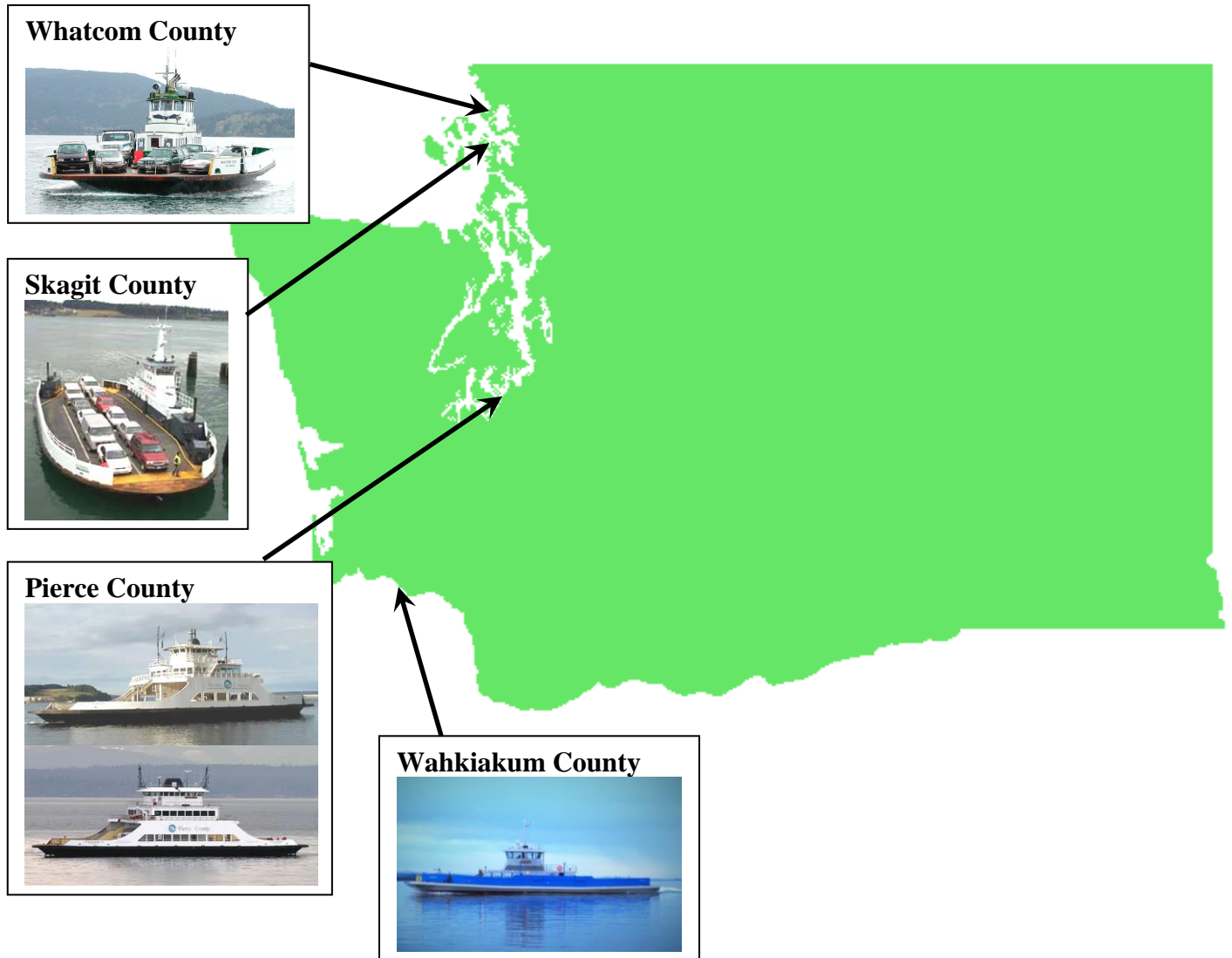


COUNTY FERRY SYSTEMS



The topography of Washington State brings challenges to the transportation system. Besides the “usual” array of highway bridges, tunnels, and mountain passes, vehicle and passenger ferries are an integral part of the state transportation system. In addition to various public and private auto and passenger-only ferries in the State of Washington, four counties operate auto ferries as part of their local transportation network:

- Pierce County operates two ferries on Puget Sound connecting Anderson and Ketron Islands with the mainland at Steilacoom.
- Skagit County operates one ferry on Puget Sound connecting Guemes Island with Fidalgo Island at Anacortes.

- Whatcom County operates one ferry on Puget Sound connecting Lummi Island with the mainland at Gooseberry Point, west of Bellingham.
- Wahkiakum County operates one ferry on the Columbia River, connecting Puget Island (near Cathlamet) with Westport (Clatsop County), Oregon.

PIERCE COUNTY ANDERSON & KETRON ISLAND FERRIES

The M/V Christine Anderson and M/V Steilacoom II provide service between the town of Steilacoom and Anderson and Ketron Islands. The ferries provide the only link to the mainland for the two islands' permanent and part-time residents. The boats begin/end the day at Steilacoom, with normal operating hours from 5:45 A.M. to 8:30 P.M., extending to 11:00 P.M. Friday through Sunday evenings. One round-trip takes approximately 60 minutes (serving Anderson only) and 75 minutes (serving both Anderson and Ketron).

Christine Anderson



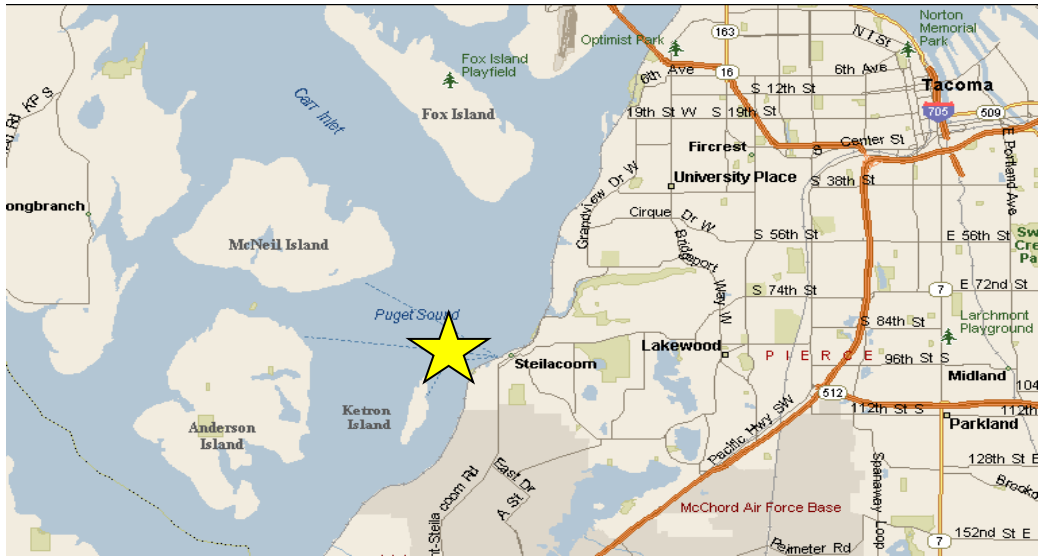
Steilacoom II



Vessel Built:	1994	2006
Vessel Vehicle Capacity:	54	54
Vessel Passenger Capacity:	250	300
Length of Route:		3.5 miles (Steilacoom-Anderson)
Crew Size:		4

2014:

Scheduled Runs (one-way):	9,176
Vessel Miles Travelled:	37,139 miles
One-Way-Trip vehicles carried:	204,226
One-Way-Trip drivers & passengers carried:	382,690
Maintenance and Operation Costs:	\$ 4,089,892



SKAGIT COUNTY GUEMES ISLAND FERRY

The M/V Guemes provides service between the city of Anacortes and Guemes Island. The ferry provides the only link to the mainland for the island's permanent and part-time residents. The boat begins/ends the day at Anacortes, with normal operating hours from 6:30 A.M. to 10:30 P.M., extending to 12:30 A.M. Saturday and Sunday mornings. One round-trip takes approximately 30 minutes.



Vessel Built:	1979
Vessel Vehicle Capacity:	22
Vessel Passenger Capacity:	99
Length of Route:	0.7 mile
Crew Size:	3

2014:	
Scheduled Runs (one-way):	17,680
Vessel Miles Travelled:	12,376 miles
One-Way-Trip vehicles carried:	173,145
One-Way-Trip drivers & passengers:	368,856
Maintenance and Operation Costs:	\$2,504,800



WAHKIAKUM COUNTY

PUGET ISLAND, WASHINGTON – WESTPORT, OREGON FERRY

The M/V Oscar B provides the only interstate connection across the Columbia River between the Astoria-Megler Bridge (43 miles to the west) and the Longview Bridge (26 miles to the east). In addition to connecting SR 4 in Washington with US 30 in Oregon, it serves as a detour route during closures of SR 4 and US 30. The boat begins/ends the day at Puget Island (connected by bridge to the town of Cathlamet), with normal operating hours from 5:00 A.M. to 10:30 P.M. One round-trip takes a minimum of 30 minutes. During 2015, the M/V Oscar B replaced the M/V Wahkiakum, which was a 12 vehicle vessel built in 1962.



Vessel Built:	2015
Vessel Vehicle Capacity:	23
Vessel Passenger Capacity:	100
Length of Route:	1.5 miles
Crew Size:	2

2014:	
Scheduled Runs (one-way):	13,140
Vessel Miles Travelled:	19,710 miles
One-Way-Trip vehicles carried:	47,450
One-Way-Trip drivers & passengers carried:	79,081
Maintenance and Operation Costs:	\$ 848,988



WHATCOM COUNTY LUMMI ISLAND FERRY

The M/V Whatcom Chief provides service between Gooseberry Point and Lummi Island (Gooseberry Point is located on the Lummi Indian Reservation). The ferry provides the only link to the mainland for the island's permanent and part-time residents. The boat begins/ends the day at Lummi Island, with normal operating hours from 5:40 A.M. to 12:30 A.M. One round-trip takes a minimum of 20 minutes.



Vessel Built:	1962
Vessel Vehicle Capacity:	20
Vessel Passenger Capacity:	103
Length of Route:	0.9 mile
Crew Size:	3

2014:		
Scheduled Runs (one-way):		24,776
Vessel Miles Travelled:		22,298 miles
One-Way-Trip vehicles carried:		223,180
One-Way-Trip drivers & passengers carried:		353,596
Maintenance and Operation Costs:		\$ 2,332,562



County Road Relationship

The operation of auto ferries by counties is considered to be a component of the county road system. The docks and transfer spans are classified as bridges for funding eligibility purposes. The ferries themselves are considered extensions of the adjoining county roads. Supporting facilities such as parking lots, vehicle holding lanes, and passenger waiting areas, are considered an integral part of the ferry system and, therefore, ancillary facilities to the county road system.

Pierce County also has been successful in qualifying its ferry system as a transit system under Federal Transit Authority rules, in cooperation with Pierce County Transit.

The following table demonstrates the size of each county's roadway system and the comparative magnitude of both ferry and overall road related expenditures.

Calendar Year 2014							
County	Total County Road Centerline Miles	Number of County Bridges	Length of Ferry Route (miles)	Ferry Docks Included in County Bridge Inventory	(from county financial reports)		
					Total County Road Related Expenditures	Total County Ferry Related O&M Expenditures	County Ferry O&M Expenditures as a Percent of Total Road Related Expenditures
Pierce	1557	102	3.5	3	\$100,899,000	\$4,089,892	4.1%
Skagit	801	105	0.7	2	\$23,206,000	\$2,504,800	10.8%
Wahkiakum	139	20	1.5	1	\$6,757,000	\$848,988	12.6%
Whatcom	940	136	0.9	2	\$32,320,000	\$2,332,562	7.2%

With the high cost of operations and its drain on local resources it might be argued that counties should simply discontinue the service and allow a private entity to provide the service at no public cost. In fact, many years ago a number of ferries in the state were private operations. In many cases it became necessary for public entities to step in to ensure public transportation services were continued, much like any other road or bridge that provides the only access to public and private properties.

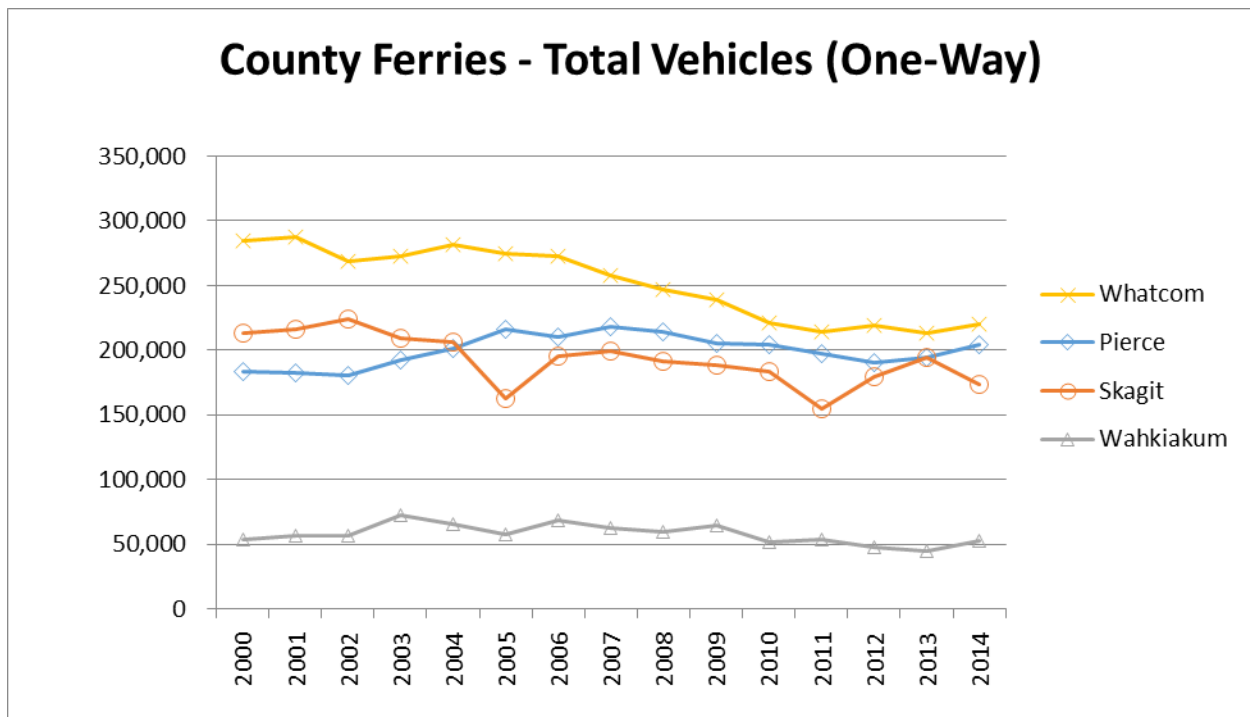
Due to the high cost of operation, all four ferry systems generate supplemental revenue through user fees (fares). As discussed in more detail later in this report the charging of fares provides substantial financial support, although local financial subsidy is still required especially during years of major maintenance activities.

County Ferry System Use

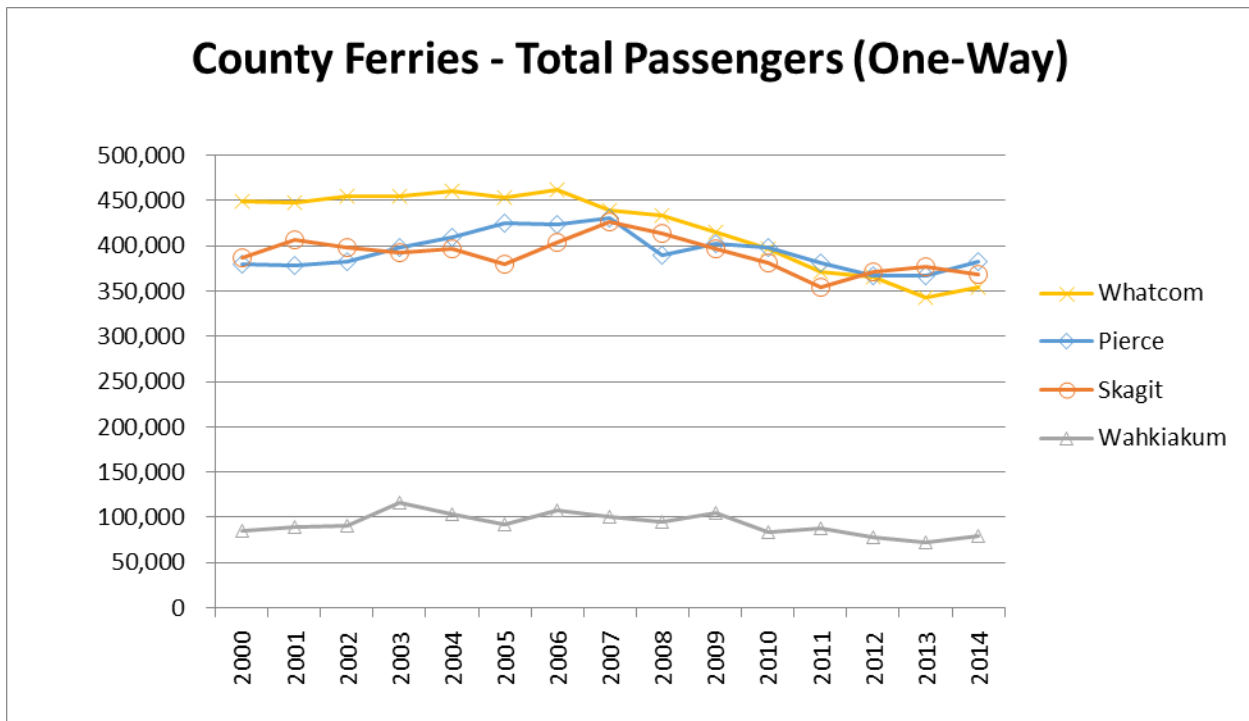
With the current population and demographic similarities between the islands served by Pierce, Skagit, and Whatcom counties, it is not surprising that both the vehicle and passenger utilization is also very similar for these three ferry systems. Due to the more remote location and existing roadway alternatives, it is also not surprising that the Wahkiakum system carries substantially fewer riders than the other three counties. Regardless of the magnitude of ridership numbers, all four county ferries continue to provide a critical link in their local transportation system.

The relationship between demand (demographics / land supply / available on-island services) and ferry service provided (schedule / car deck space / parking / passenger space) is very dynamic. The application of a supply/demand model is also highly influenced by a third factor: cost of both providing and using the ferry service. Fare structures ultimately have a major influence over both short-term and long-term ridership levels.

The following two graphs present ridership information, comparing the four county ferry systems.



County Ferries - Total Passengers (One-Way)



Operation and Maintenance Costs

Operation and Maintenance Costs (O&M) are routinely divided into “fixed” and “variable” costs. The variable costs are primarily fuel and the amount expended on a given year for repair/maintenance of the boat and associated docks and facilities. It is not uncommon for many repair/maintenance costs to be considered fixed costs due to their predictable and repetitive nature.

With the formal establishment of an operating schedule, the most significant fixed cost is associated with staffing, whether county employees or contracted operation. Under Coast Guard regulations (operational safety standards), there is a minimum crew size required on each vessel at all times of operation, subject to the vessel’s overall size and user capacity.

For all four of these ferry systems the annual O&M costs are the primary factor used to determine the appropriate fare structure for users to cover a portion of the system costs.

Even though not included in this O&M financial analysis, when a capital expenditure occurs local governments may account for a depreciation expense as well. While depreciation of capital expenditures will affect the literal calculation of operating costs for an individual ferry system, it is neither included nor allowed in the required financial reporting of ferry O&M at the state level. From a local policy standpoint, depreciation may or may not be included in local fare setting policies.

Operation and Maintenance Revenues

The three categories of O&M revenue include Farebox, Operating Subsidy, and Other Local Funds.

Farebox - The total of all user fees charged for ferry services.

As suggested in the "County Ferry System Use" section, the impact of various fare setting policies can highly influence an operational supply/demand evaluation. Each of the counties expends a great deal of organizational time in reviewing and planning for cost recovery through the farebox. It is by far the one revenue source that the ferry user community is most interested in.

At times the established fares may include a surcharge in addition to the normal fare. Surcharges are commonly applied to address a specific capital or operational financial need having both a defined magnitude and predicted life.

Operating Subsidy - Special revenue directed to the counties specifically due to the unique nature and costs of operating a ferry as a part of their road system.

For Wahkiakum County, due to the fact that this ferry service is primarily an extension of a state highway, the operating subsidy is a direct WSDOT budgeted expenditure item. The basis for this subsidy is specifically outlined in RCW 47.56.720. The dollar amount is adjusted periodically as appropriate.

Prior to 2015, the other three counties (Pierce, Skagit, and Whatcom) were receiving an equitable share of \$500,000 on an annual basis, as described in RCW 47.56.725. During the 2015 Legislative Session, this amount was increased to \$900,000 plus an annual inflation factor. The distribution between these three counties is based on the relative magnitude of financial shortfall (operating deficit) of each on a given year. The "deficit" is the difference between total O&M costs and the combination of farebox revenue and certain local funds.

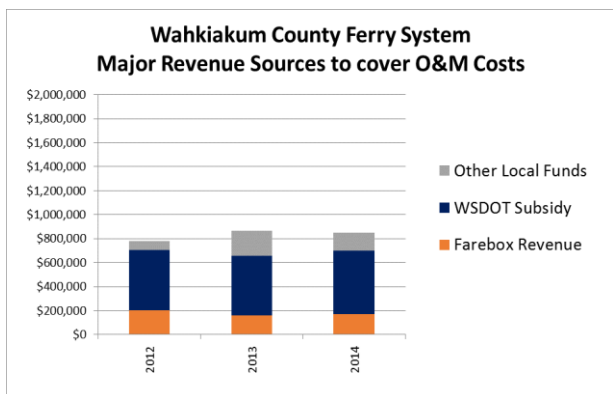
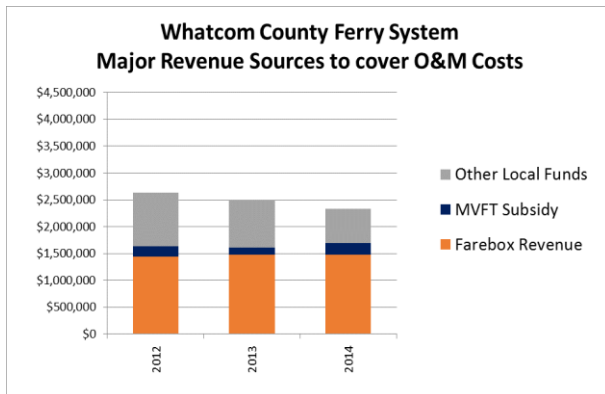
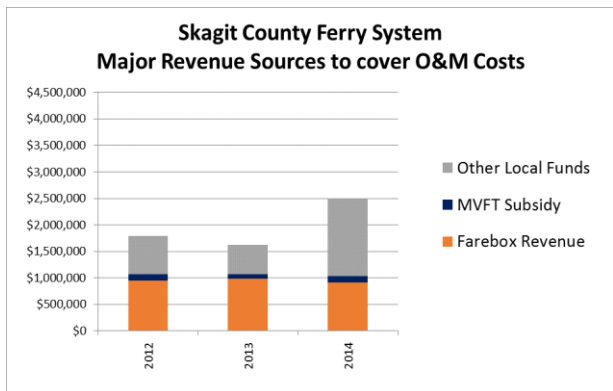
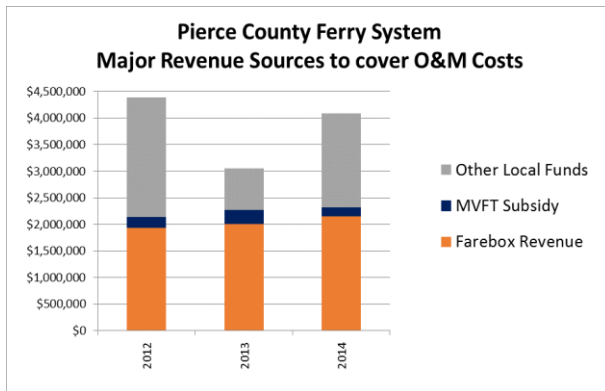
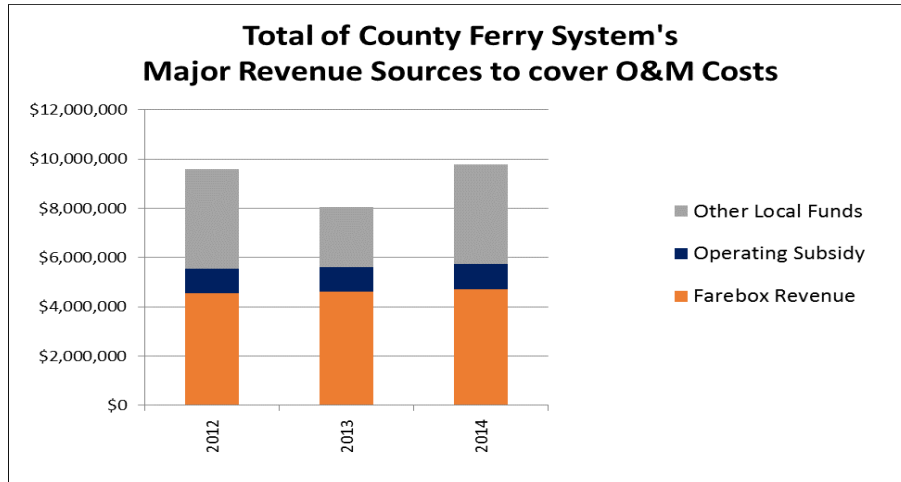
Other Local Funds - Represents the balance of revenue needs in order to offset all O&M costs.

The source of other local funds is the counties' Road Fund and its various revenue sources. The two most significant sources include the counties' share of general distribution of Fuel Tax and the local Road Levy (property tax).

In the case of Pierce, Skagit, and Whatcom, a part of their Fuel Tax general distribution is a calculated amount that is "attributable to the county ferry", as noted in RCW 47.56.725 (3). This calculated amount of Fuel Tax is considered a part of "Other Local Funds" because it is only an administrative calculation without any requirement of dedicated use or purpose other than a local county road purpose.

An additional potential local revenue source is through formation of a Ferry District, as provided for in RCW 36.54. At this time, none of the four counties has formed a Ferry District, opting instead to focus on the farebox and other local revenues.

The following charts represent the magnitude of operating costs and the relative significance of the three major revenue sources for the four counties.



Of particular note overall:

- O&M costs are highly variable on a given year, with 100% of the variability addressed through use of "other local funds"
- Vessel and land use limitations discourage growth in the number of users and, therefore, the need to increase fares over time
- The general decline in the number of users (see previous graphs) can be attributed to the same economic influences affecting overall mobility, along with the moderate increase seen in the past couple of years