

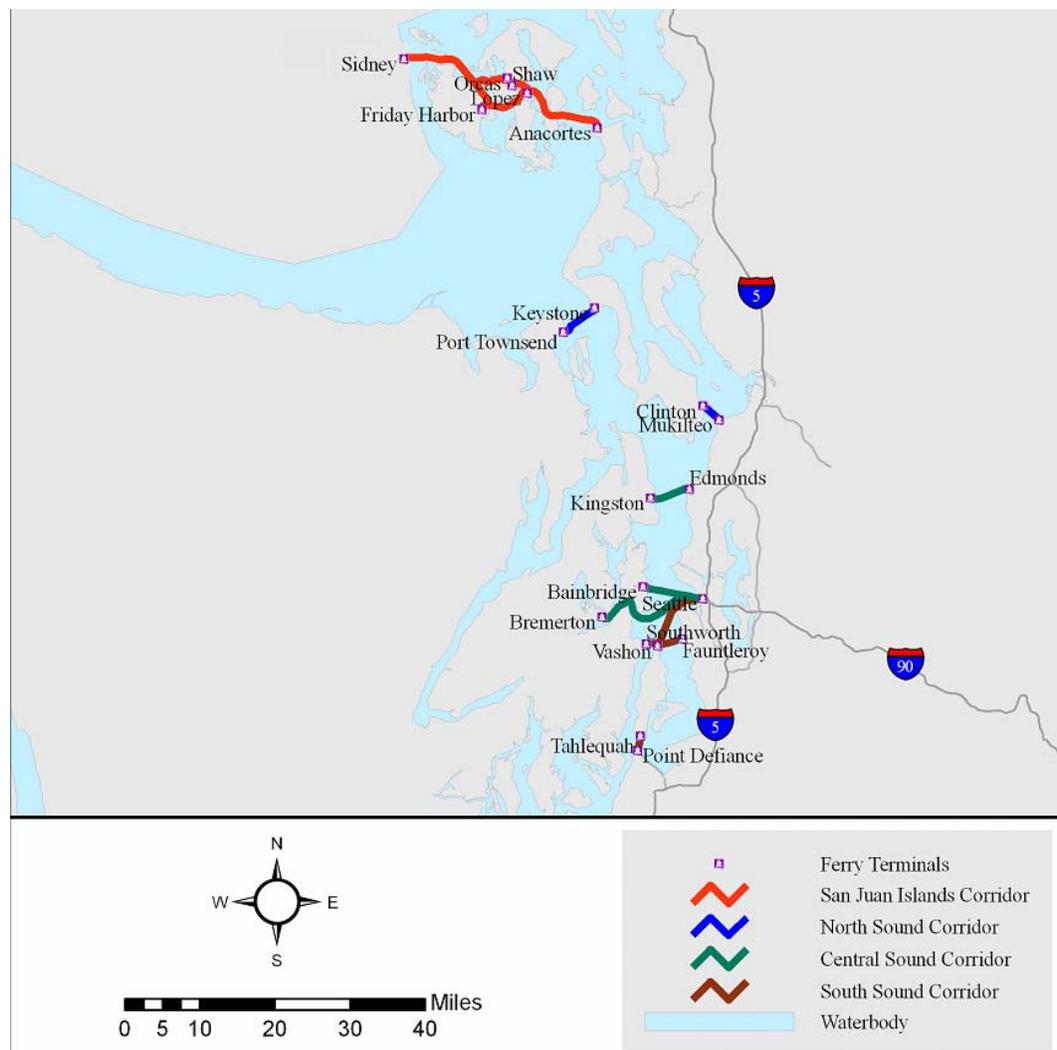
## 4.0 Corridor Travel Markets

There are four corridor travel markets in the WSF system:

- San Juan Islands corridor (Anacortes-San Juan Islands, Anacortes-Sidney routes);
- North Sound corridor (Mukilteo-Clinton, Port Townsend-Keystone routes);
- Central Sound corridor (Edmonds-Kingston, Seattle-Bainbridge, Seattle-Bremerton routes); and
- South Sound corridor (Fauntleroy-Vashon, Fauntleroy-Southworth, Vashon-Southworth, Seattle-Vashon Passenger-Only, Pt. Defiance-Tahlequah routes).

These are presented in Figure 4.1.

Figure 4.1 Corridor Travel Markets for the WSF System



The San Juan Islands corridor is isolated from the rest of the system and does not typically serve as a substitute for any other route based on the origins and destinations of travelers. If someone is traveling to/from the San Juan Islands, this is the only means to get there. This is not true for travelers destined to Sidney, since there are alternate British-Columbia ferries that also go to Vancouver Island. The San Juan Islands corridor includes some trips that travel from one island to another (interisland), but these trips were not included in the corridor or route analyses because the interisland trips could not be expanded due to limited responses and limitations on the available counts.

The North Sound corridor also is isolated in terms of the travelers it serves, since the primary focus in this corridor is on travelers destined for Whidbey Island or points north. The Port Townsend-Keystone ferry draws travelers from all over the Olympic Peninsula, but for only those travelers destined to Whidbey Island or points north. The Mukilteo-Clinton ferry serves Whidbey Island travelers almost exclusively.

The Central Sound corridor has relatively little interchange between the Seattle-Bainbridge and Edmonds-Kingston routes and any other routes in the system, because these routes serve specific communities on the west side (Bainbridge Island and North and Central Kitsap County and the Olympic Peninsula) and because the northern route at Mukilteo-Clinton serves an isolated community as well (Whidbey Island).

There is, however, interplay between the Seattle-Bremerton route and the Southworth-Fauntleroy route, since these both serve South Kitsap County. Since the Bremerton ferry goes into downtown Seattle, this serves more walk-on passengers effectively than the Southworth ferry, which has fewer transit and walking options at Fauntleroy. The other important dynamic is that the Southworth ferry has a shorter crossing time (35 minutes) compared to the Bremerton ferry (60 minutes), so travelers who are equidistant from the terminals (and driving) may choose the shorter crossing time at Southworth. The Seattle-Vashon Passenger-Only ferry also serves walk-ons from South Kitsap County destined to Seattle with a shorter crossing time than Bremerton (35 minutes) but with a transfer required from the Southworth-Vashon ferry and the Seattle-Vashon Passenger-Only ferry. Since the origin-destination survey results show that travelers in South Kitsap County do indeed switch between these three viable options, further market research on the reasons for these tradeoffs may be warranted.

The remainder of the South Sound routes are relatively isolated in the markets they serve. The Point Defiance-Tahlequah, Southworth-Vashon, and the Fauntleroy-Vashon routes all serve Vashon Island almost exclusively. The Seattle-Vashon Passenger-Only ferry also serves Vashon Island primarily, and South Kitsap County as mentioned above.

These are analyzed in detail in Sections 5 through 8, both at the corridor level and at the route level. We also have included some of the key findings from each corridor in the following summaries. Age, income, and auto ownership are quite similar across all the corridors. Specific travel characteristics, though, vary significantly by corridor, as described in the following sections.

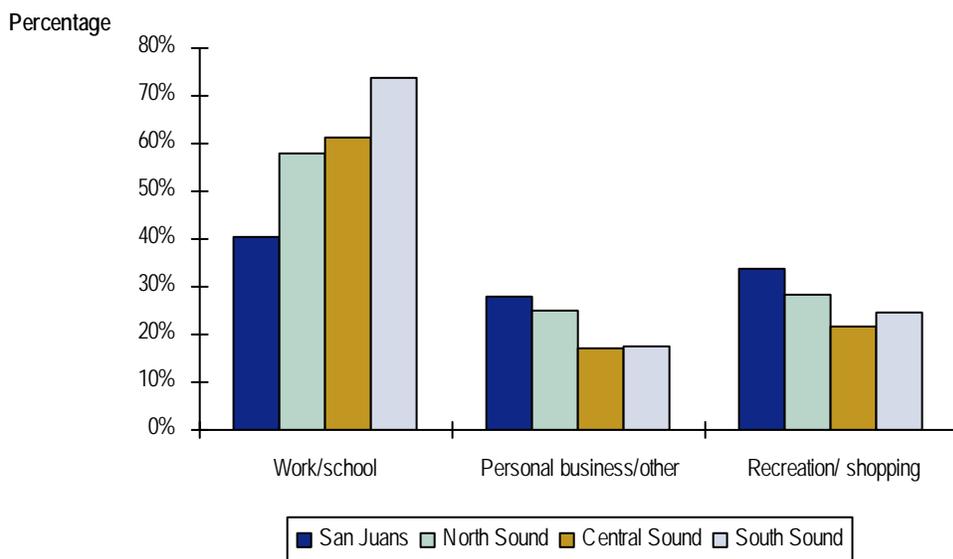
## 4.1 SAN JUAN ISLANDS CORRIDOR FINDINGS

The San Juan Islands corridor is the lowest volume travel corridor in the WSF system, with 1.7 million riders per year (or seven percent of total system ridership). There are two routes in this corridor, with numerous possible inter-island stops on each route: Anacortes-San Juan Islands and Anacortes-Sidney. The corridor serves all trips to/from the San Juan Islands and Vancouver Island (British Columbia).

The ferry riders in this corridor are wealthier than average (\$90,000 per year self-reported household income) and older than average (50 years old) when compared to regional averages (\$53,000 per year self-reported household income and 35 years of age). Consistent with the average household incomes, the number of vehicles per household also is higher than the regional average (2.5 vehicles per household compared to the regional average of 1.7 vehicles per household).

Over the last seven years, work trips have increased in this corridor to become the largest share of total trips (40 percent in 2006 compared to 31 percent in 1999). While the non-work trips still make up more than half the total trips, this increase represents a clear trend towards more working households living on the San Juan Islands, as well as more working opportunities on the San Juan Islands. The San Juan Islands corridor still has the smallest share of work trips of any corridor in the system, as demonstrated in Figure 4.2. But the increasing work trip trend in this corridor is different than the trend that is occurring in other corridors, where work trips are the most dominant trip purpose, but are declining, in part because of telecommuting. There is significant telecommuting in this corridor as well, with 19 percent of all weekday travelers saying that they telecommute at least one day per week.

Figure 4.2 Weekday Trips by Purpose and Corridor



Part of the work trip phenomenon is that there are a significant number of people who travel to work on the San Juan Islands. More than half (58 percent) of these work trips are made by people who live in Whatcom or Skagit County. Another 8 percent live in Seattle and 9 percent live outside the survey area boundaries.

San Juan Island travelers also use the ferry less frequently than travelers in other corridors, because of the longer travel times both on the ferry and traveling on the mainland. Almost 70 percent of weekday travelers commute on the ferry one or two days per week. 84 percent of weekend travelers use the ferry only once a week.

More than half the travelers in this corridor return on a different day than they travel out on, probably because the fares and travel times are high enough to warrant this type of multi-day travel for many travelers. This is consistent with the previous 1999 survey for weekday travelers, but there has been a significant shift in round trip patterns for weekend travelers. In 1999, weekend travelers were more likely to return on a different day (80 percent), but in 2006, they were more likely to return on the same day (61 percent). The 2006 survey also included a question on whether travelers were on their preferred sailing. Almost 20 percent of weekday travelers said that they would prefer a different sailing. The underlying reasons for this result are not well understood, so additional research on this topic is warranted.

There is an increase in ferry riders boarding in a vehicle and a corresponding decrease in ferry riders who walk onboard from 1993 to 1999 (from 75 percent in 1993 to 86 percent in 1999) and then a small decrease in ferry riders boarding in a vehicle from 1999 to 2006 (to 84 percent in 2006). The small decrease is due to car passengers changing modes (from 38 percent in 1999 to 30 percent in 2006) rather than car drivers changing modes (because these increase from 60 to 63 percent from 1999 to 2006). This may be a result of a combination of factors, including that the increased work trips will more likely need their vehicle for work purposes, that destinations are more likely to be beyond transit accessible locations, and higher incomes make some ferry riders less sensitive to cost increases. A large number of people keep a vehicle at their destination terminal, so that they can drive to their destination, but still walk on the ferry (50 percent for weekday and 28 percent for weekend) further supporting the need for a vehicle at Anacortes.

The Anacortes-San Juans ferry riders follows a typical commuter pattern, with 77 percent of travel heading westbound in the p.m. peak, even though this route is not typically thought of as a commuter route. This has increased from 53 percent in 1999. The p.m. peak period represents 35 percent of daily traffic.

## 4.2 NORTH SOUND CORRIDOR FINDINGS

The North Sound Corridor is the second highest travel corridor in the WSF system, with 4.8 million riders per year, but this represents only 20 percent of total system ridership. There are two routes in this corridor: Mukilteo-Clinton

and Port Townsend-Keystone. The corridor serves primarily trips to and from Whidbey Island and trips from the Olympic Peninsula destined to points north of Whidbey Island.

The ferry riders in this corridor are wealthier than average (\$90,000 per year self-reported household income) and older than average (51 years old) when compared to regional averages (\$53,000 per year self-reported household income and 35 years of age). Consistent with the average household incomes, the number of vehicles per household also is higher than the regional average (2.5 vehicles per household compared to the regional average of 1.7 vehicles per household).

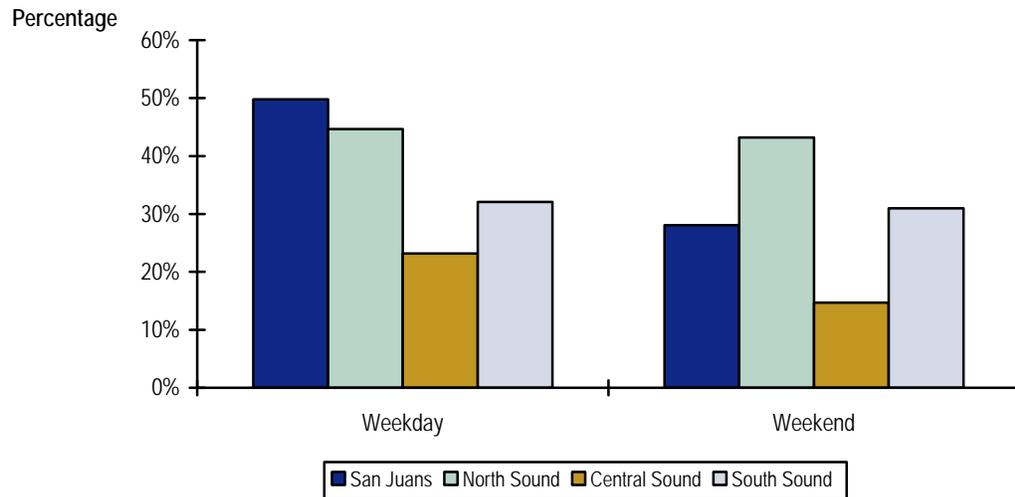
The corridor is dominated by work trips (more than 52 percent). Even though work trips are the most common trip purpose, they are declining as a percent of total trips since 1993 (56 percent) but have held constant since 1999 (at 52 percent). This is likely because more people are telecommuting (22 percent of weekday travelers said they telecommute at least one day per week), there are more job opportunities on Whidbey Island, and more people can work at home full-time.

Travelers in the North Sound corridor are most likely to use the ferry one or two days per week (63 percent) and weekend travelers are even more likely to travel one or two days per week (83 percent). 27 percent of weekday travelers use the ferry five days per week.

The vast majority of travelers return the same day and using the same ferry route, as expected. But the number of return trips on a different day has increased significantly in recent years (from 14 percent in 1999 to 27 percent in 2006) for weekdays. This is likely because with higher fares, ferry riders are more likely to take fewer trips but stay longer. The 2006 survey also included a question on whether travelers were on their preferred sailing and 27 percent of weekday travelers said that they would prefer a different sailing. The underlying reasons for this result may be overcrowding on vehicle ferries in the peak-period, but additional research on this topic is warranted.

There is an increasing trend in ferry riders boarding in a vehicle and a decreasing trend in ferry riders who walk onboard from 1993 to 2006 (from 81 percent in 1993 to 86 percent in 1999 to 88 percent in 2006). This may be a result of a combination of factors, including that the increase in non-work trips are less likely to be walk-ons, that destinations are more likely to be beyond transit accessible locations, higher incomes make some ferry riders less sensitive to cost increases, and/or more travelers need their vehicle for work purposes. A significant number of people keep a vehicle at their destination, so that they can drive to their destination terminal, but still walk on the ferry (45 percent for weekday and 43 percent for weekend). This is higher than for any other corridor on the weekends and almost the highest on the weekdays, as shown in Figure 4.3.

**Figure 4.3 Percent of Travelers keeping Vehicles or Bicycles at Destination Ferry Terminals**



In the North Sound Corridor, the Mukilteo-Clinton route is more commuter oriented, with 74 percent of p.m. peak travel heading westbound in the p.m. peak period. The Port Townsend-Keystone route has 61 percent of travel heading westbound in the p.m. peak period. Both routes have increased the percent of p.m. peak period travel in the westbound direction since 1999 (69 and 56 percent, respectively).

### 4.3 CENTRAL SOUND CORRIDOR FINDINGS

The Central Sound corridor is the highest travel corridor in the WSF system, with 13.2 million riders per year (this is 56 percent of system ridership). There are three routes in this corridor: Seattle-Bainbridge, Seattle-Bremerton, and Edmonds-Kingston. The corridor serves primarily North and Central Kitsap County and Bainbridge Island traveling to/from central and north Seattle.

Ferry riders in this corridor are wealthier than average (\$100,000 per year self-reported household income) and older than average (48 years old) when compared to regional averages (\$53,000 per year self-reported household income and 35 years of age). Consistent with the average household incomes, the number of vehicles per household also is higher than the regional average (2.3 vehicles per household compared to the regional average of 1.7 vehicles per household).

The corridor is dominated by work trips (more than 60 percent). Even though work trips are the most common trip purpose, they are declining as a percent of total trips since 1993 (73 percent in 1993 and 61 percent in 2006). This is likely because more people are telecommuting (19 percent of weekday travelers said they telecommute at least one day per week), there are more job opportunities

on Bainbridge Island and in Kitsap County, and more people can work at home full-time.

Weekday travelers are most likely to travel four or five days per week (more than 40 percent use ferries five days per week) but weekend travelers are most likely to travel only one day per week, indicating that the weekend market is made up of different people than the weekday market and for different purposes (i.e., non-work).

The vast majority of travelers return the same day and using the same ferry route, as expected. But the number of return trips on a different day has increased significantly in recent years (from 11 percent in 1999 to 24 percent in 2006) for weekdays. This is likely because with higher fares, ferry riders are more likely to take fewer trips but stay longer. The 2006 survey also included a question on whether travelers were on their preferred sailing and 30 percent of weekday travelers said that they would prefer a different sailing. The underlying reasons for this result are not well understood, so additional research on this topic is warranted.

There is an increasing trend in ferry riders boarding in a vehicle and a decreasing trend in ferry riders who walk onboard from 1993 to 2006. This may be a result of a combination of factors, including that the increase in non-work trips will less likely be walk-ons, that destinations are more likely to be beyond transit accessible locations, that higher incomes make some ferry riders less sensitive to cost increases, and/or more travelers need their vehicle for work purposes. A significant number of people keep a vehicle at their destination, so that they can drive to their destination, but still walk on the ferry (23 percent for weekday and 15 percent for weekend).

In the Central Sound Corridor, the Seattle-Bainbridge route is the most commuter oriented, with 86 percent of p.m. peak travel heading westbound in the p.m. peak period. This is an increase from 78 percent in 1999. It represents 46 percent of daily traffic. The Seattle-Bremerton and Edmonds-Kingston routes have 74 and 66 percent of travel heading westbound in the p.m. peak period, respectively. These routes have not changed significantly since 1999. Seattle-Bremerton has 46 percent of daily traffic in the p.m. peak period and Edmonds-Kingston has 34 percent.

## 4.4 SOUTH SOUND CORRIDOR FINDINGS

The South Sound corridor is the third highest travel corridor in the WSF system, with four million riders per year (this is 17 percent of system ridership). There are five routes in this corridor: Fauntleroy-Vashon, Fauntleroy-Southworth, Vashon-Southworth, Seattle-Vashon Passenger-Only, Pt. Defiance-Tahlequah routes. The corridor serves primarily trips to/from Vashon Island and South Kitsap County.

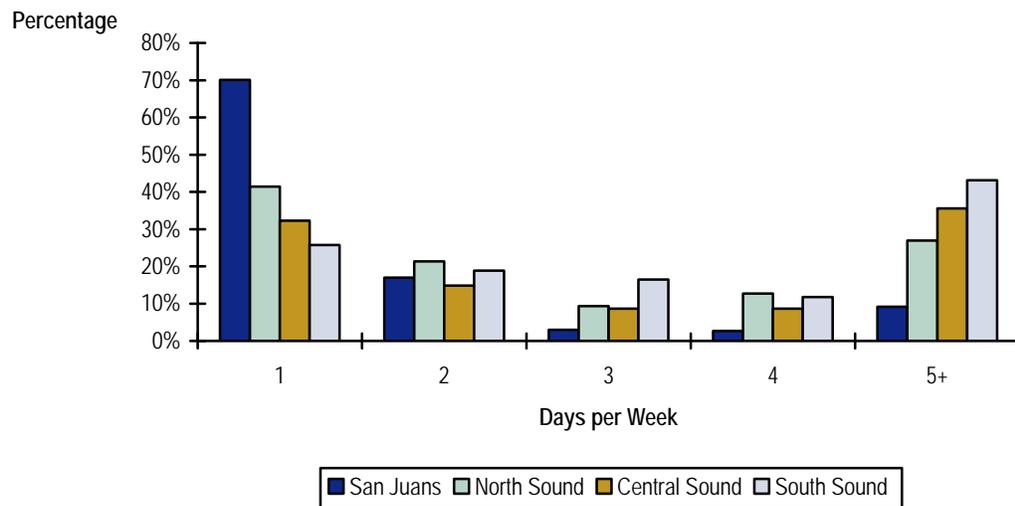
The ferry riders in this corridor are wealthier than average (\$94,000 per year self-reported household income) and older than average (48 years old) when

compared to regional averages (\$53,000 per year self-reported household income and 35 years of age). Consistent with the average household incomes, the number of vehicles per household also is higher than the regional average (2.4 vehicles per household compared to the regional average of 1.7 vehicles per household).

The corridor is dominated by work trips (more than 74 percent). Even though work trips are the most common trip purpose, they are declining as a percent of total trips since 1999 (from 64 percent in 1999). This may be because more people are telecommuting (22 percent of weekday travelers said they telecommute at least one day per week), there are more job opportunities on Vashon Island and in South Kitsap County, and more people can work at home full-time.

More weekday travelers are likely to travel four or five days per week than in any other corridor (more than 43 percent use ferries five days per week) as shown in Figure 4.4. Weekend travelers are most likely to travel only one day per week (55 percent), indicating that the weekend market is made up of different people than the weekday market and for different purposes (i.e., nonwork).

**Figure 4.4 Average Number of Days per Week Riding the Ferry by Corridor**



The vast majority of travelers return the same day and using the same ferry route, as expected. But the number of return trips on a different day has increased significantly in recent years (from eight percent in 1999 to 16 percent in 2006) for weekdays. This is likely because with higher fares, ferry riders are more likely to take fewer trips but stay longer. The 2006 survey also included a question on whether travelers were on their preferred sailing. More than a quarter of weekday travelers (27 percent) said that they would prefer a different sailing. The underlying reasons for this result may be overcrowding on vehicle ferries in the peak-period, but additional research on this topic is warranted.

There is an increasing trend in ferry riders boarding in a vehicle (from 64 percent in 1993 to 81 percent in 1999) and a corresponding decreasing trend in ferry riders who walk onboard from 1993 to 1999 but the ferry riders boarding in a vehicle has been constant since then (at 81 percent in 2006). This may be a result of a combination of factors, including that the increase in non-work trips are less likely to be walk-ons, that destinations are more likely to be beyond transit accessible locations, higher incomes make some ferry riders less sensitive to cost increases, and/or more travelers need their vehicle for work purposes. A surprising number of people keep a vehicle at their destination terminal, so that they can drive to their destination, but still walk on the ferry (32 percent for weekday and 31 percent for weekend).

In the South Sound Corridor, the Seattle-Vashon Passenger-Only route is the most commuter oriented, with 98 percent of p.m. peak travel heading westbound in the p.m. peak period. This is an increase from 86 percent in 1999. The other routes in this corridor range from 58 and 73 percent of travel heading westbound in the p.m. peak period. Most routes have not changed significantly since 1999, but Southworth-Vashon route has increased from 39 percent to 58 percent traveling westbound in the p.m. peak period and Fauntleroy-Vashon has increased from 63 to 73 percent traveling westbound in the p.m. peak period. These routes range from 36 to 46 percent of daily traffic in the p.m. peak period except for Southworth to Vashon, which has 21 percent.

