table 7-28. The major origins were South Kitsap County,



**Table 7-28. Fauntleroy–Southworth eastbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ▶		Destination District																	Origin Total	Origin Percent Share
				Seattle CBD	Seattle Industrial Area	S Seattle	W Seattle	Capitol Hill	Queen Anne-Lake Union / Magnolia	University District	Ballard-Green Lake	N Seattle / Ngate / Sand Point	Bothell / Kirkland / Redmond	Greater Bellevue / Mercer Island	SeaTac	Kent-Auburn / Federal Way	Renton / Issaquah	Other W King Co.	W Snohomish Co.	All Other Places_E		
		1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	27				
W Pierce Co.	18				3		11	3						3	9				29	3.9%		
Mason Co.	20	11		9	21		3		3	3	11			3					65	8.7%		
Jefferson / Clallam Counties	21				6														6	0.8%		
Greater Port Orchard	22	12			12		6	3	3	3				6		3		6	55	7.3%		
Other S Kitsap Co.	23	97	25	11	76	20	26	11	48	11	6	23	28	6	12	12	48	20	480	64.0%		
Greater Bremerton	24	3			15				6	3				6	3				35	4.7%		
Other Central Kitsap Co.	25	11			37					8				3					60	8.0%		
N Kitsap Co.	26			6	6														12	1.5%		
All Other Places_E	27				8														8	1.1%		
Destination Total		135	25	26	184	20	46	17	60	29	18	38	46	9	12	18	48	20	750	100%		
Destination Percent Share		18.0%	3.4%	3.4%	24.6%	2.7%	6.1%	2.3%	8.0%	3.8%	2.3%	5.0%	6.2%	1.2%	1.6%	2.4%	6.3%	2.7%	100%			

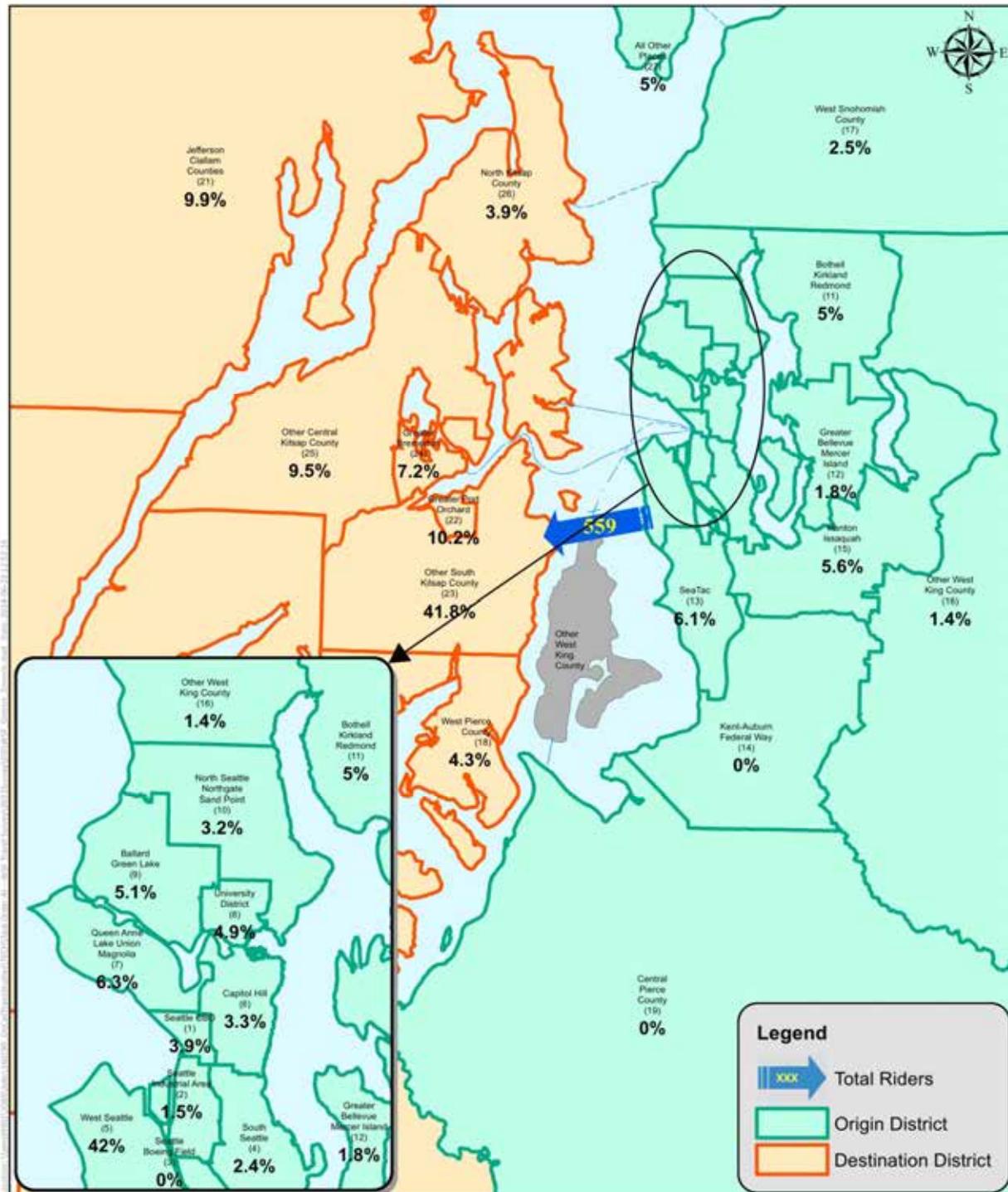
Figure 7-38. Fauntleroy–Southworth eastbound origin and destination locations by boarding mode, Saturday survey period



### 7.3.11 Saturday Travel Patterns—Westbound

Figure 7-39 presents the origins and destinations of Saturday westbound trips by district. This information is presented in tabular format in Table 7-29. The major origin with more than 40 percent of trips was West Seattle, while primary destinations were South Kitsap County, Mason County, Greater Port Orchard, and Central Kitsap County. Origin and destination locations by boarding mode are shown in Figure 7-40. Origin and destination locations were dispersed.

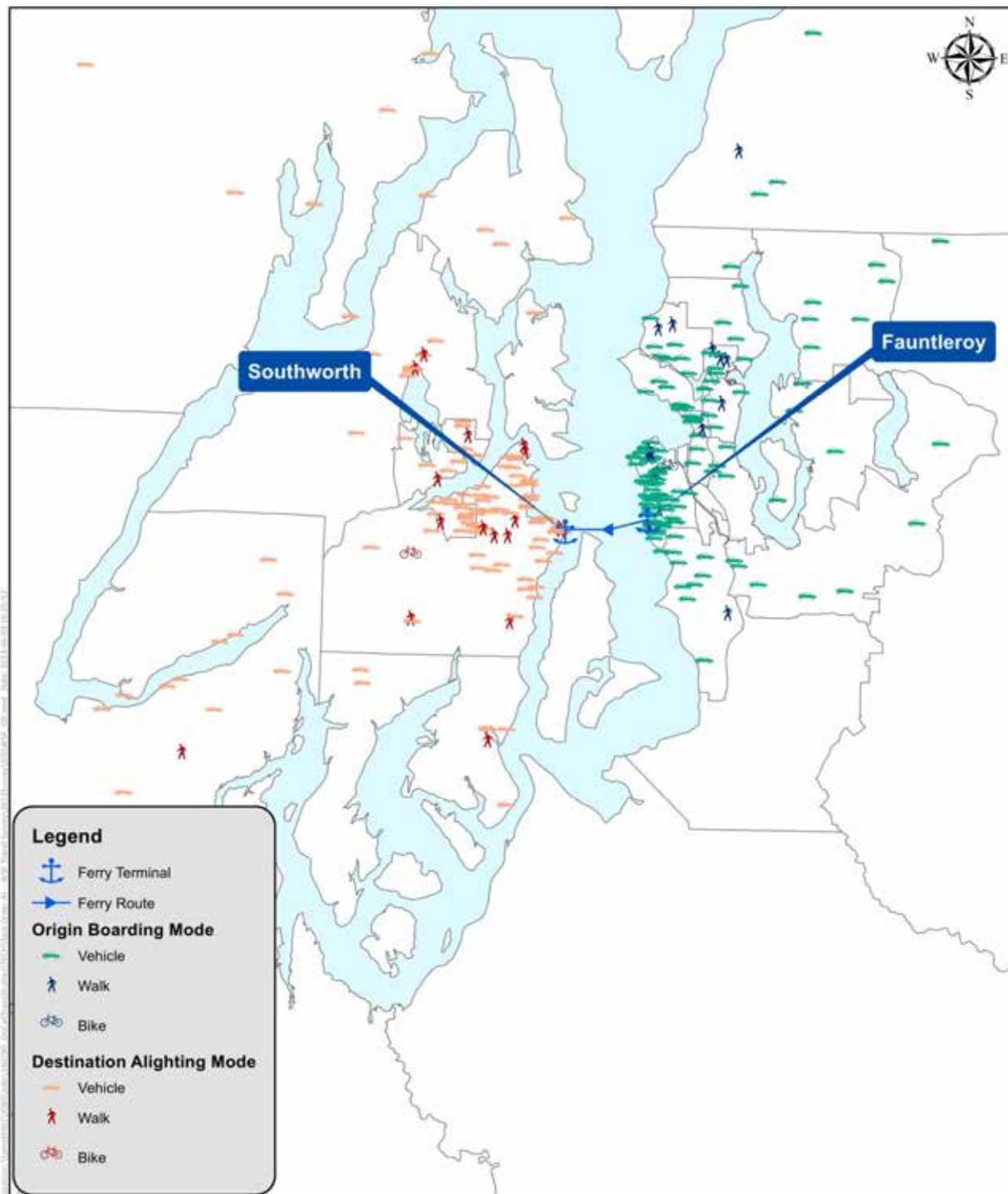
Figure 7-39. Fauntleroy–Southworth westbound origin and destination districts, Saturday survey period



**Table 7-29. Fauntleroy–Southworth westbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ►									Origin Total	Origin Percent Share	
			W Pierce Co.	Mason Co.	Jefferson / Clallam Counties	Greater Port Orchard	Other S Kitsap Co.	Greater Bremerton	Other Central Kitsap Co.	N Kitsap Co.			All Other Places_W
			18	20	21	22	23	24	25	26	28		
Seattle CBD	1		4			8	6				4	22	3.9%
Seattle Industrial Area	2						6		2			8	1.5%
S Seattle	4						11	2				13	2.4%
W Seattle	5		16	39	49	2	46	18	41	22		235	42.0%
Capitol Hill	6			2	2		14					18	3.3%
Queen Anne-Lake Union/Magnolia	7						35					35	6.3%
University District	8		4	2		12	10					28	4.9%
Ballard-Green Lake	9			6		4	18					28	5.1%
N Seattle / Ngate / Sand Point	10			4		4	10					18	3.2%
Bothell-Kirkland / Redmond	11			4		8	16					28	5.0%
Greater Bellevue / Mercer Island	12						10					10	1.8%
SeaTac	13			2			16	7	9			34	6.1%
Renton / Issaquah	15				4	8	12	8				31	5.6%
Other W King Co.	16			4		4						8	1.4%
W Snohomish Co.	17			6			8					14	2.5%
All Other Places	27					8	14	6				28	5.0%
Destination Total			24	70	56	57	234	40	53	22	4	559	100.0%
Destination Percent Share			4.3%	12.5%	9.9%	10.2%	41.8%	7.2%	9.5%	3.9%	0.7%	100%	

Figure 7-40. Fauntleroy–Southworth westbound origin and destination locations by boarding mode, Saturday survey period



## 7.4 Southworth–Vashon

### 7.4.1 Route Description

The Southworth–Vashon route connects Southworth on the Kitsap Peninsula and the northern tip of Vashon Island. It takes 10 minutes to ride this ferry route one way. The crossing is approximately 1.6 nautical miles. For 2013, the annual total ridership was about 80,000 passengers plus 100,000 vehicles and drivers for a total of 180,000 people, or about 500 riders per day. This compares to 500 riders per day in 2006 and 900 riders per day in 1999. The route is served by 22 sailings per day in each direction. The fare in October 2013 for a vehicle 14 to 22 feet including driver was \$17.25. The full fare for passengers was \$5.10.

This section provides some key trip-making characteristics of ferry riders on this route. In addition, the 2013 survey results are compared with key characteristics from the previous 2006 survey data to identify trends in trip-making on this route.

### 7.4.2 Trips by Purpose

As shown in Table 7-30, the most frequent weekday trip purpose is work/school with a slight decrease from 81 percent in 2006 to 78 percent in 2013. Recreation/shopping is the predominant trip purpose for Saturday trips. There was a significant difference between westbound (83 percent) and eastbound (17 percent) trips on weekdays; this is a big change from 2006 when they were well balanced. Saturday directional trips are distributed rather evenly.

**Table 7-30. Southworth–Vashon trips by purpose and direction, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Direction	Work/ School	Personal Business/ Other	Recreation/ Shopping	Total	All Purposes	
					2013	2006
<b>Weekday</b>						
Eastbound	39	14	23	75	16.7%	50.1%
Westbound	310	32	31	373	83.3%	49.9%
Total	348	46	54	448	100%	100%
2013 Distribution	77.8%	10.2%	12.0%	100%		
2006 Distribution	80.7%	10.1%	9.3%	100%		
<b>Saturday</b>						
Eastbound	40	32	69	141	57.6%	N/A
Westbound	40	25	40	104	42.4%	N/A
Total	80	57	108	245	100%	
2013 Distribution	32.5%	23.3%	44.2%	100%		
2006 Distribution	N/A	N/A	N/A			

### 7.4.3 Frequency of Travel

Table 7-31 shows the frequency of travel for weekdays and Saturdays by trip purpose for 2006 and 2013. The highest percentage category for weekday riders was those who use the ferry fairly frequently (seven to eight times per week), at 29 percent. This represents a shift from the category of nine to ten times per week, which had the highest percentage in 2006.

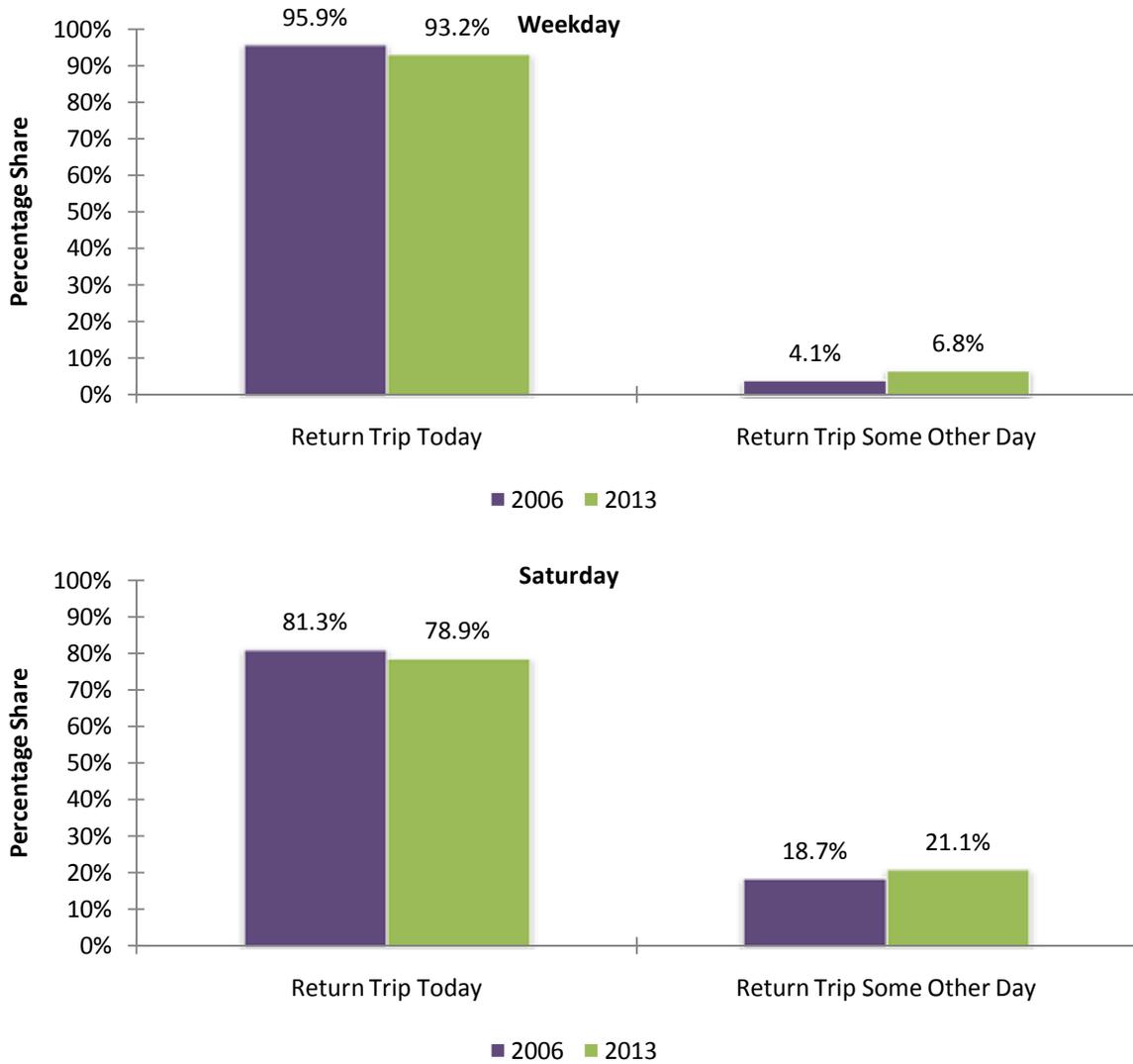
**Table 7-31. Southworth–Vashon one-way trips by purpose and frequency, weekday 8-hour and Saturday survey periods (2006 and 2013)**

One-Way Trips	Work/ School	Personal Business/ Other	Recreation / Shopping	Total	All Purposes		Work/School	
					2013	2006	2013	2006
<b>Weekday</b>								
1	0	0	23	23	5.4%	0.2%	0.0%	0.3%
2	8	0	24	31	7.4%	0.5%	2.3%	0.6%
3 to 4	17	25	4	45	10.7%	11.9%	5.2%	1.7%
5 to 6	48	4	0	52	12.3%	28.8%	14.8%	23.3%
7 to 8	120	2	0	122	28.9%	4.3%	37.2%	5.5%
9 to 10	64	15	4	83	19.7%	36.5%	19.8%	46.3%
11+	67	0	0	67	15.8%	17.8%	20.7%	22.4%
Total	322	46	54	422	100%	100%	100%	100%
2013 Distribution	76.4%	10.9%	12.8%	100%				
2006 Distribution	78.4%	11.3%	10.4%	100%				
<b>Saturday</b>								
1	22	6	37	65	30.2%	N/A		
2	0	4	25	29	13.5%	N/A		
3 to 4	6	26	12	44	20.4%	N/A		
5 to 6	23	4	18	45	20.9%	N/A		
7 to 8	10	0	0	10	4.6%	N/A		
9 to 10	6	2	6	14	6.6%	N/A		
11+	2	6	0	8	3.8%	N/A		
Total	70	47	98	215	100%			
2013 Distribution	32.4%	21.9%	45.7%	100%				
2006 Distribution	N/A	N/A	N/A					

### 7.4.4 Round-Trip Patterns

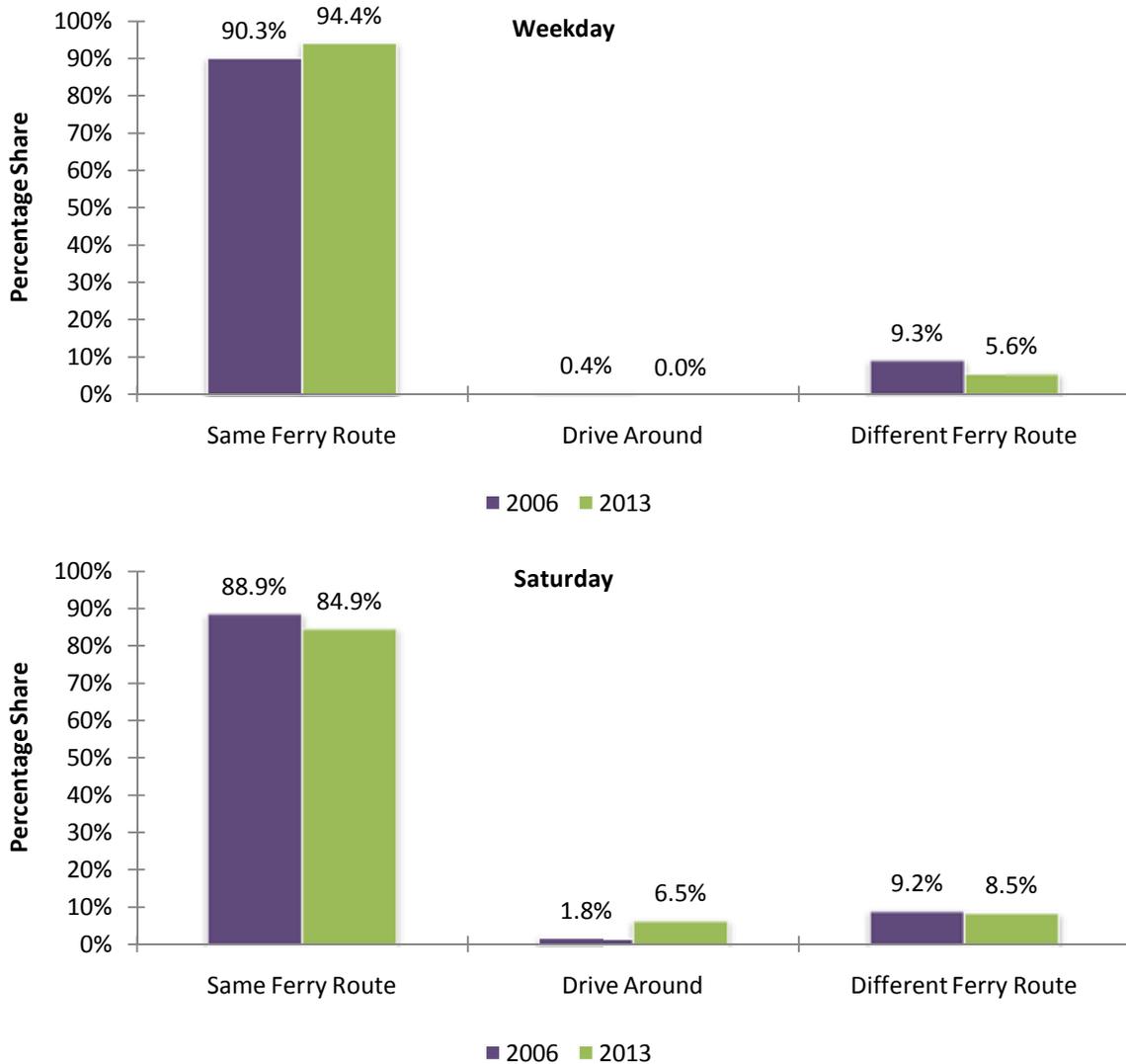
As shown in Figure 7-41, the percentage of weekday ferry travelers making a round-trip on the same day versus some other day was similar to 2006, with a slight decrease from 96 percent in 2006 to 93 percent in 2013. A similar trend on Saturdays shows a slight decrease in same-day round-trips from 81 percent in 2006 to 79 percent in 2013.

**Figure 7-41. Southworth–Vashon round-trip patterns by day, weekday 8-hour and Saturday survey periods (2006 and 2013)**



As shown in Figure 7-42, the vast majority (over 94 percent) of round-trip ferry travelers used the same route for both legs of the trip. This situation was true for both weekday and Saturday travelers, although there are inverse trends from 2006 to 2013, with an increase on the weekday and a decrease on Saturdays.

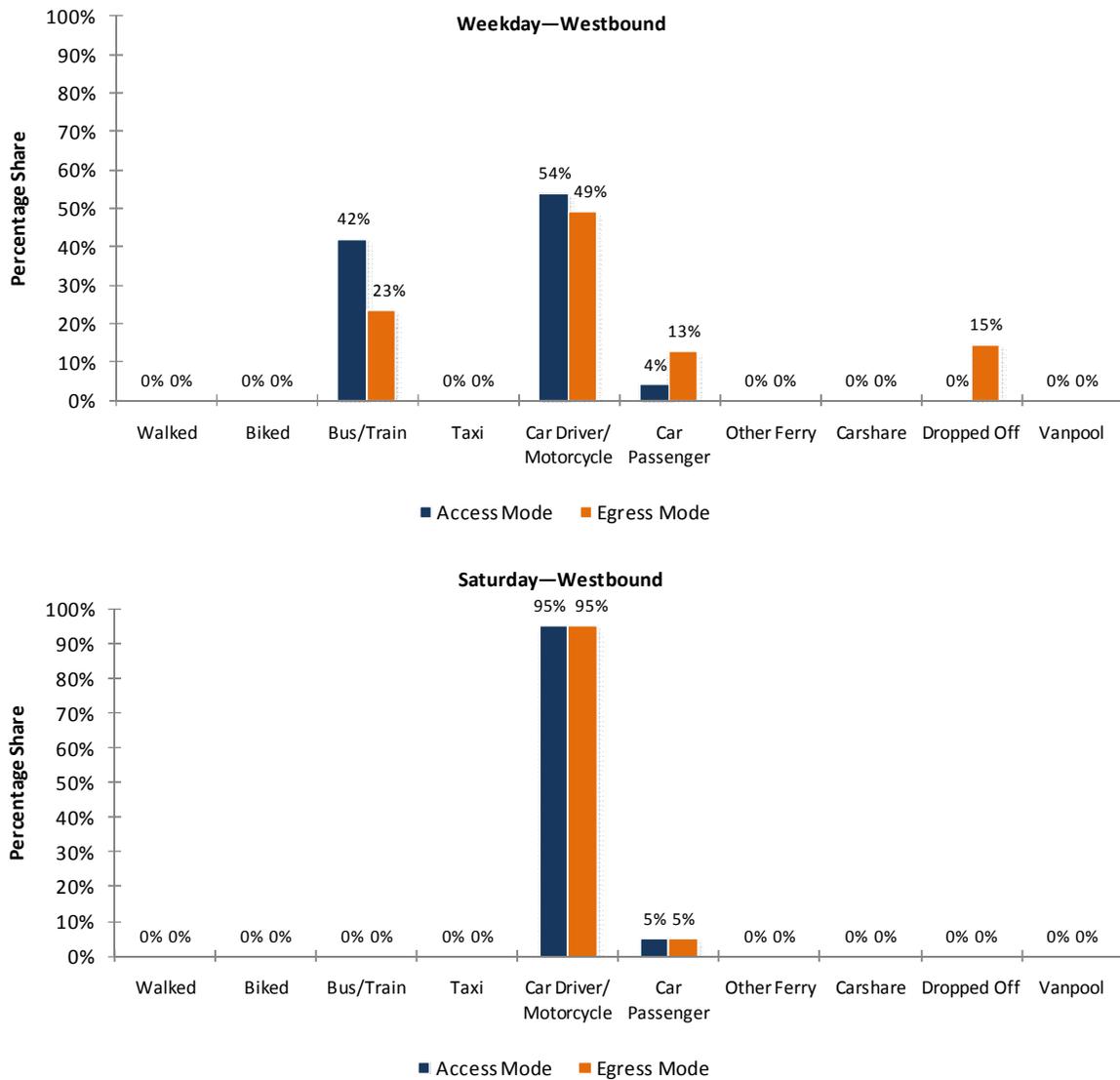
**Figure 7-42. Southworth–Vashon round-trip patterns by route, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.4.5 Access, Egress, and Boarding Modes

Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the primary mode of access and egress for the majority of westbound travelers, as shown in Figure 7-43. On weekdays, 54 percent of ferry travelers drove to the ferry, and an additional 4 percent were passengers in a private vehicle. However, in contrast with many of the other routes in the system, a relatively high percentage of riders also used transit to access and egress the terminal (42 percent and 23 percent, respectively). On Saturdays, an extremely high percentage of riders (95 percent) drove a car to access and egress the terminal

**Figure 7-43. Southworth–Vashon westbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**



Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant eastbound mode of access and egress in 2013, as shown in Figure 7-44. On weekdays, 81 percent of ferry travelers drove to the ferry, and an additional 8 percent were passengers in a private vehicle. Leaving the ferry, 85 percent were drivers while 8 percent were passengers. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays. Walk access on Saturdays was higher than the weekday walk access, at 16 percent.

**Figure 7-44. Southworth–Vashon eastbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**

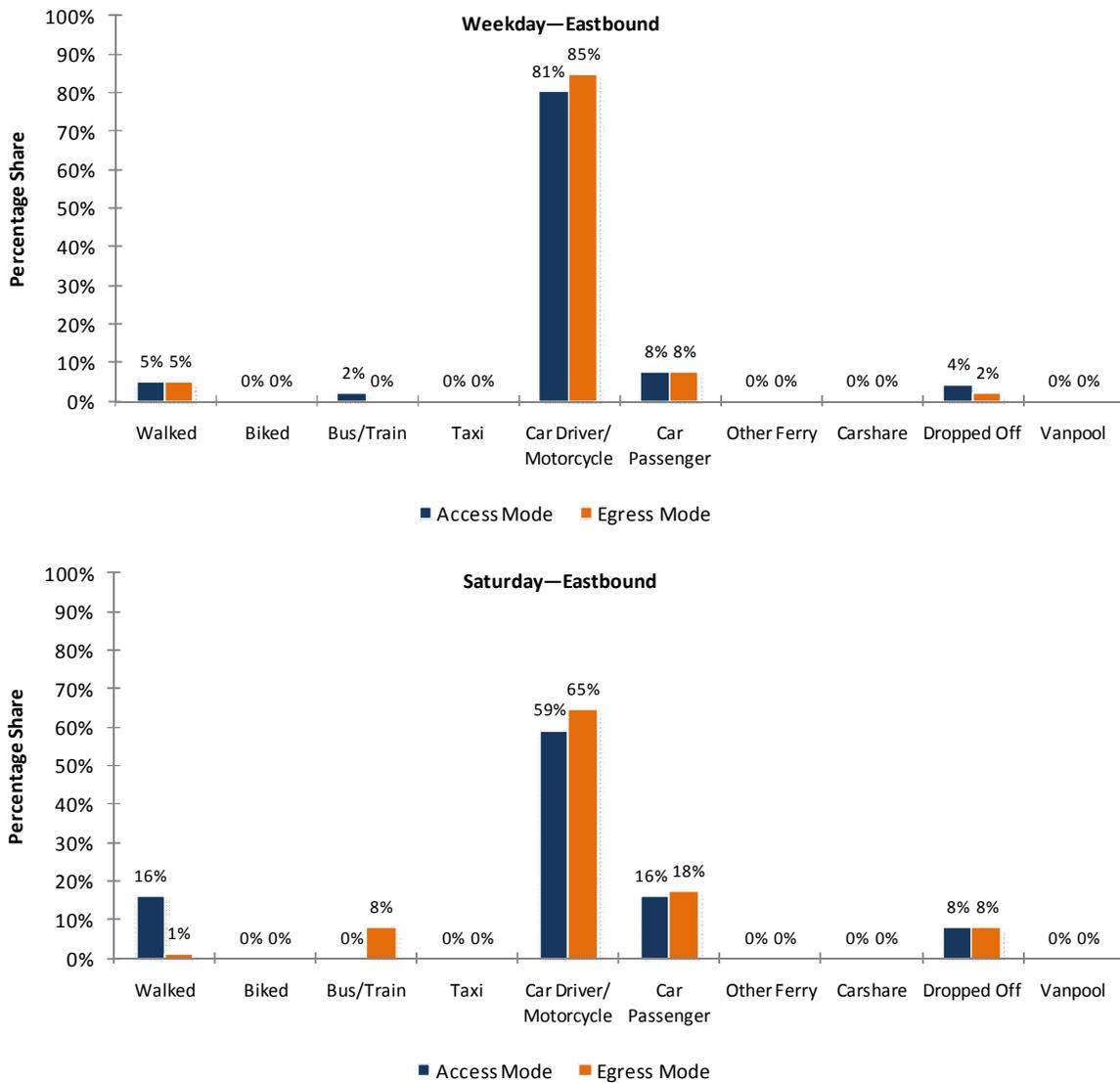


Table 7-32 shows the access mode and boarding method for weekdays and Saturdays in 2006 and 2013. As shown in the table, most travelers boarded the ferry by driving on. In 2013, this method accounted for 62 percent and 81 percent of boardings on weekdays and Saturdays, respectively. On weekdays, the walk-on share of boardings increased from 21 percent to 38 percent between 2006 and 2013.

**Table 7-32. Southworth–Vashon access mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Access Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	4	0	4	0.9%	1.2%
Biked	0	0	0	0	0.0%	0.0%
Bus/Train	0	159	0	159	35.3%	0.0%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	257	6	0	263	58.4%	81.4%
Car Passenger	21	0	0	21	4.7%	17.3%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	3	0	3	0.7%	
Vanpool	0	0	0	0	0.0%	
Total	278	172	0	450	100%	100%
2013 Distribution	61.8%	38.2%	0.0%	100%		
2006 Distribution	77.7%	20.6%	1.7%	100%		
<b>Saturday</b>						
Walked	0	23	0	23	9.4%	0.0%
Biked	0	0	0	0	0.0%	0.0%
Bus/Train	0	0	0	0	0.0%	0.0%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	171	12	0	183	74.5%	59.5%
Car Passenger	28	0	0	28	11.4%	40.5%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	12	0	12	4.7%	
Vanpool	0	0	0	0	0.0%	
Total	199	46	0	245	100%	100%
2013 Distribution	81.2%	18.8%	0.0%	100%		
2006 Distribution	79.5%	20.5%	0.0%	100%		

Table 7-33 shows the egress mode and boarding method for weekdays and Saturdays in 2006 and 2013. Egress modes are similar to the access modes.

**Table 7-33. Southworth–Vashon egress mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Egress Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	4	0	4	0.9%	4.6%
Biked	0	0	0	0	0.0%	1.8%
Bus/Train	0	87	0	87	19.4%	4.6%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	242	7	0	249	55.4%	73.5%
Car Passenger	36	17	0	54	11.9%	15.5%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	56	0	56	12.4%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>278</b>	<b>172</b>	<b>0</b>	<b>450</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	61.8%	38.2%	0.0%	100%		
2006 Distribution	78.3%	19.9%	1.8%	100%		
<b>Saturday</b>						
Walked	2	0	0	2	0.8%	5.7%
Biked	0	0	0	0	0.0%	0.0%
Bus/Train	0	12	0	12	4.7%	0.0%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	167	23	0	190	77.6%	64.9%
Car Passenger	30	0	0	30	12.2%	29.4%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	12	0	12	4.7%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>199</b>	<b>46</b>	<b>0</b>	<b>245</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	81.2%	18.8%	0.0%	100%		
2006 Distribution	78.6%	21.4%	0.0%	100%		

Table 7-34, Table 7-35, and Table 7-36 show access and egress modes used across the entire ferry trip for the weekday PM peak period, the weekday non-PM peak period, and Saturdays, respectively. For weekday PM peak period walk-on boardings, the percentage of travelers arriving at the origin terminal by bus/transit was much higher than the percentage of travelers leaving the destination terminal by bus/transit.

**Table 7-34. Southworth–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, weekday PM peak period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (40.2% of total boardings)					
Pedestrian	2.4%	Pedestrian	100.0%	Pedestrian	2.4%
Bicycle	0.0%	Pedestrian w/ Bicycle	0.0%	Bicycle	0.0%
By Bus/Transit	95.2%			By Bus/Transit	52.9%
By Vehicle	2.4%			By Vehicle	44.7%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (59.8% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	92.2%	In-Vehicle	100.0%
		Vehicle Passengers	7.8%		

Note: Average vehicle occupancy (AVO) was 1.08 for the weekday PM peak period.

**Table 7-35. Southworth–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, Weekday Non-PM Peak Period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (17.5% of total boardings)					
Pedestrian	0.0%	Pedestrian	100.0%	Pedestrian	0.0%
Bicycle	0.0%	Pedestrian w/ Bicycle	0.0%	Bicycle	0.0%
By Bus/Transit	23.8%			By Bus/Transit	0.0%
By Vehicle	76.2%			By Vehicle	100.0%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (82.5% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	93.9%	In-Vehicle	100.0%
		Vehicle Passengers	6.1%		

Note: Average vehicle occupancy (AVO) was 1.07 for the weekday non-PM peak period.

**Table 7-36. Southworth–Vashon trips by access mode to ferry—boarding method—egress mode from ferry, Saturday survey period (2013)**

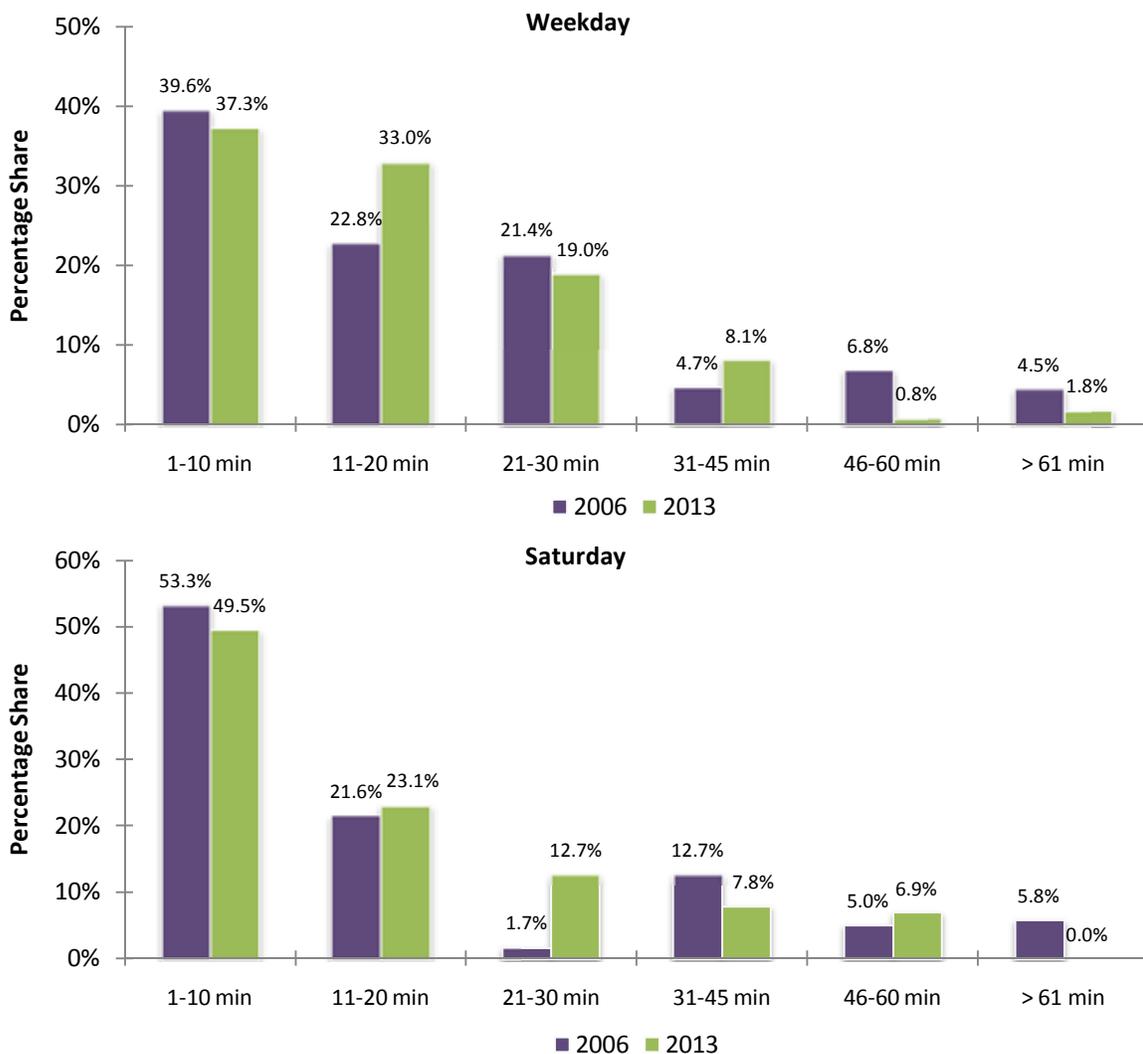
Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
<b>Walk-On Boardings (18.8% of total boardings)</b>					
Pedestrian	50.0%	Pedestrian	100.0%	Pedestrian	0.0%
Bicycle	0.0%	Pedestrian w/ Bicycle	0.0%	Bicycle	0.0%
By Bus/Transit	0.0%			By Bus/Transit	25.0%
By Vehicle	50.0%			By Vehicle	75.0%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
<b>In-Vehicle Boardings (81.2% of total boardings)</b>					
In-Vehicle	100.0%	Vehicle Drivers	85.9%	In-Vehicle	100.0%
		Vehicle Passengers	14.1%		

*Note: Average vehicle occupancy (AVO) was 1.16 for the Saturday survey period.*

### 7.4.6 Wait Time

Respondents were asked the amount of time they spent waiting before boarding the ferry. Figure 7-45 shows the frequency distribution of perceived wait time (in minutes) for 2006 and 2013. In 2013, 11 percent of weekday ferry passengers waited for more than 30 minutes, which was a decrease from 2006, when 16 percent of weekday riders waited for more than 30 minutes. A similar trend was seen on Saturdays, with 23 and 15 percent of ferry passengers waiting for more than 30 minutes in 2006 and 2013, respectively.

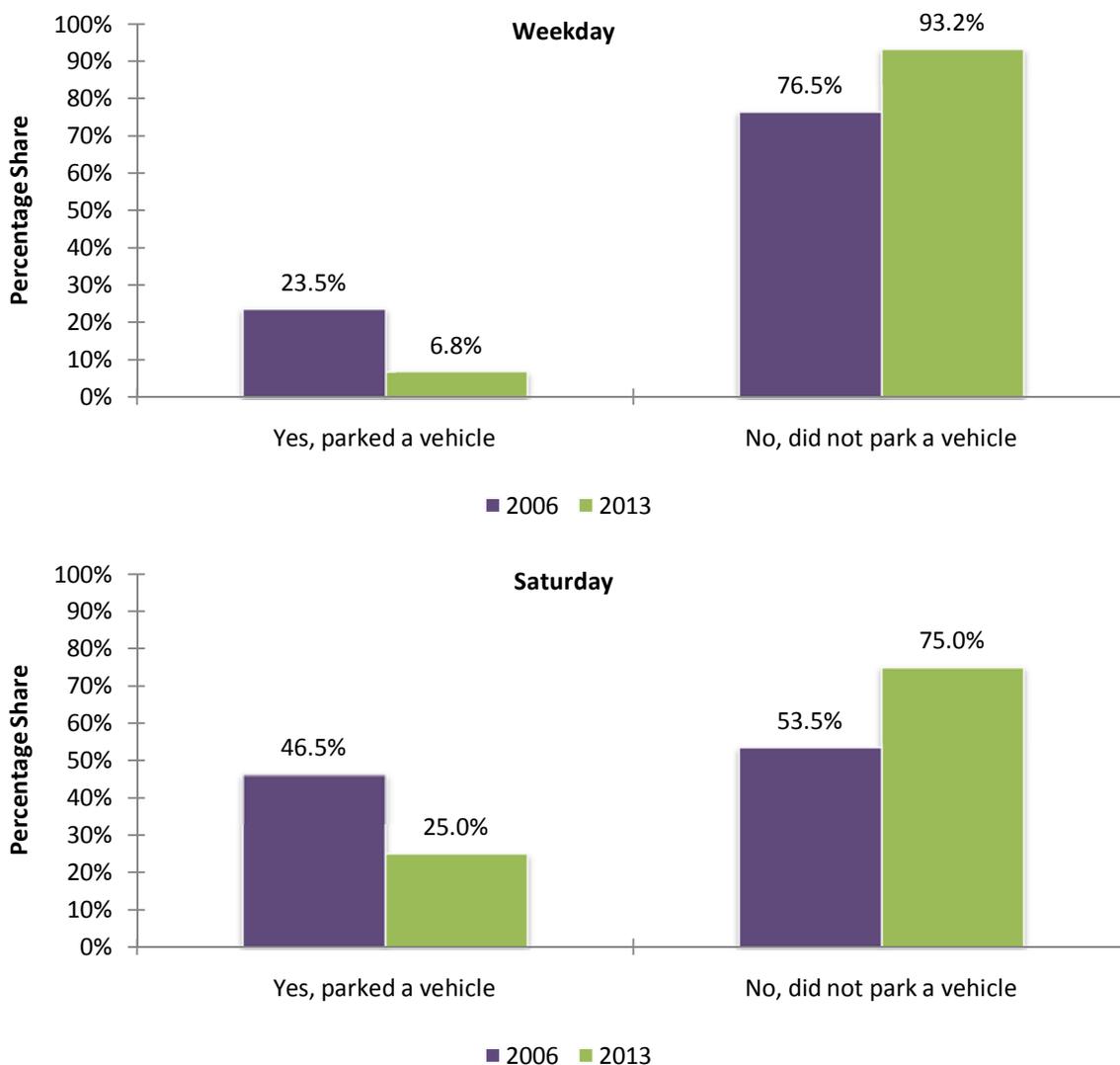
**Figure 7-45. Southworth–Vashon trips by wait time, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.4.7 Parking

Figure 7-46 presents the percentage of riders who boarded by foot or bicycle who parked or did not park a vehicle at the terminal. Only 7 percent of the weekday ferry passengers parked a vehicle in the 2013 survey, compared with about 24 percent in 2006. On Saturdays, those who parked a vehicle decreased from 46 percent to 25 percent from 2006 to 2013.

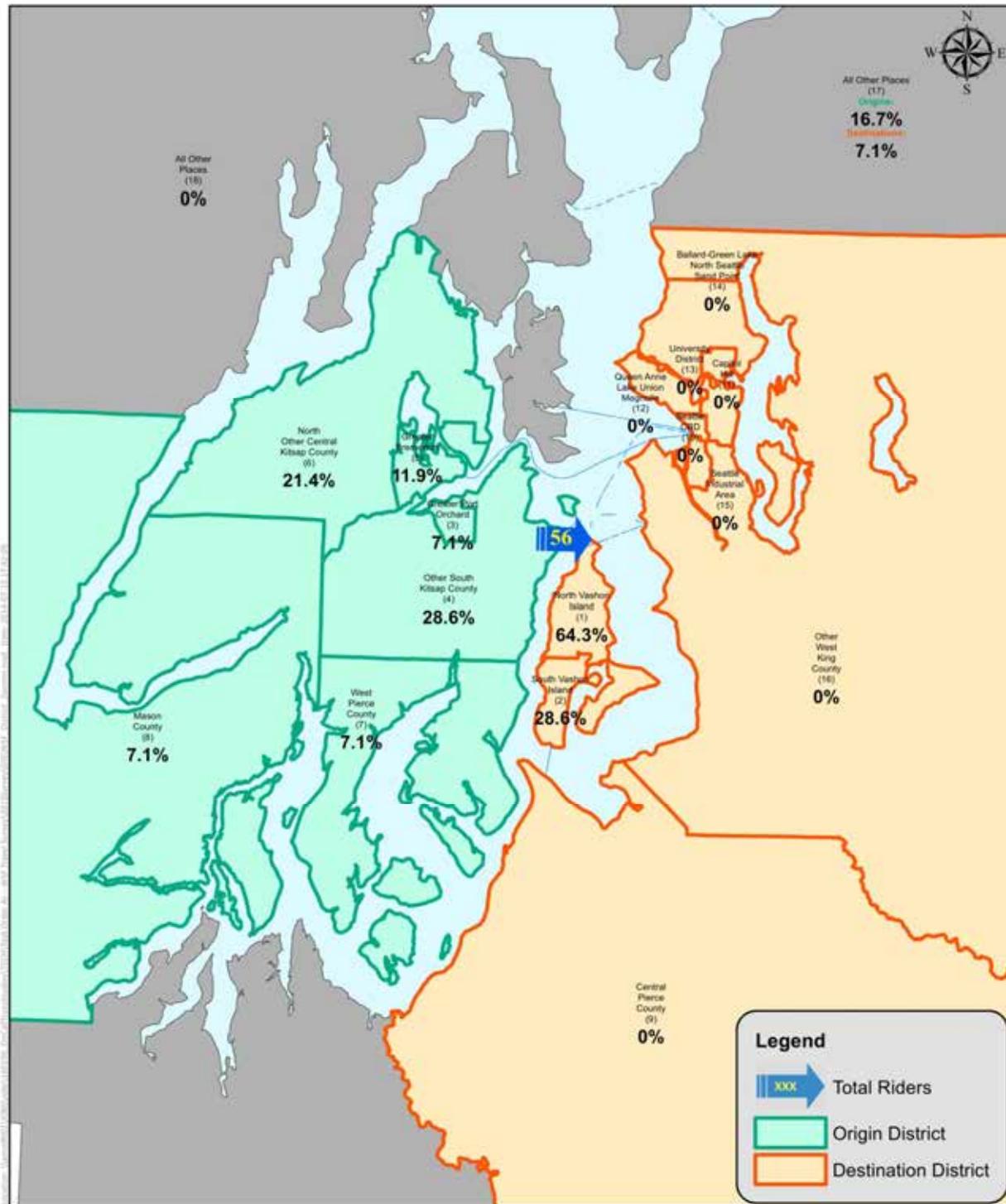
**Figure 7-46. Southworth–Vashon non-motorized boardings that parked a vehicle at terminal, weekday 8-hour and Saturday survey periods (2006 and 2013)**



#### 7.4.8 Weekday PM Peak-Period Travel Patterns—Eastbound

Figure 7-47 presents the origins and destinations of weekday PM peak-period eastbound trips by district. This information is presented in tabular format in Table 7-37. The major origins were North, Central, and South Kitsap County and Greater Bremerton, while the majority of destinations were in North Vashon Island. Origin and destination locations by boarding mode are shown in Figure 7-48. Origin and destination locations were dispersed.

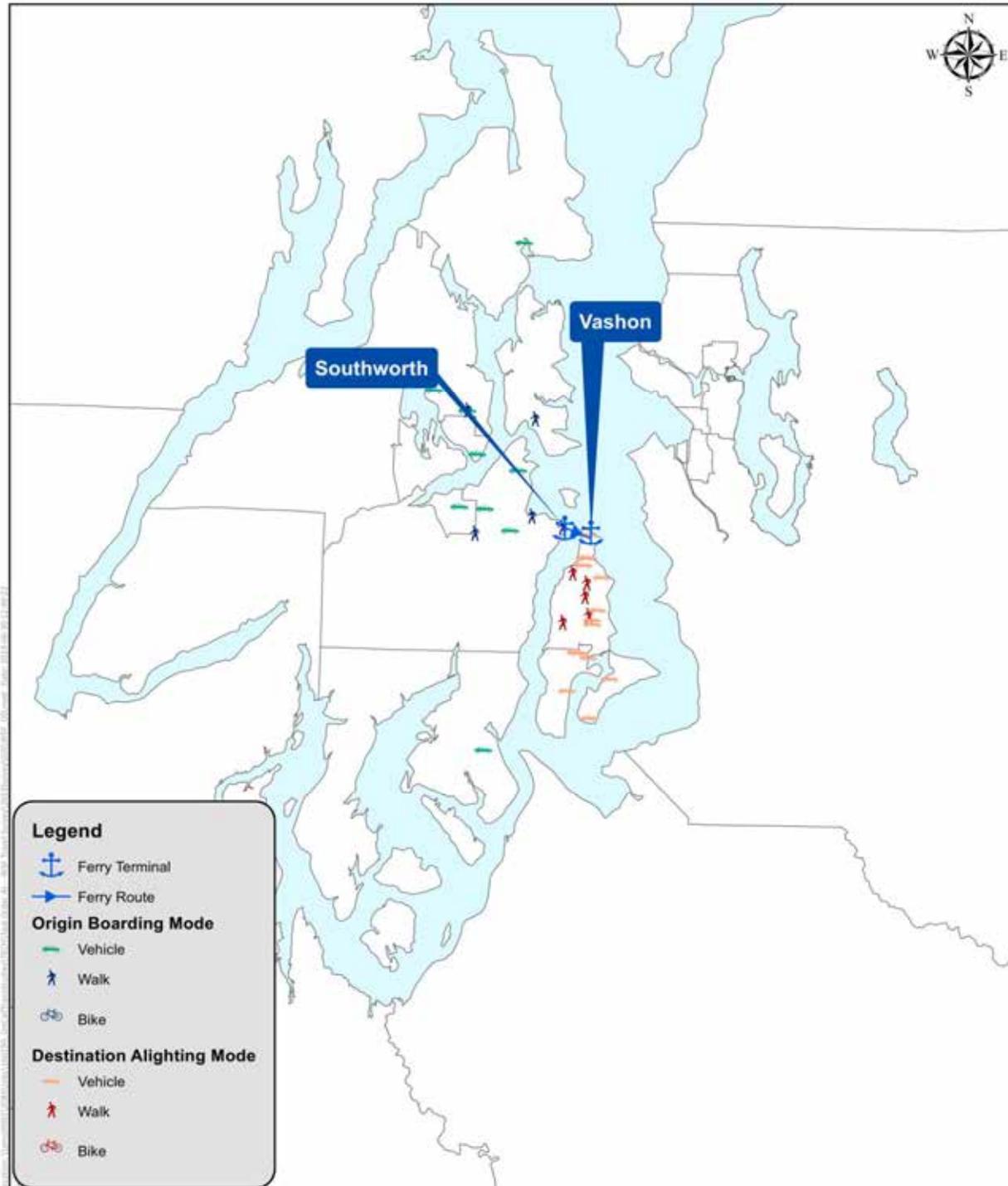
Figure 7-47. Southworth–Vashon eastbound origin and destination districts, weekday PM peak period



**Table 7-37. Southworth–Vashon eastbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►			Origin Total	Origin Percent Share
		N Vashon Island 1	S Vashon Island 2	All Other Places 17		
Greater Port Orchard	3		4		4	7.1%
Other S Kitsap County	4	12	4		16	28.6%
Greater Bremerton	5	7			7	11.9%
N / Other Central Kitsap Co.	6	8	4		12	21.4%
West Pierce Co.	7	4			4	7.1%
Mason Co.	8			4	4	7.1%
All Other Places	17	5	4		9	16.7%
Destination Total		36	16	4	56	100%
Destination Percent Share		64.3%	28.6%	7.1%	100%	

Figure 7-48. Southworth–Vashon eastbound origin and destination locations by boarding mode, Weekday 8-hour Survey Period



#### 7.4.9 Weekday PM Peak-Period Travel Patterns—Westbound

Figure 7-49 presents the origins and destinations of weekday PM peak-period westbound trips by district. This information is presented in tabular format in Table 7-38. The majority of origins were in North Vashon Island, while the major destinations were South Kitsap County and Greater Bremerton. Figure 7-50 shows the change in travel patterns for westbound trips between 2006 and 2013. As shown in the figure, a larger percentage of trips originated in North Vashon Island compared with 2006.

Origin and destination locations by boarding mode are shown in Figure 7-51. Origin and destination locations were dispersed.

Figure 7-49. Southworth–Vashon westbound origin and destination districts, weekday PM peak period

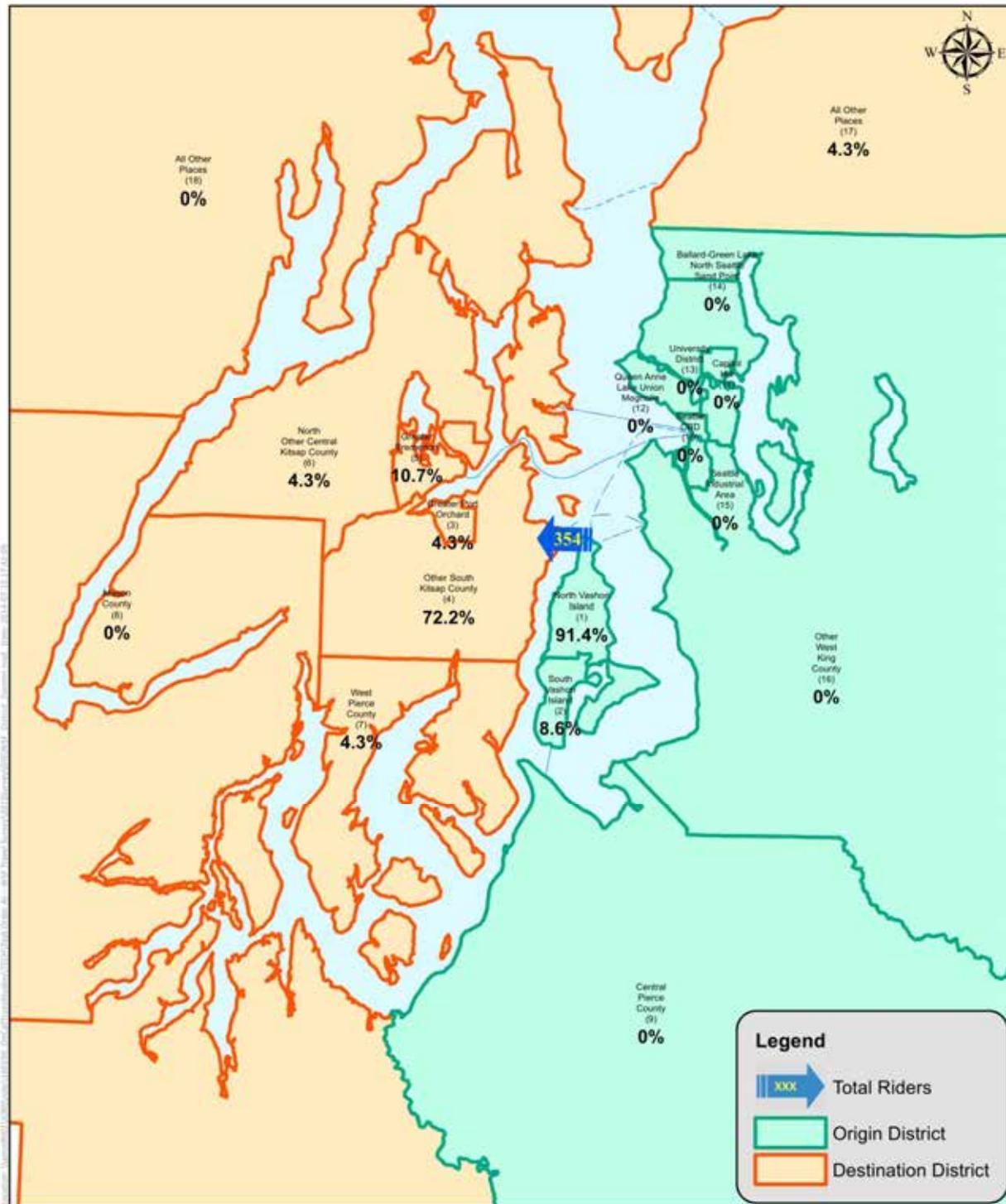
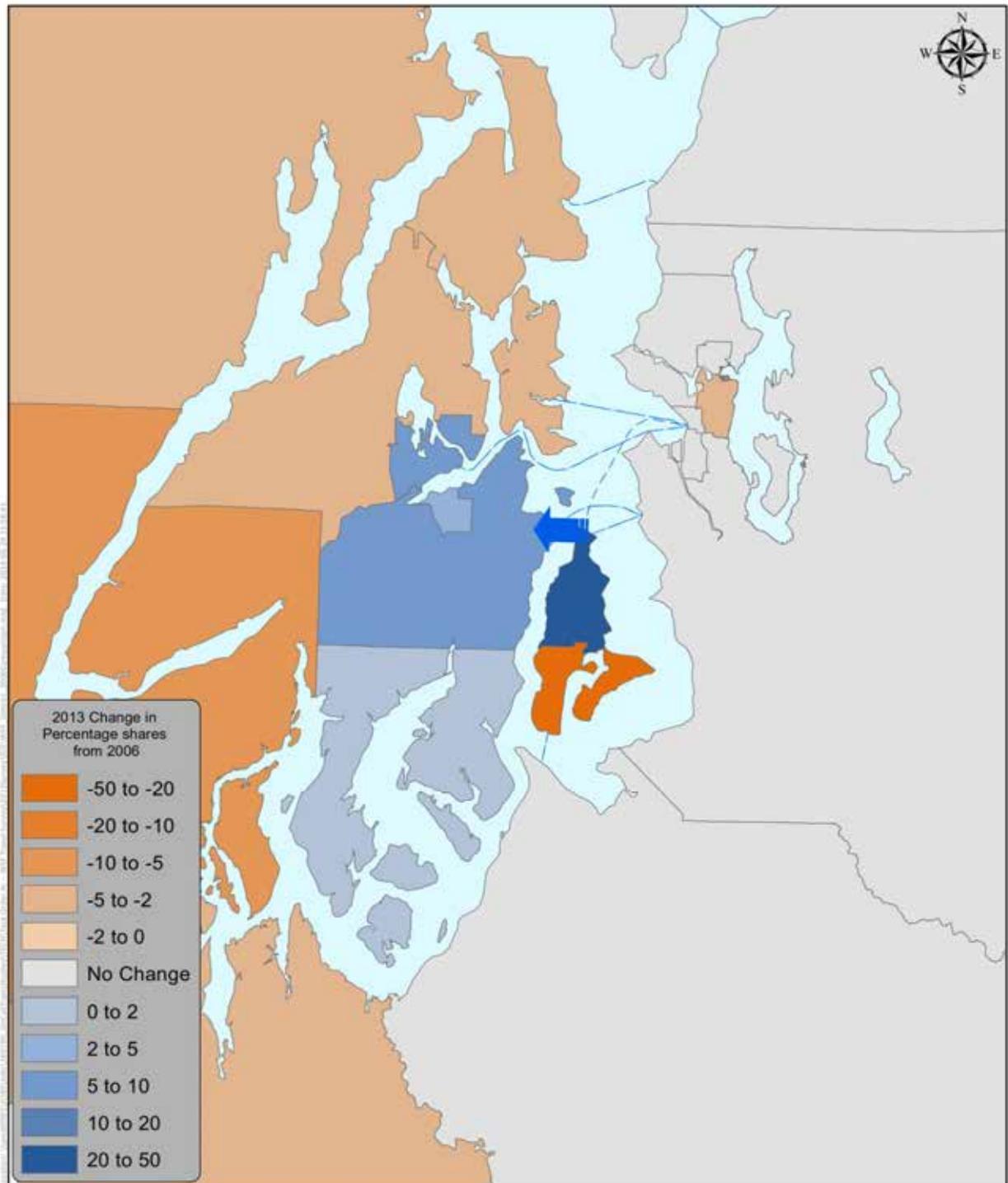


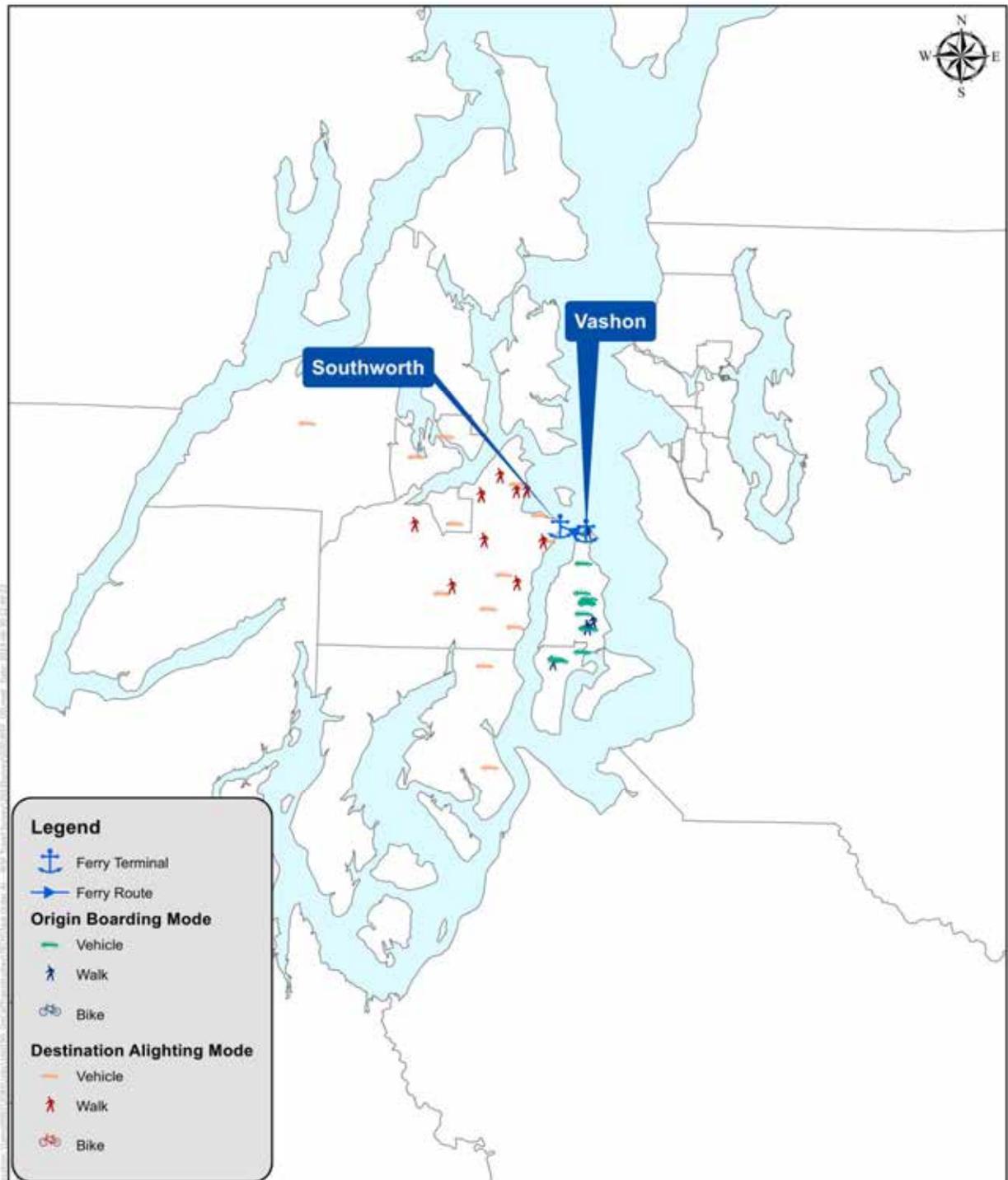
Figure 7-50. Southworth–Vashon change in westbound travel patterns from 2006, weekday PM peak period



**Table 7-38. Southworth–Vashon westbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►		Greater Port Orchard	Other S Kitsap County	Greater Bremerton	N / Other Central Kitsap County	W Pierce County	All Other Places	Origin Total	Origin Percent Share
				3	4	5	6	7	17		
N Vashon Island	1	15	240	38	15				15	324	91.4%
S Vashon Island	2		15					15		30	8.6%
Destination Total		15	256	38	15			15	15	354	100%
Destination Percent Share		4.3%	72.2%	10.7%	4.3%			4.3%	4.3%	100%	

**Figure 7-51. Southworth–Vashon westbound origin and destination locations by boarding mode, Weekday 8-hour Survey Period**

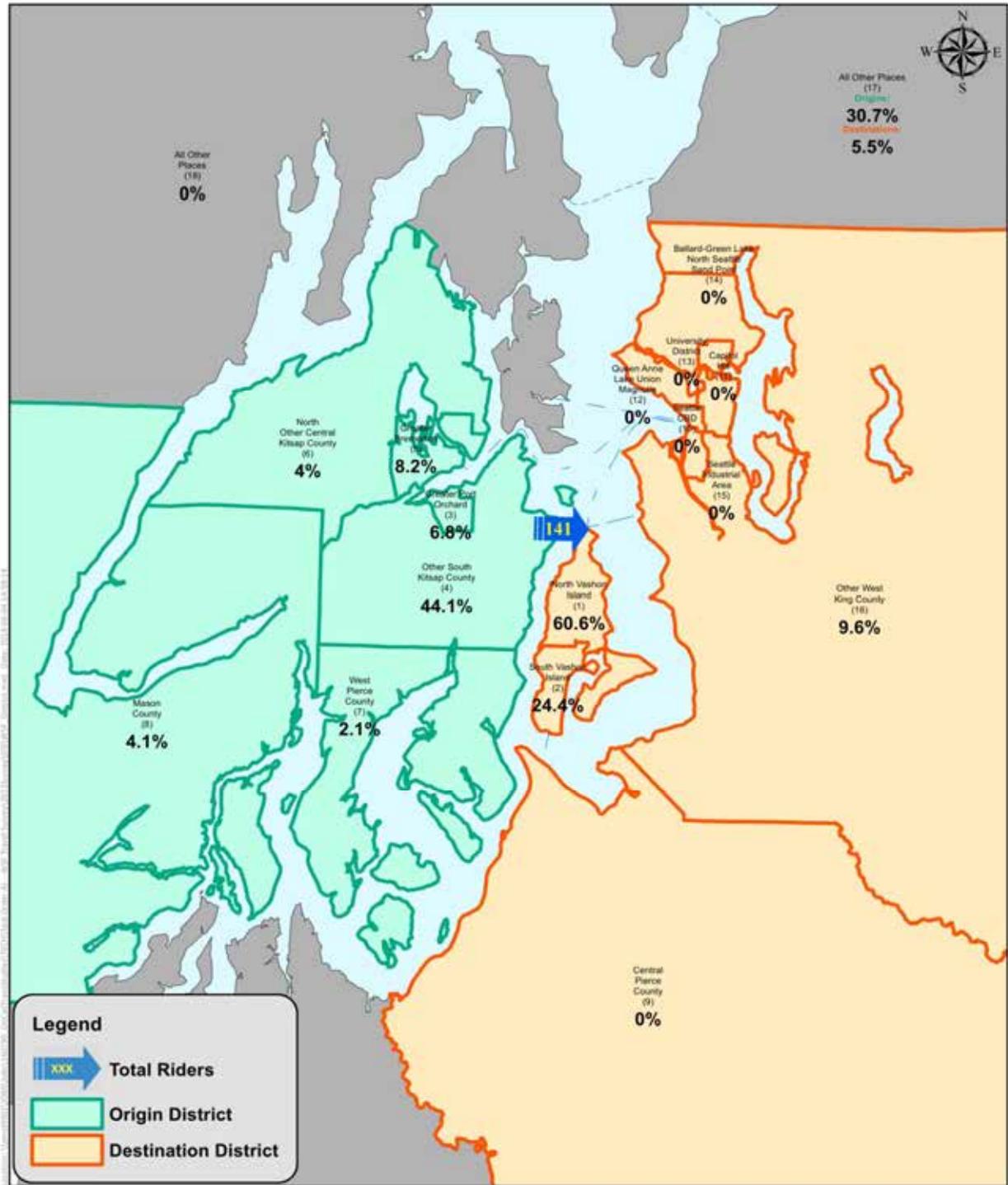


#### 7.4.10 Saturday Travel Patterns—Eastbound

Figure 7-52 presents the origins and destinations of Saturday eastbound trips by district. This information is presented in tabular format in Table 7-39. The main origin district is South Kitsap

County and the majority of destinations were in North Vashon Island. Origin and destination locations by boarding mode are shown in Figure 7-53. Origin and destination locations were dispersed.

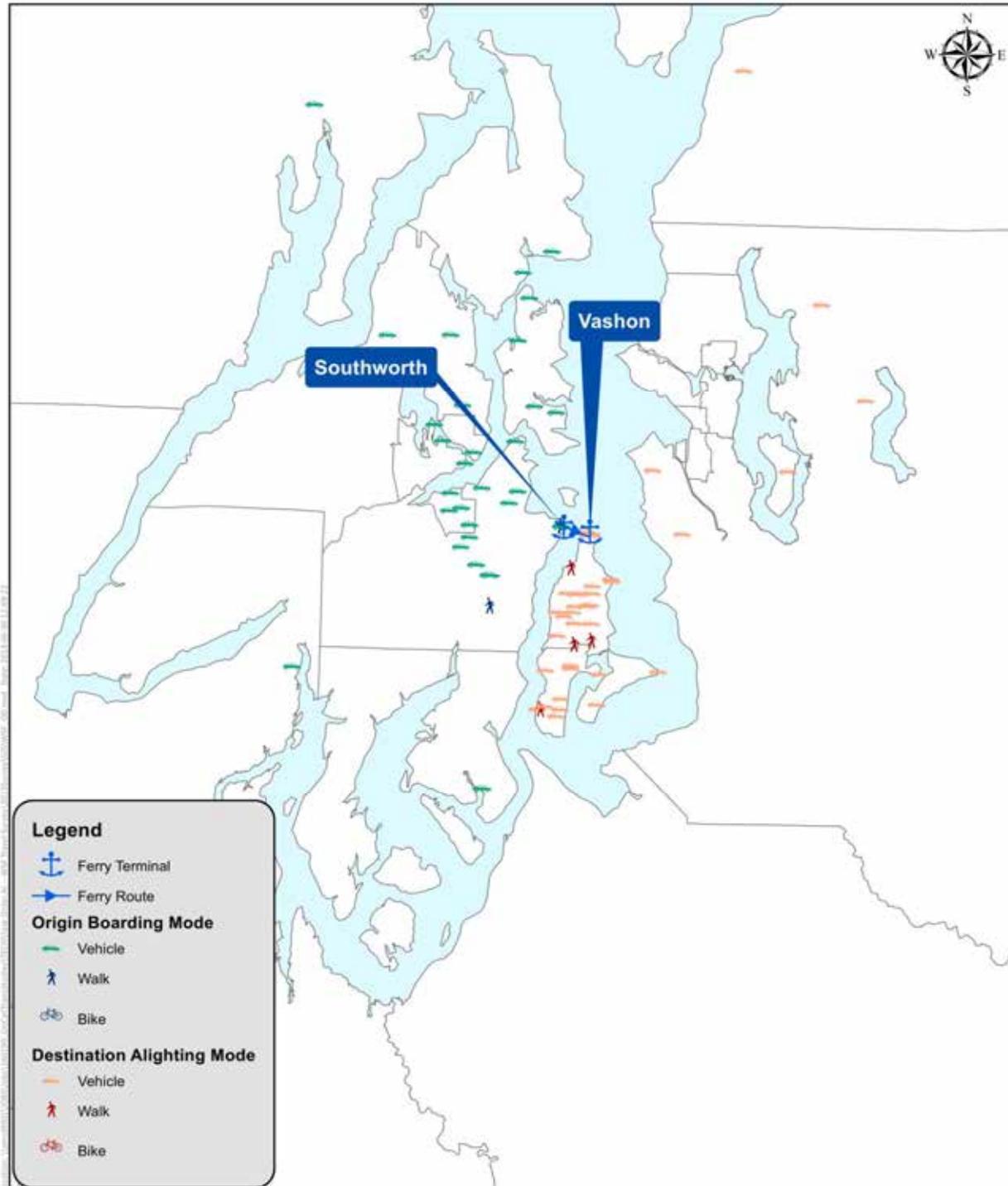
**Figure 7-52. Southworth–Vashon eastbound origin and destination districts, Saturday survey period**



**Table 7-39. Southworth–Vashon eastbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ►				Origin Total	Origin Percent Share
		N Vashon Island 1	S Vashon Island 2	Other W King Co. 16	All Other Places 17		
Greater Port Orchard	3	4	3	3	10	6.8%	
Other S Kitsap County	4	39	17	6	62	44.1%	
Greater Bremerton	5	8	2	2	12	8.2%	
N / Other Central Kitsap Co.	6	4	2		6	4.0%	
West Pierce Co.	7			3	3	2.1%	
Mason Co.	8	6			6	4.1%	
All Other Places	17	25	10		43	30.7%	
Destination Total		85	34	13	8	141	100%
Destination Percent Share		60.6%	24.4%	9.6%	5.5%	100%	

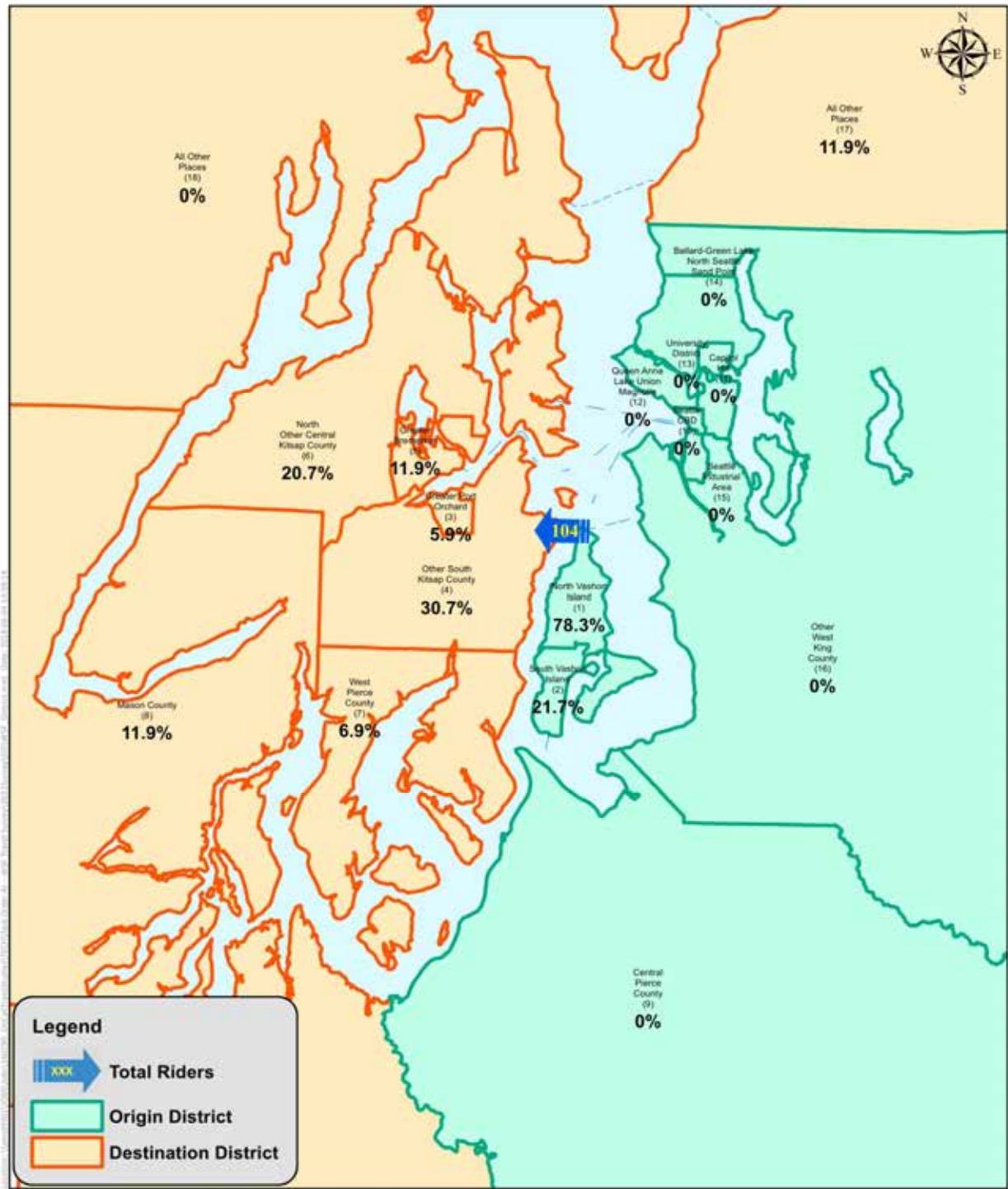
Figure 7-53. Southworth–Vashon eastbound origin and destination locations by boarding mode, Saturday survey period



#### 7.4.11 Saturday Travel Patterns—Westbound

Figure 7-54 presents the origins and destinations of Saturday westbound trips by district. This information is presented in tabular format in Table 7-40. The majority of origins were in North Vashon Island. The primary destinations were North, Central, and South Kitsap County. Origin and destination locations by boarding mode are shown in Figure 7-55. Origin and destination locations were dispersed.

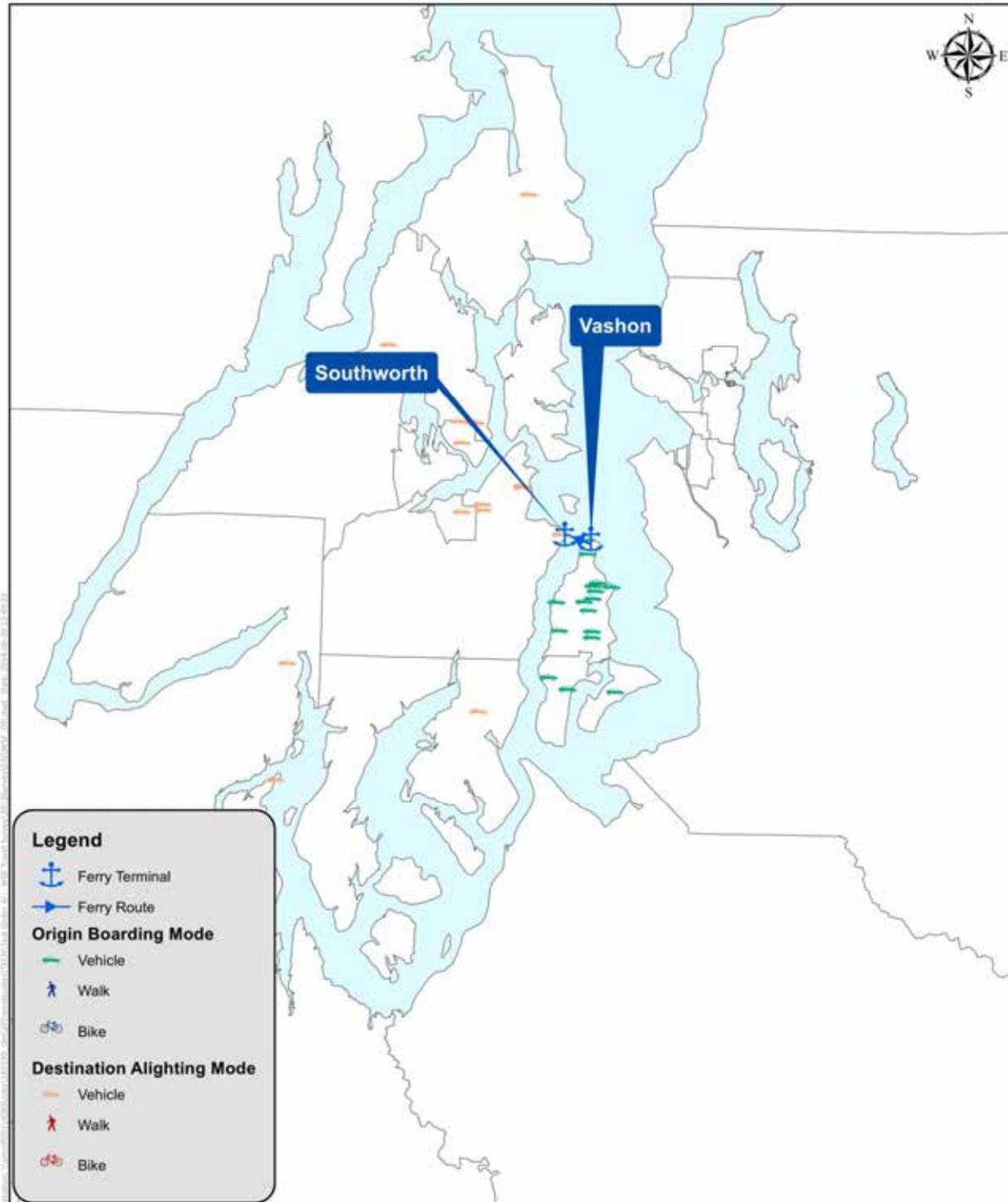
Figure 7-54. Southworth–Vashon westbound origin and destination districts, Saturday survey period



**Table 7-40. Southworth–Vashon westbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ►		Greater Port Orchard	Other S Kitsap County	Greater Bremerton	N / Other Central Kitsap County	W Pierce County	Mason Co.	All Other Places	Origin Total	Origin Percent Share
				3	4	5	6	7	8	17		
N Vashon Island	1	6	19	12	12	7	12	12			81	78.3%
S Vashon Island	2		13		9						23	21.7%
Destination Total		6	32	12	22	7	12	12			104	100%
Destination Percent Share		5.9%	30.7%	11.9%	20.7%	6.9%	11.9%	11.9%			100%	

Figure 7-55. Southworth–Vashon westbound origin and destination locations by boarding mode, Saturday survey period



## 7.5 Point Defiance–Tahlequah

### 7.5.1 Route Description

The Point Defiance–Tahlequah route connects Point Defiance in Tacoma and Tahlequah on the southern tip of Vashon Island. It takes 15 minutes to ride this ferry route one way. The crossing is approximately 1.5 nautical miles and is the shortest route in the WSF system. It runs seven days per week. For 2013, the annual total ridership was 280,000 passengers plus 400,000 vehicles and drivers for a total of 680,000 people, or about 1,900 riders per day. This compares to 1,800 riders per day in 2006 and 2,400 riders per day in 1999. The route is served by 19 sailings per day each direction. The fare in October 2013 for a vehicle 14 to 22 feet including driver was \$17.25. The full fare for passengers was \$5.10.

This section provides some key trip-making characteristics of ferry riders on this route. In addition, the 2013 survey results are compared with key characteristics from the previous 2006 survey data to identify trends in trip-making on this route.

### 7.5.2 Trips by Purpose

As shown in Table 7-41, the most frequent weekday trip purpose was work/school (59 percent), which is similar to 2006. Recreation/shopping remains the predominant trip purpose for Saturday trips.

**Table 7-41. Point Defiance–Tahlequah trips by purpose and direction, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Direction	Work/ School	Personal Business/ Other	Recreation/ Shopping	Total	All Purposes	
					2013	2006
<b>Weekday</b>						
Eastbound	248	86	107	441	44.9%	47.8%
Westbound	336	93	112	541	55.1%	52.2%
Total	583	179	220	982	100%	100%
2013 Distribution	59.4%	18.2%	22.4%	100%		
2006 Distribution	59.8%	15.8%	24.4%	100%		
<b>Saturday</b>						
Eastbound	40	150	572	762	51.2%	48.1%
Westbound	89	90	546	726	48.8%	51.9%
Total	129	241	1,118	1,488	100%	
2013 Distribution	8.7%	16.2%	75.1%	100%		
2006 Distribution	7.9%	18.5%	73.6%			

### 7.5.3 Frequency of Travel

Table 7-42 shows the frequency of travel for weekdays and Saturdays by trip purpose for 2006 and 2013. About 50 percent of travelers used this ferry more than five times per week on weekdays in 2013, a slight decrease from 64 percent in 2006. The highest percentage of weekday travelers traveled on the ferry three to four times in the past week (25 percent), an increase from 2006, when 20 percent of travelers reported three to four trips in the past week. In addition, those reporting only one trip in the past week increased from 7 percent in 2006 to 20 percent in 2013. On Saturdays, trip frequency remained more similar to 2006.

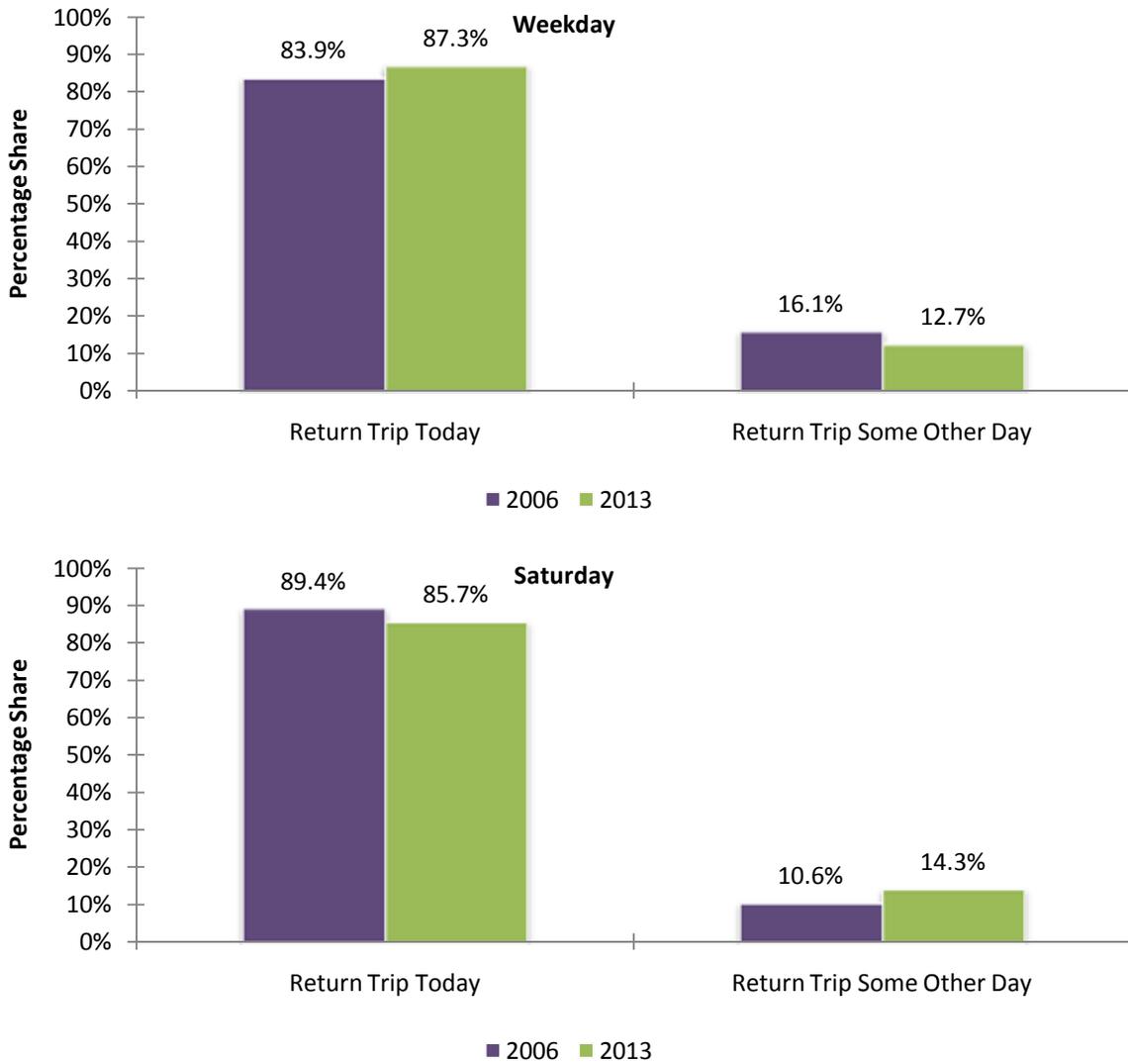
**Table 7-42. Point Defiance–Tahlequah one-way trips by purpose and frequency, weekday 8-hour and Saturday survey periods (2006 and 2013)**

One-Way Trips	Work/ School	Personal Business/ Other	Recreation / Shopping	Total	All Purposes		Work/School	
					2013	2006	2013	2006
<b>Weekday</b>								
1	87	47	53	187	20.2%	7.2%	16.1%	0.0%
2	8	31	8	48	5.2%	8.8%	1.6%	5.2%
3 to 4	106	47	80	233	25.2%	20.0%	19.7%	14.1%
5 to 6	82	23	36	141	15.2%	19.0%	15.2%	20.6%
7 to 8	109	21	4	135	14.6%	8.3%	20.2%	9.7%
9 to 10	90	1	30	121	13.1%	22.0%	16.7%	30.6%
11+	56	4	0	61	6.6%	14.6%	10.5%	19.8%
Total	538	175	212	925	100%	100%	100%	100%
2013 Distribution	58.1%	18.9%	22.9%	100%				
2006 Distribution	59.4%	15.8%	24.8%	100%				
<b>Saturday</b>								
1	10	20	250	279	26.7%	15.9%		
2	5	54	109	168	16.0%	19.5%		
3 to 4	24	71	164	259	24.7%	25.0%		
5 to 6	34	9	111	155	14.8%	13.1%		
7 to 8	0	10	44	55	5.2%	6.9%		
9 to 10	9	10	5	25	2.3%	4.8%		
11+	19	0	88	107	10.2%	14.9%		
Total	101	175	772	1,047	100%	100%		
2013 Distribution	9.6%	16.7%	73.7%	100%				
2006 Distribution	7.8%	18.7%	73.5%	100%				

### 7.5.4 Round-Trip Patterns

The percentage of weekday ferry travelers making a round-trip on the same day versus some other day grew slightly from 84 percent in 2006 to 87 percent in 2013, as shown in Figure 7-56. Conversely, the percentage of Saturday riders making a round-trip on the same day decreased from 89 percent in 2006 to 86 percent in 2013.

**Figure 7-56. Point Defiance–Tahlequah round-trip patterns by day, weekday 8-hour and Saturday survey periods (2006 and 2013)**



As shown in Figure 7-57, the vast majority (90 percent) of round-trip ferry travelers used the same route for both legs of the trip. This situation was true for both weekday and Saturday travelers.

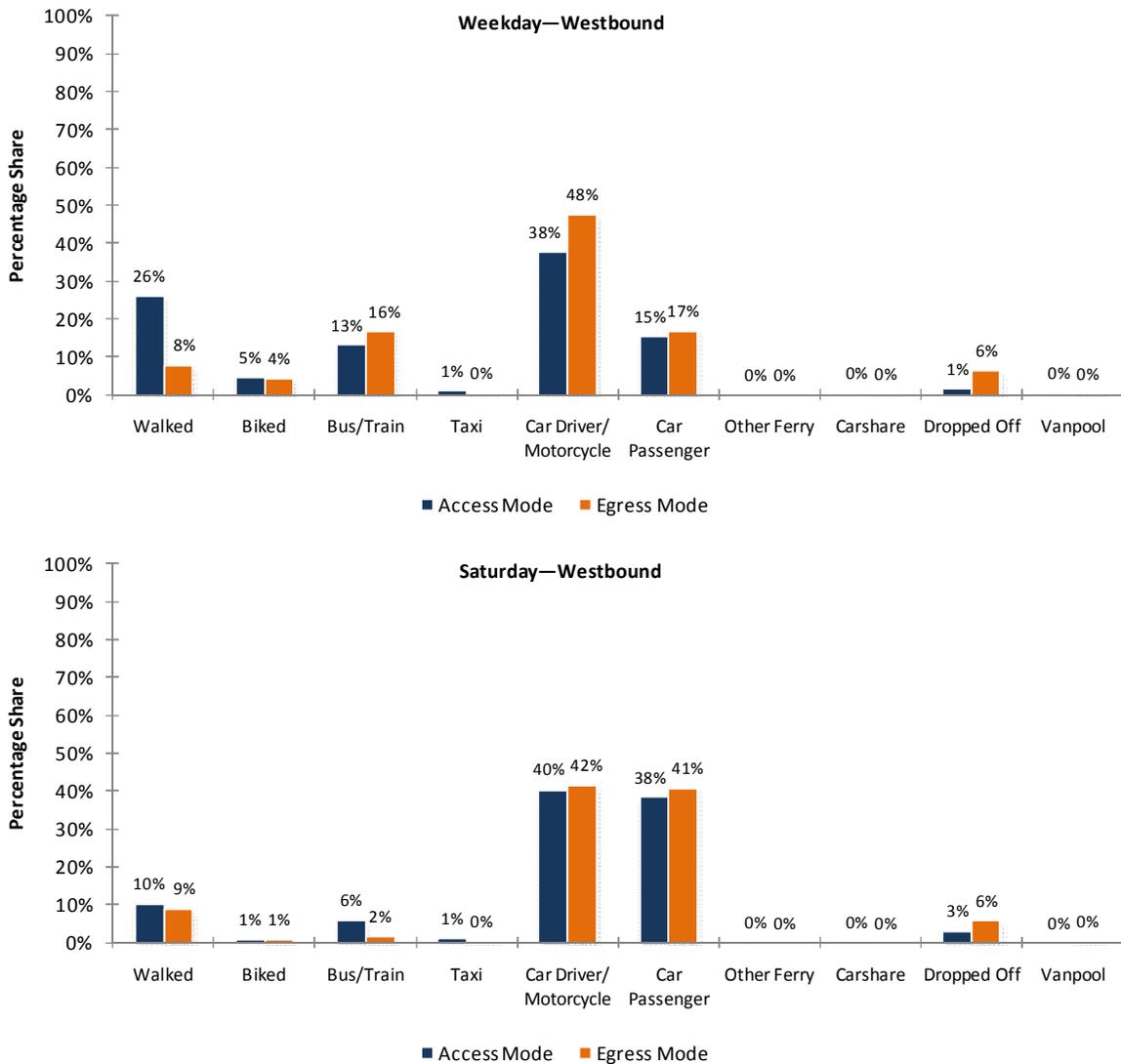
**Figure 7-57. Point Defiance–Tahlequah round-trip patterns by route, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.5.5 Access, Egress, and Boarding Modes

Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant northbound mode of access and egress in 2013, as shown in Figure 7-58. On weekdays, 73 percent of ferry travelers drove to the ferry, and an additional 23 percent were passengers in a private vehicle. Leaving the ferry, 72 percent were drivers while 24 percent were passengers. Likely due to the higher proportion of recreation and shopping trips on Saturdays versus weekdays, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-58. Point Defiance–Tahlequah northbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**



Travel by private vehicle (i.e., automobile driver and passengers and motorcycle) was the predominant southbound mode of access and egress in 2013, as shown in Figure 7-59. On weekdays,

59 percent of ferry travelers drove to the ferry, and an additional 39 percent were passengers in a private vehicle. Leaving the ferry, 54 percent were drivers while 41 percent were passengers. Consistent with northbound travel, Saturdays exhibit a higher share of automobile passengers (and higher vehicle occupancy) for access and egress than on weekdays.

**Figure 7-59. Point Defiance–Tahlequah southbound trips by access and egress modes, weekday 8-hour and Saturday survey periods (2013)**

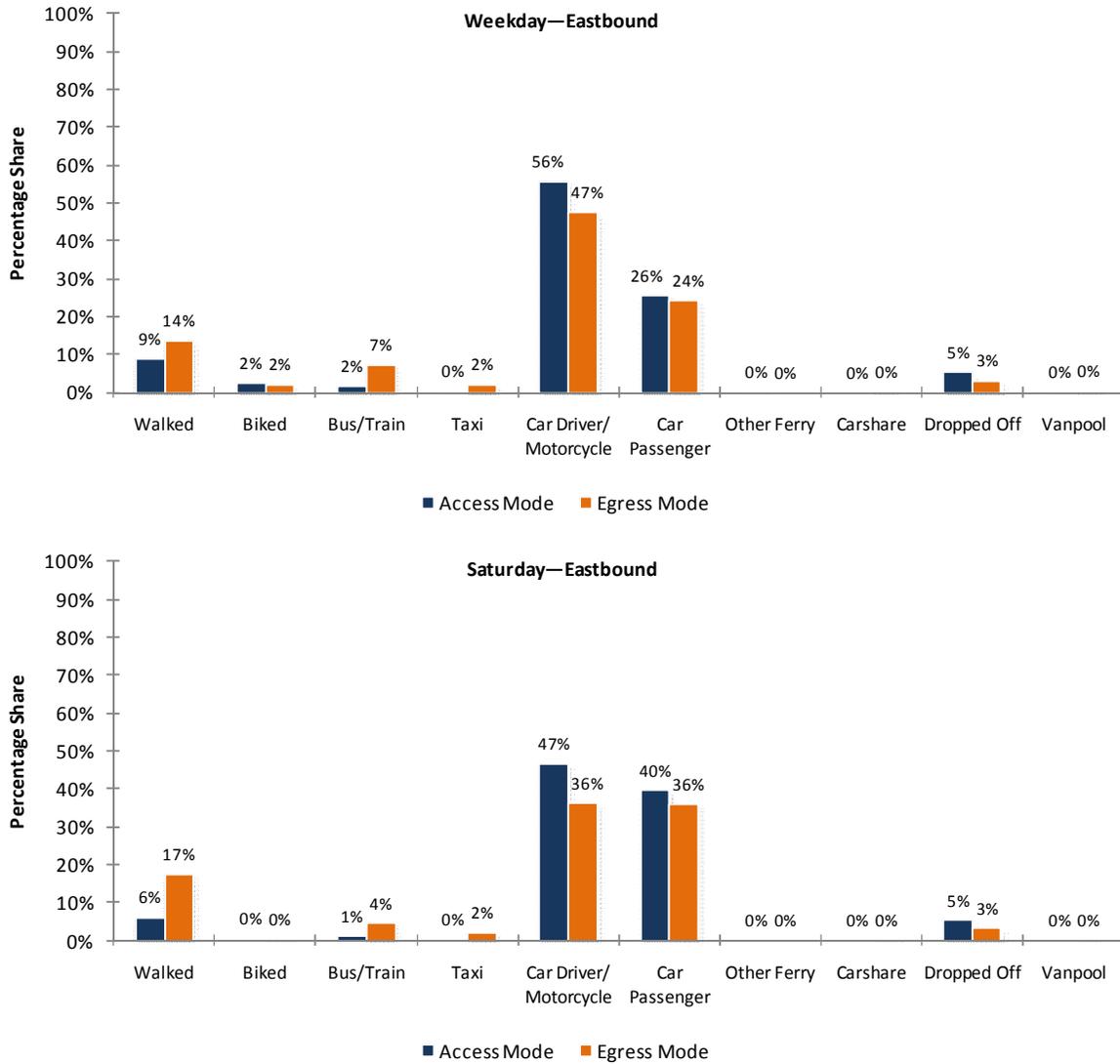


Table 7-43 shows the access mode and boarding method for weekdays and Saturdays in 2006 and 2013. As shown in the table, most travelers boarded the ferry by driving on. In 2013, this method accounted for 92 percent of boardings, both on weekdays and Saturdays.

**Table 7-43. Point Defiance–Tahlequah access mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Access Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	8	0	8	0.8%	0.9%
Biked	0	0	4	4	0.4%	0.6%
Bus/Train	4	11	2	17	1.7%	2.7%
Taxi	0	3	0	3	0.3%	0.0%
Car Driver/Motorcycle	609	44	0	653	66.5%	70.2%
Car Passenger	290	5	0	295	30.1%	25.6%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	2	0	2	0.2%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>903</b>	<b>73</b>	<b>6</b>	<b>982</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	92.0%	7.5%	0.6%	100%		
2006 Distribution	87.0%	11.5%	1.4%	100%		
<b>Saturday</b>						
Walked	0	16	0	16	1.1%	0.6%
Biked	0	0	3	3	0.2%	0.0%
Bus/Train	0	0	0	0	0.0%	0.0%
Taxi	0	5	0	5	0.3%	0.6%
Car Driver/Motorcycle	724	55	0	779	52.3%	70.2%
Car Passenger	644	23	0	667	44.8%	28.6%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	18	0	18	1.2%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>1,368</b>	<b>117</b>	<b>3</b>	<b>1,488</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	91.9%	7.8%	0.2%	100%		
2006 Distribution	89.9%	10.1%	0.0%	100%		

Table 7-44 shows the egress mode and boarding method for weekdays and Saturdays in 2006 and 2013. Results are similar to access mode.

**Table 7-44. Point Defiance–Tahlequah egress mode and boarding methods, weekday 8-hour and Saturday survey periods (2006 and 2013)**

Egress Mode	Drive	Walk	Bicycle	Total	All Boardings	
					2013	2006
<b>Weekday</b>						
Walked	0	22	0	22	2.3%	1.3%
Biked	0	0	5	5	0.5%	0.1%
Bus/Train	0	10	0	10	1.0%	0.7%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	599	30	1	630	64.2%	76.6%
Car Passenger	304	7	0	311	31.7%	21.3%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	4	0	4	0.4%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>903</b>	<b>73</b>	<b>6</b>	<b>982</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	92.0%	7.5%	0.6%	100%		
2006 Distribution	87.6%	11.5%	0.9%	100%		
<b>Saturday</b>						
Walked	0	38	0	38	2.5%	3.8%
Biked	0	0	3	3	0.2%	0.0%
Bus/Train	0	3	0	3	0.2%	1.3%
Taxi	0	0	0	0	0.0%	0.0%
Car Driver/Motorcycle	710	11	0	721	48.5%	65.5%
Car Passenger	658	23	0	681	45.8%	29.4%
Other Ferry	0	0	0	0	0.0%	
Carshare	0	0	0	0	0.0%	
Dropped Off	0	41	0	41	2.8%	
Vanpool	0	0	0	0	0.0%	
<b>Total</b>	<b>1,368</b>	<b>117</b>	<b>3</b>	<b>1,488</b>	<b>100%</b>	<b>100%</b>
2013 Distribution	91.9%	7.8%	0.2%	100%		
2006 Distribution	89.7%	10.3%	0.0%	100%		

Table 7-45, Table 7-46, and Table 7-47 show access and egress modes used across the entire ferry trip for the weekday PM peak period, the weekday non-PM peak period, and Saturdays, respectively. For walk-on boardings on the weekday non-PM peak period and on Saturdays, the percentage of travelers leaving the destination terminal on foot was higher than the percentage arriving at the origin terminal on foot.

**Table 7-45. Point Defiance–Tahlequah trips by access mode to ferry—boarding method—egress mode from ferry, weekday PM peak period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (7.9% of total boardings)					
Pedestrian	10.0%	Pedestrian	87.8%	Pedestrian	8.3%
Bicycle	8.3%	Pedestrian w/ Bicycle	12.2%	Bicycle	10.0%
By Bus/Transit	19.7%			By Bus/Transit	21.8%
By Vehicle	62.0%			By Vehicle	59.8%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (92.1% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	73.8%	In-Vehicle	100.0%
		Vehicle Passengers	26.2%		

Note: Average vehicle occupancy (AVO) was 1.36 for the Saturday survey period.

**Table 7-46. Point Defiance–Tahlequah trips by access mode to ferry—boarding method—egress mode from ferry, Weekday Non-PM Peak Period (2013)**

Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (8.3% of total boardings)					
Pedestrian	10.9%	Pedestrian	100.0%	Pedestrian	56.4%
Bicycle	0.0%	Pedestrian w/ Bicycle	0.0%	Bicycle	0.0%
By Bus/Transit	10.9%			By Bus/Transit	0.0%
By Vehicle	78.2%			By Vehicle	43.6%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (91.7% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	59.2%	In-Vehicle	100.0%
		Vehicle Passengers	40.8%		

Note: Average vehicle occupancy (AVO) was 1.69 for the Saturday survey period.

**Table 7-47. Point Defiance–Tahlequah trips by access mode to ferry—boarding method—egress mode from ferry, Saturday survey period (2013)**

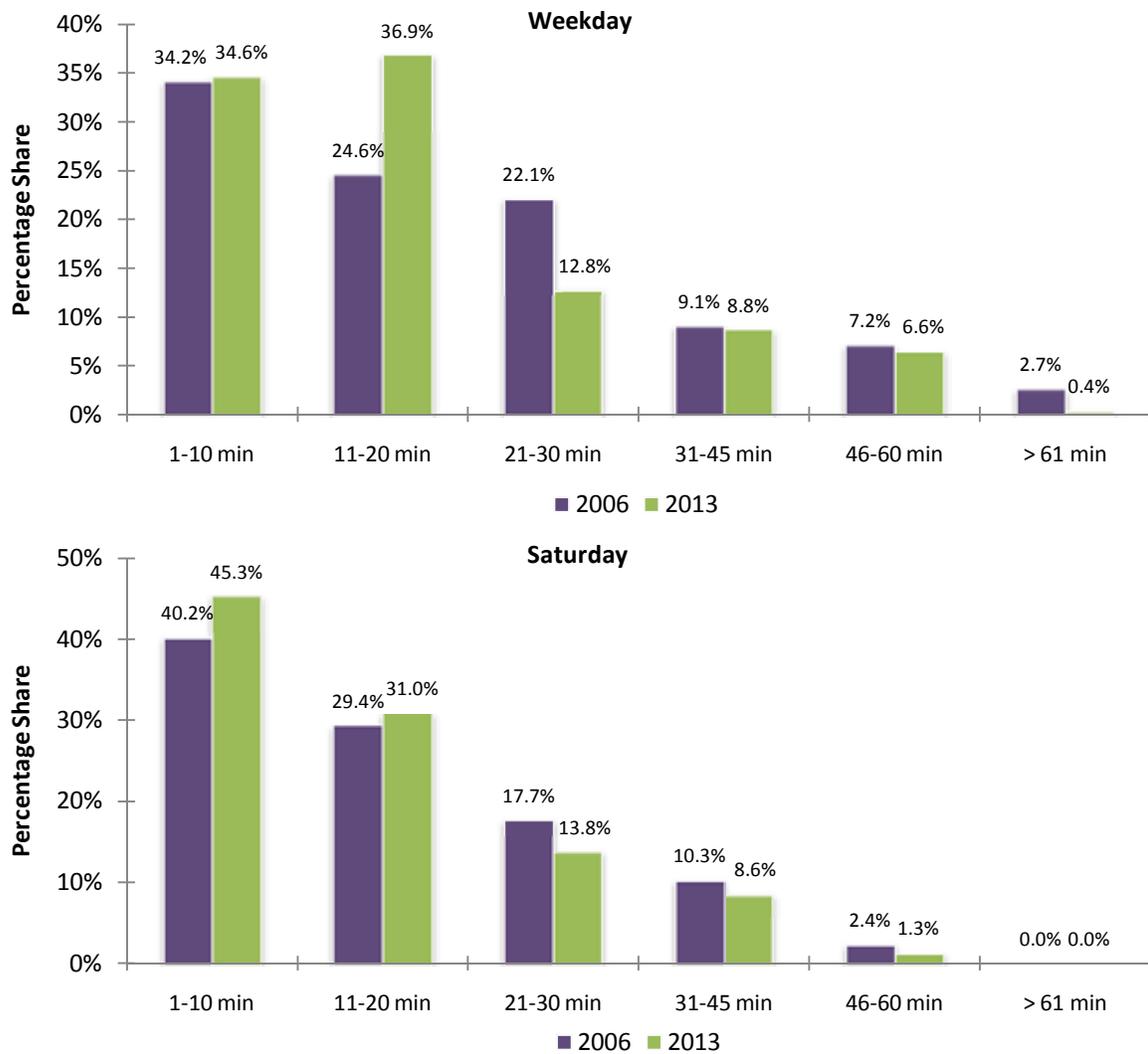
Access Mode to Ferry Terminal	Percentage Distribution	Boarding Method	Percentage Distribution	Egress Mode from Ferry Terminal	Percentage Distribution
Walk-On Boardings (8.1% of total boardings)					
Pedestrian	13.5%	Pedestrian	13.5%	Pedestrian	31.5%
Bicycle	2.8%	Pedestrian w/ Bicycle	2.8%	Bicycle	2.8%
By Bus/Transit	0.0%			By Bus/Transit	2.8%
By Vehicle	83.7%			By Vehicle	62.9%
Vanpool	0.0%			Vanpool	0.0%
Carshare	0.0%			Carshare	0.0%
Other Ferry	0.0%			Other Ferry	0.0%
In-Vehicle Boardings (91.9% of total boardings)					
In-Vehicle	100.0%	Vehicle Drivers	52.9%	In-Vehicle	100.0%
		Vehicle Passengers	47.1%		

*Note: Average vehicle occupancy (AVO) was 1.89 for the Saturday survey period.*

### 7.5.6 Wait Time

Respondents were asked the amount of time they spent waiting before boarding the ferry. Figure 7-60 shows the frequency distribution of perceived wait time (in minutes) for 2006 and 2013. In 2013, 71 percent of weekday ferry passengers waited less than 20 minutes, an increase from 59 percent in 2006.

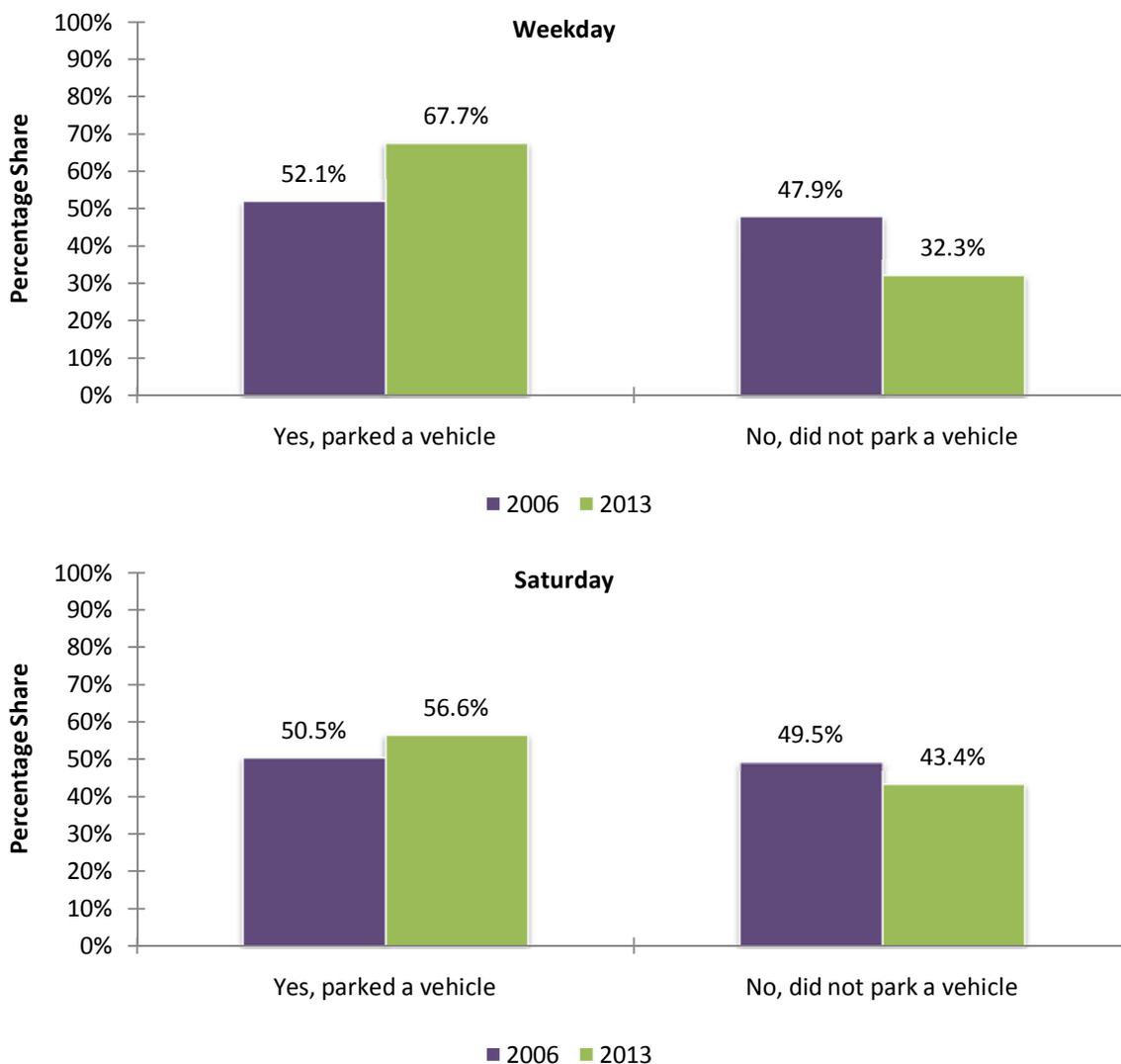
**Figure 7-60. Point Defiance–Tahlequah trips by wait time, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.5.7 Parking

Figure 7-61 presents the percentage of riders who boarded by foot or bicycle who parked or did not park a vehicle at the terminal. About 68 percent of the weekday ferry passengers parked a vehicle in the 2013 survey, compared with about 52 percent in 2006. On Saturdays, those who parked a vehicle increased from 50 percent in 2006 to 57 percent in 2013.

**Figure 7-61. Point Defiance–Tahlequah non-motorized boardings that parked a vehicle at terminal, weekday 8-hour and Saturday survey periods (2006 and 2013)**



### 7.5.8 Weekday PM Peak-Period Travel Patterns—Southbound

Figure 7-62 presents the origins and destinations of weekday PM peak-period southbound trips by district. This information is presented in tabular format in Table 7-48. The majority of origins were in South Vashon Island, while the major of destinations were North Tacoma, South Tacoma, and University Place/Fircrest. Origin and destination locations by boarding mode are shown in Figure 7-63. Origin and destination locations were dispersed.

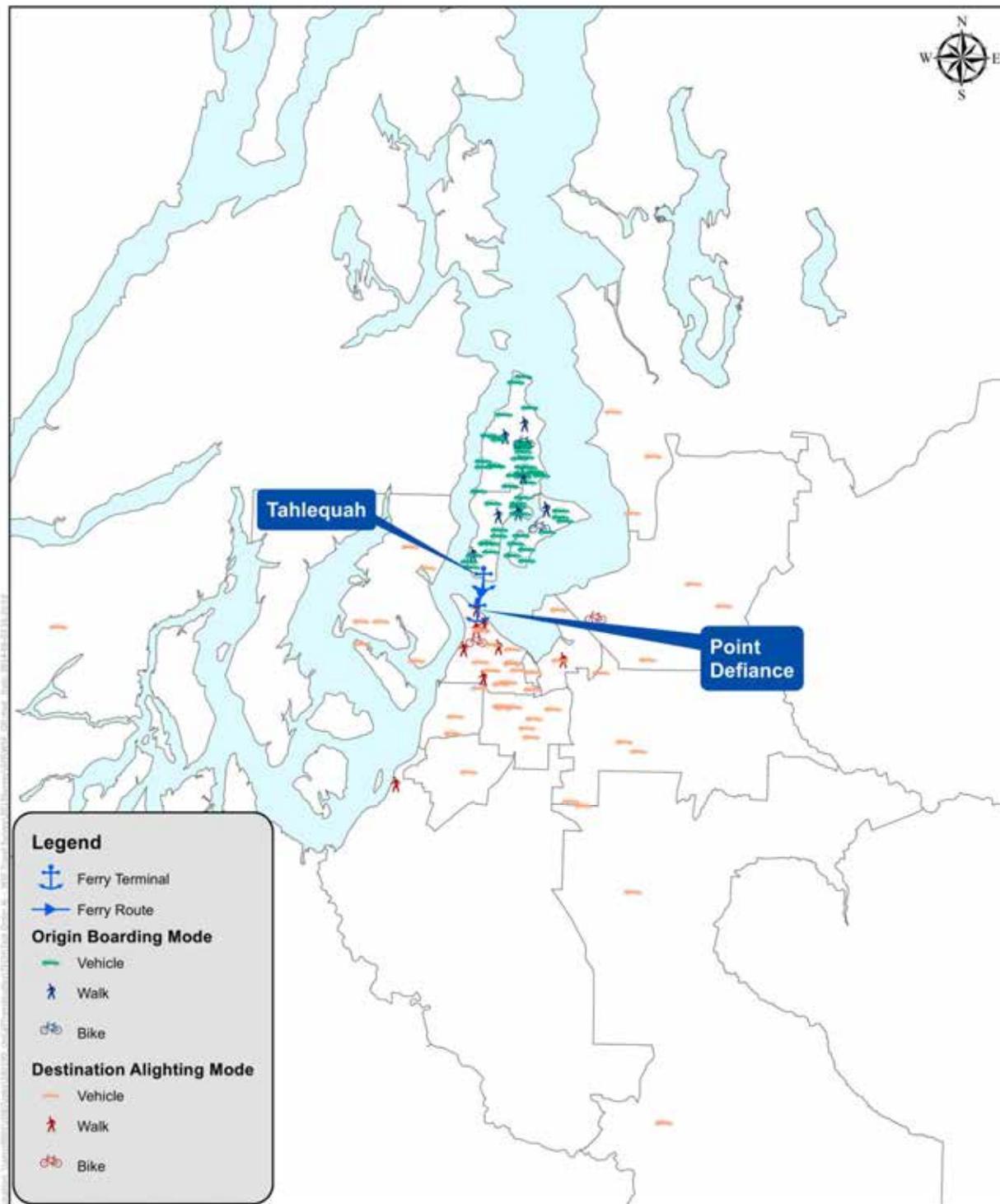
Figure 7-62. Point Defiance–Tahlequah southbound origin and destination districts, weekday PM peak period



**Table 7-48. Point Defiance–Tahlequah southbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►													Origin Total	Origin Percent Share
		N Tacoma	Tacoma CBD	Port of Tacoma	S Tacoma	University Place / Fircrest	Fife / Puyallup / Sumner	S Central Pierce Co.	SE Pierce Co.	W Pierce Co.	Kent-Auburn / Federal Way	Thurston Co.	All Other Places			
N Vashon Island	1	56		14	13	4	9				5		9	111	43.1%	
S Vashon Island	2	16	4		27	31	13	1	4	9	9	13	18	147	56.9%	
Destination Total		72	4	14	40	36	22	1	4	9	14	13	27	258	100%	
Destination Percent Share		27.9%	1.7%	5.6%	15.6%	13.8%	8.6%	0.4%	1.7%	3.5%	5.6%	5.2%	10.4%	100%		

Figure 7-63. Point Defiance–Tahlequah southbound origin and destination locations by boarding mode, Weekday 8-hour Survey Period



### 7.5.9 Weekday PM Peak-Period Travel Patterns—Northbound

Figure 7-64 presents the origins and destinations of weekday PM peak-period northbound trips by district. This information is presented in tabular format in Table 7-49. The major origins were North Tacoma and South Tacoma, while destinations were relatively evenly split between North and South Vashon Island. Figure 7-65 shows the change in travel patterns for northbound trips between 2006 and 2013. As shown in the figure, there was a decrease in the percentage of trips ending in South Vashon and an increase in North Vashon Island. Origin and destination locations by boarding mode are shown in Figure 7-66. Origin and destination locations were dispersed.

Figure 7-64. Point Defiance–Tahlequah northbound origin and destination districts, weekday PM peak period

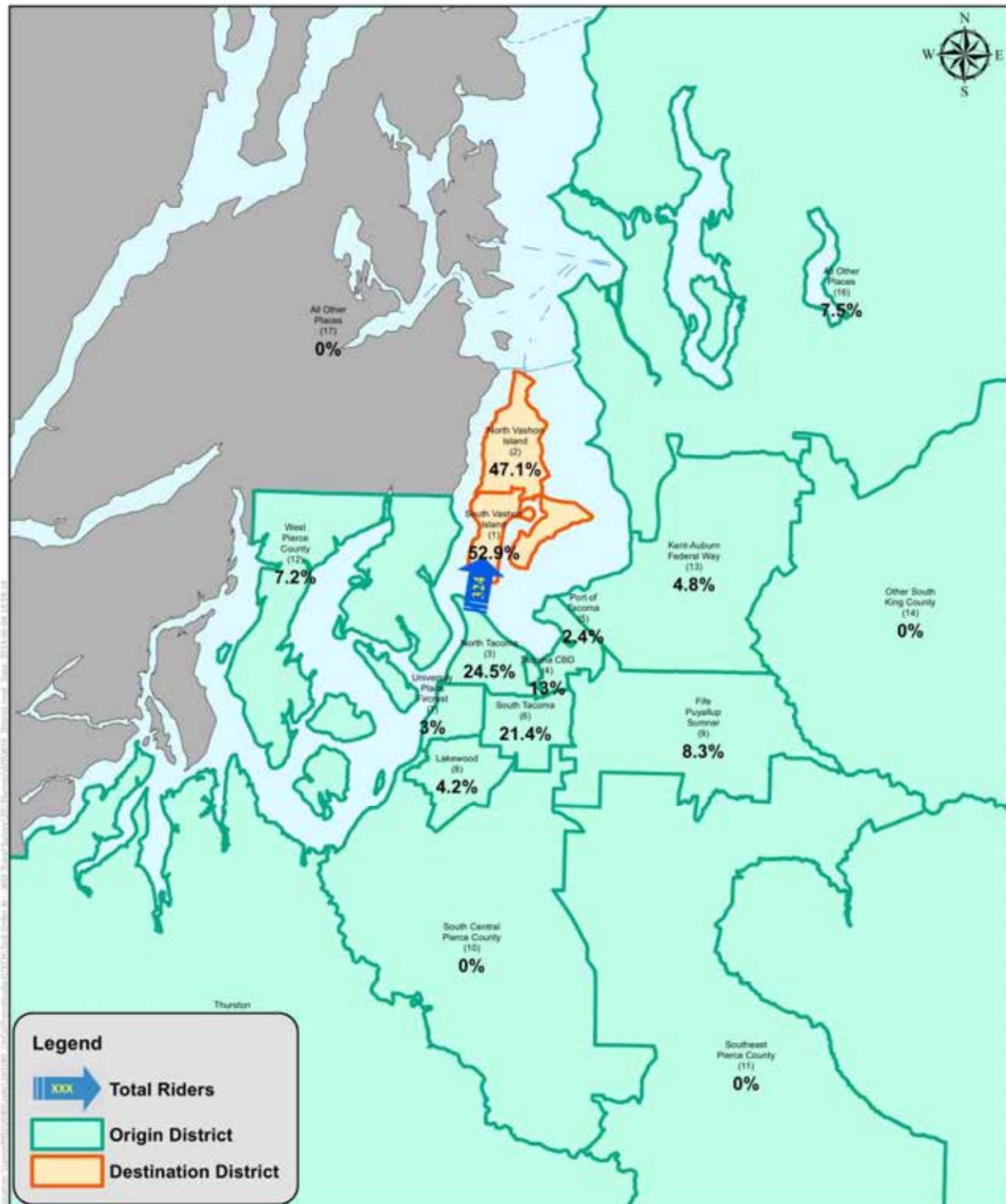
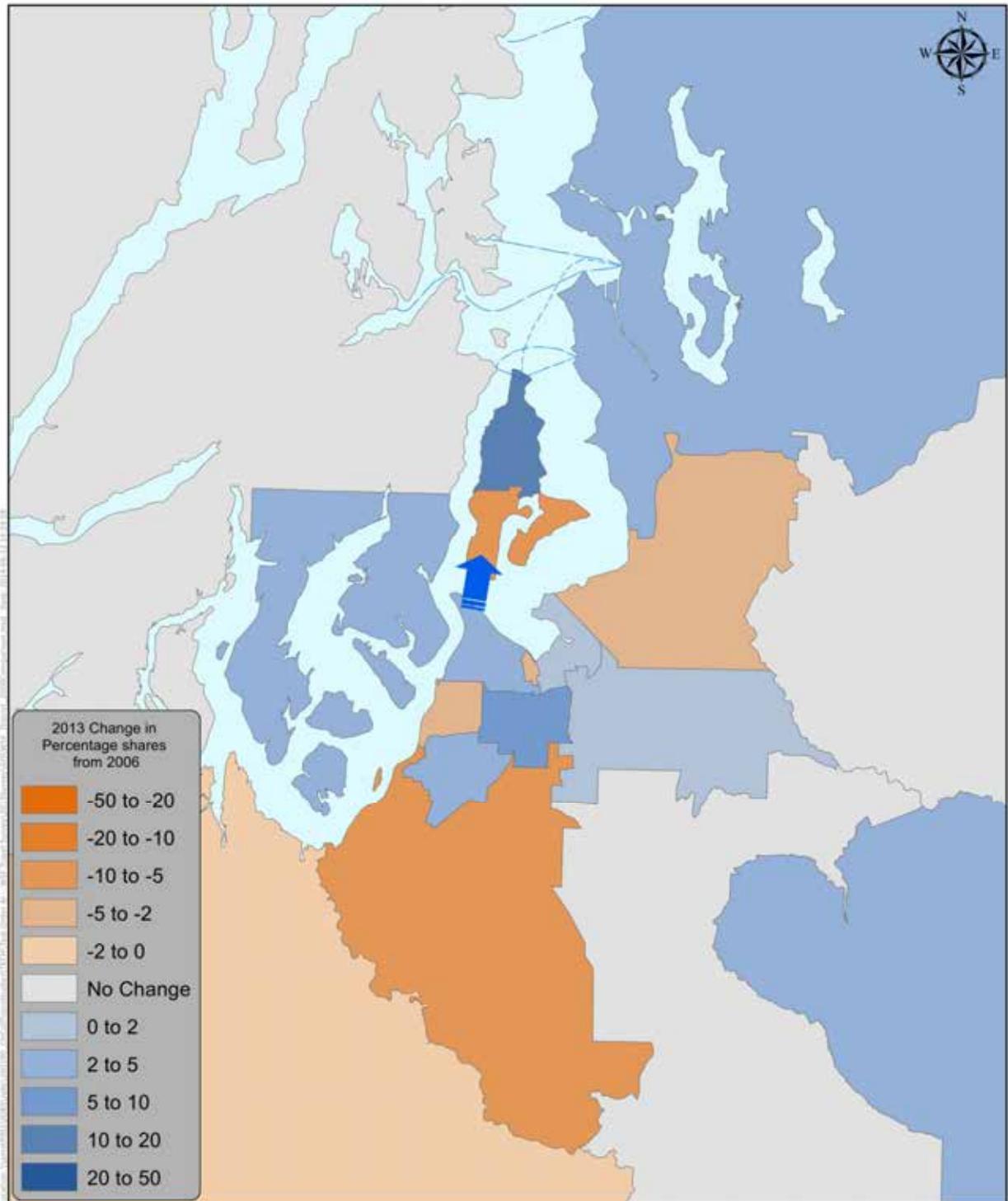


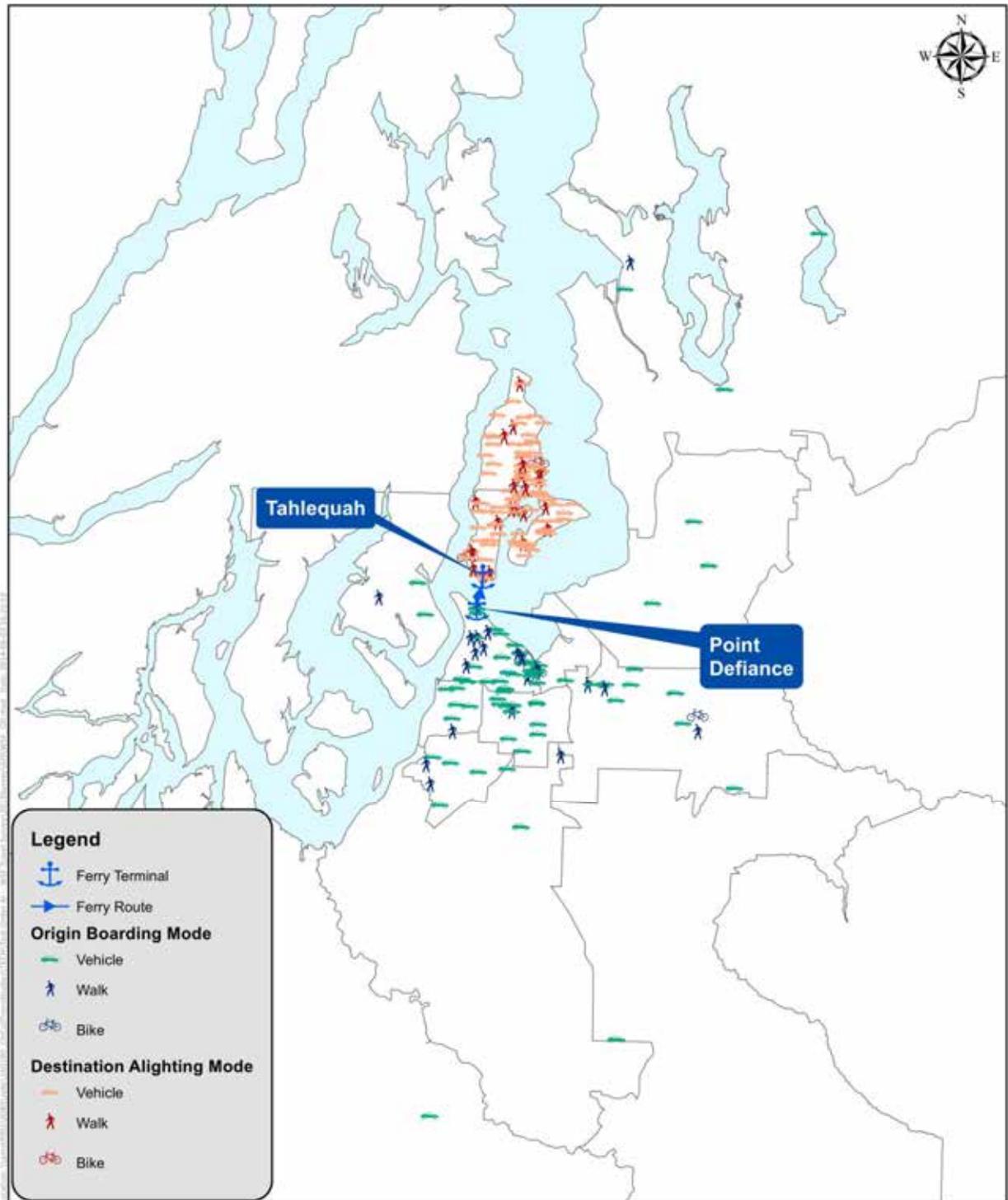
Figure 7-65. Point Defiance–Tahlequah change in northbound travel patterns from 2006, weekday PM peak period



**Table 7-49. Point Defiance–Tahlequah northbound total boardings by origin and destination district, weekday PM peak period**

Origin District ▼		Destination District ►		Origin Total	Origin Percent Share
		S Vashon Island 1	N Vashon Island 2		
N Tacoma	3	54	25	79	24.5%
Tacoma CBD	4	27	15	42	13.0%
Port of Tacoma	5	8		8	2.4%
S Tacoma	6	35	34	69	21.4%
University Place / Fircrest	7	6	4	10	3.0%
Lakewood	8	6	8	14	4.2%
Fife / Puyallup / Sumner	9	4	23	27	8.3%
W Pierce Co.	12	4	19	23	7.2%
Kent-Auburn / Federal Way	13	8	8	16	4.8%
Thurston Co.	15		12	12	3.6%
All Other Places	16	20	4	24	7.5%
Destination Total		172	152	324	100%
Destination Percent Share		52.9%	47.1%	100%	

**Figure 7-66. Point Defiance–Tahlequah northbound origin and destination locations by boarding mode, weekday 8-hour survey period**



**7.5.10 Saturday Travel Patterns—Southbound**

Figure 7-67 presents the origins and destinations of Saturday southbound trips by district. This information is presented in tabular format in Table 7-50. The origins were relatively evenly split

between North and South Vashon Island, while the major destinations were North Tacoma, South Tacoma, and Fife/Puyallup/Sumner. Origin and destination locations by boarding mode are shown in Figure 7-68. Origin and destination locations were dispersed.

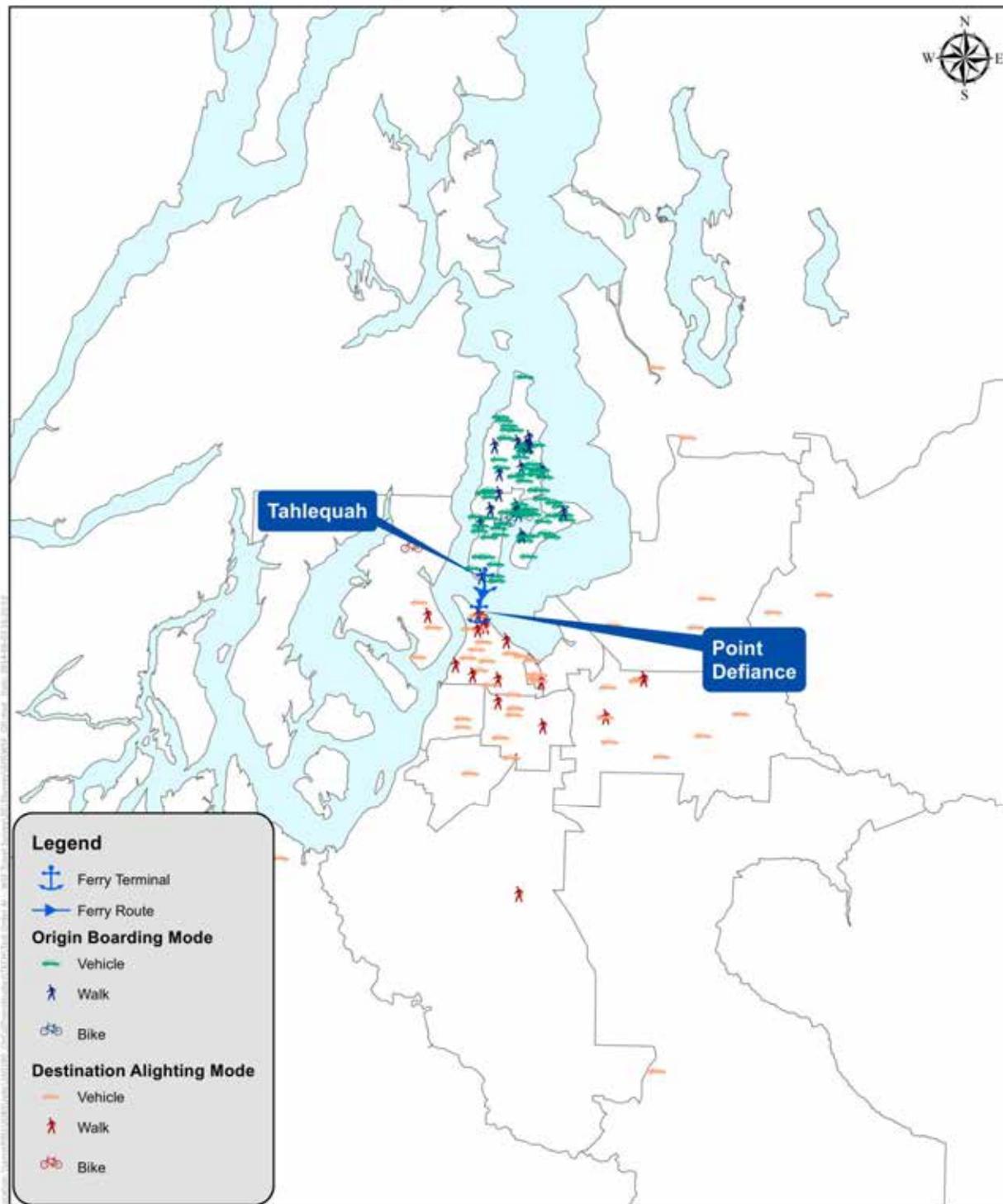
**Figure 7-67. Point Defiance–Tahlequah southbound origin and destination districts, Saturday survey period**



**Table 7-50. Point Defiance–Tahlequah southbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ▶															Origin Total	Origin Percent Share
		N Tacoma	Tacoma CBD	Port of Tacoma	S Tacoma	University Place / Fircrest	Lakewood	Fife / Puyallup / Sumner	S Central Pierce Co.	SE Pierce Co.	W Pierce Co.	Kent-Auburn / Federal Way	Other S King Co.	Thurston Co.	All Other Places (E)	All Other Places (W)		
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
S Vashon Island	1	113	14		44		34	48		17	41	26	26	14	54	9	441	57.9%
N Vashon Island	2	65	10	16	42	18	9	52	3		8	5		35	56		321	42.1%
Destination Total		178	24	16	86	18	43	100	3	17	50	31	26	49	110	9	762	100%
Destination Percent Share		23.4%	3.2%	2.1%	11.3%	2.4%	5.6%	13.2%	0.4%	2.2%	6.5%	4.1%	3.5%	6.4%	14.5%	1.2%	100%	

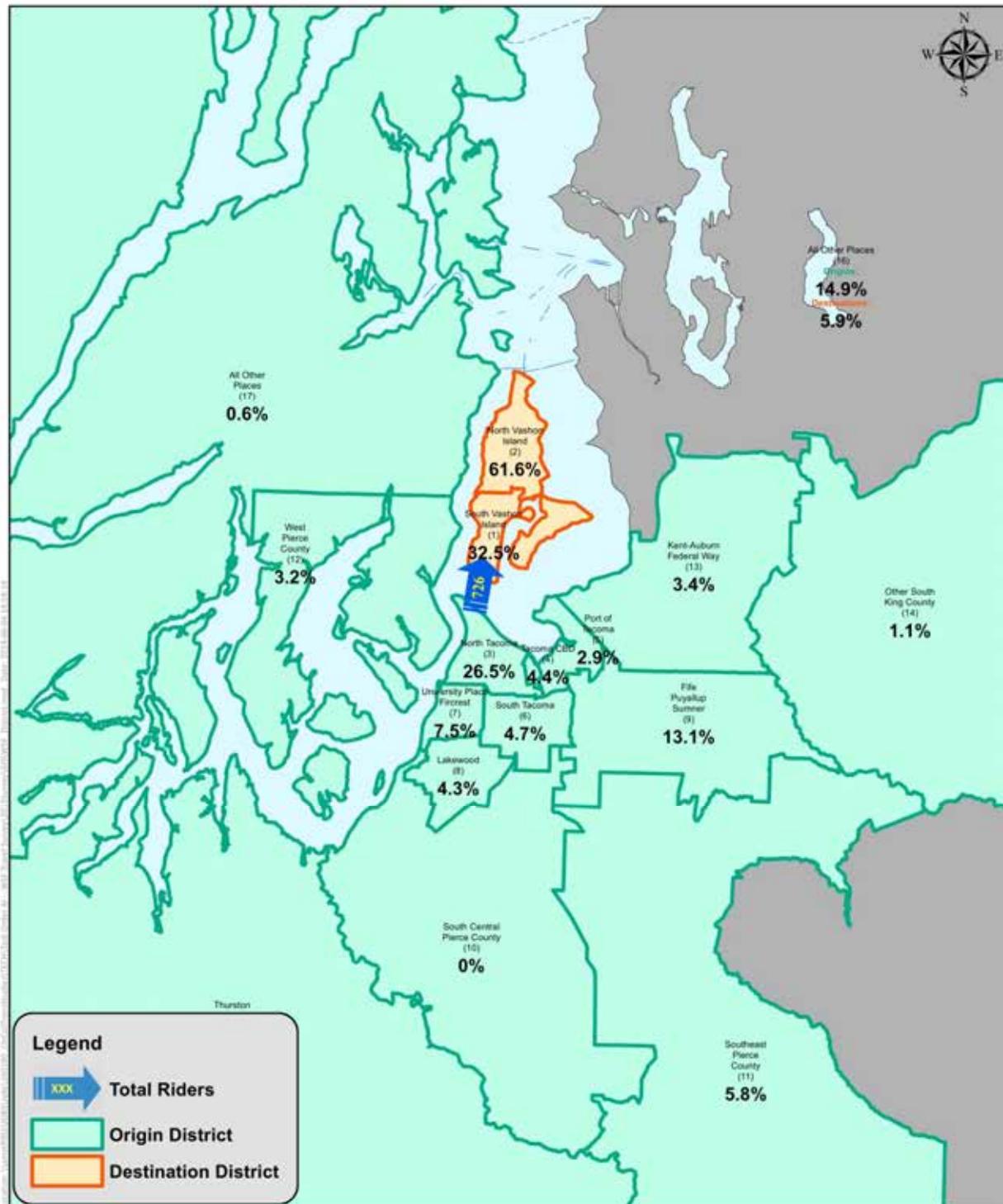
Figure 7-68. Point Defiance–Tahlequah southbound origin and destination locations by boarding mode, Saturday survey period



### 7.5.11 Saturday Travel Patterns—Northbound

Figure 7-69 presents the origins and destinations of Saturday northbound trips by district. This information is presented in tabular format in Table 7-51. The major origins were North Tacoma and Fife/Puyallup/Sumner, while the majority of destinations were in North Vashon Island. Origin and destination locations by boarding mode are shown in Figure 7-70. Origin and destination locations were dispersed.

Figure 7-69. Point Defiance–Tahlequah northbound origin and destination districts, Saturday survey period



**Table 7-51. Point Defiance–Tahlequah northbound boardings by origin and destination district, Saturday survey period**

Origin District ▼		Destination District ▶	S Vashon Island	N Vashon Island	All Other Places	Origin Total	Origin Percent Share
			1	2	16		
N Tacoma	3	57	102	34	193	26.5%	
Tacoma CBD	4	8	24		32	4.4%	
Port of Tacoma	5	9	12		21	2.9%	
S Tacoma	6	21	8	5	34	4.7%	
University Place / Fircrest	7	34	21		55	7.5%	
Lakewood	8	5	27		31	4.3%	
Fife / Puyallup / Sumner	9	31	64		95	13.1%	
SE Pierce Co.	11	13	29		42	5.8%	
W Pierce Co.	12	23			23	3.2%	
Kent-Auburn / Federal Way	13		24		24	3.4%	
Other S King Co.	14		8		8	1.1%	
Thurston Co.	15		50	5	55	7.5%	
All Other Places (east)	16	34	74		108	14.9%	
All Other Places (west)	17		5		5	0.6%	
Destination Total		236	447	43	726	100%	
Destination Percent Share		32.5%	61.6%	5.9%	100%		

Figure 7-70. Point Defiance–Tahlequah northbound origin and destination locations by boarding mode, Saturday survey period

