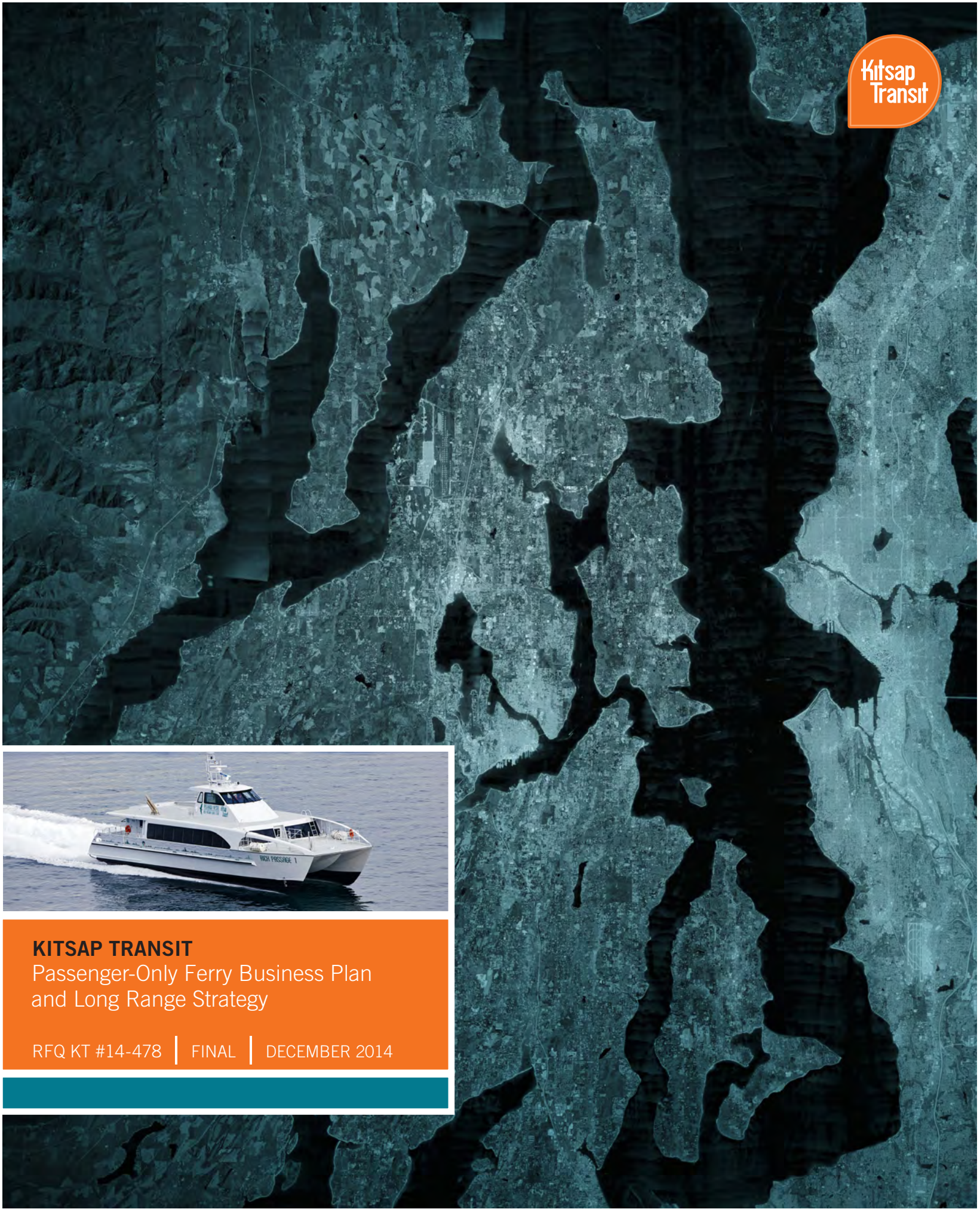

KITSAP TRANSIT
Passenger-Only Ferry Business Plan and Long Range Strategy

RFQ KT #14-478 | FINAL | DECEMBER 2014

Passenger-Only Ferry Business Plan and Long Range Strategy

Summary Report

December 2014

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Table of Contents

List of Figures

List of Tables

Attachments

Appendices (Under Separate Cover)

1 Introduction/Overview

Successful passenger-only service in Kitsap County will involve a phasing plan that introduces service in an incremental way and then builds upon its successes. The plan will build upon existing infrastructure, including terminal, vessel, and staff expertise, both in-house and in partnering agencies, to bring a safe, efficient and reliable travel option to Kitsap County residents.

1.1 PURPOSE

This business plan and long-range strategy will be the blueprint for implementation of Passenger-Only Ferry (POF) service in Kitsap County. The plan includes a comprehensive near-term and long-range financial plan.

1.2 SCOPE

To prepare a comprehensive business plan that builds upon past experience and existing resources in the region, the project addressed the following questions:

- What can we learn from past POF service?
- What are the options for organizing and funding POF service?
- What do potential riders and the community tell us about POF service?
- Where are the riders?
- What terminal facilities and vessels do we need?
- How should we manage and operate the service?
- How should we phase implementation?
- How much will this cost and how do we pay for it?
- What economic benefits will the service bring?

1.3 PUBLIC INVOLVEMENT PLAN

Kitsap Transit's strategy for informing and involving the public and key stakeholders in the development of the business plan and long-range strategy to implement POF service between Kitsap County and Seattle is outlined in the Public Involvement Plan (PIP). The goals of public involvement for this project were the following:

- Inform the public and key stakeholders.
- Seek input to inform the POF business plan.
- Gauge community interest in POF.
- Build understanding about POF.

Project information sheets were developed throughout the project to inform the public. Potential rider and general community input was received during the project through two online surveys which focused on interest in the service, travel patterns, potential fare, and funding mechanisms. The outcomes of these surveys are further documented in Section 4 of this report.

1.4 ROUTES IDENTIFIED FOR SERVICE

Three routes were identified for analysis: one in north, south, and central Kitsap County. The routes and corresponding Kitsap terminal locations were chosen based on a number of factors, including infrastructure, proximity to other transportation modes, and access. The terminal locations are:

- **Bremerton:** At the location of the existing Kitsap Transit foot ferry terminal, located northeast of the Washington State Ferries (WSF) terminal; the site of the newly constructed A-float and associated improvements.
- **Kingston:** At the location of past passenger-only ferry operations, located southwest of the WSF terminal.
- **Southworth:** At a proposed location southeast of existing WSF terminal.
- **Pier 50 in Seattle:** The eastern hub of the Kitsap County passenger-only ferries would be located at Pier 50, the current location of the King County Water Taxi, located south of the existing WSF vehicle ferry terminal. Pier 50 is currently preparing redevelopment plans as part of the Colman Dock project. As part of the Seattle Permanent Facility Siting Study prepared for the King County Water Taxi, Pier 50 was identified as the best location for POF service.

2 What Can We Learn From Past POF Service?

Prior to beginning work to outline a proposed service or a potential finance plan, the team researched the history of passenger-only ferries in Kitsap County and the Puget Sound. The goal with this research was to learn from past failures and successes alike. The findings are clear: there is a demonstrated desire for POF service in Kitsap County, and the majority of past unsuccessful service attempts can be attributed to unsustainable financial plans and, in the case of past Bremerton—Seattle POF service, to environmental concerns, specifically wake wash impacts. Refer to Table 2-1.

Extensive research has been undertaken on the beach impacts of wake wash in Rich Passage, including regular monitoring of beach conditions for a period of time. This research found that high-speed, passenger-only ferry service is feasible through Rich Passage with the use of the specially designed vessel, the Rich Passage 1 (RP1)[1].

[1] Golder Associates Inc., Rich Passage Wave Energy Evaluation (113-93490.300), September 2, 2013.

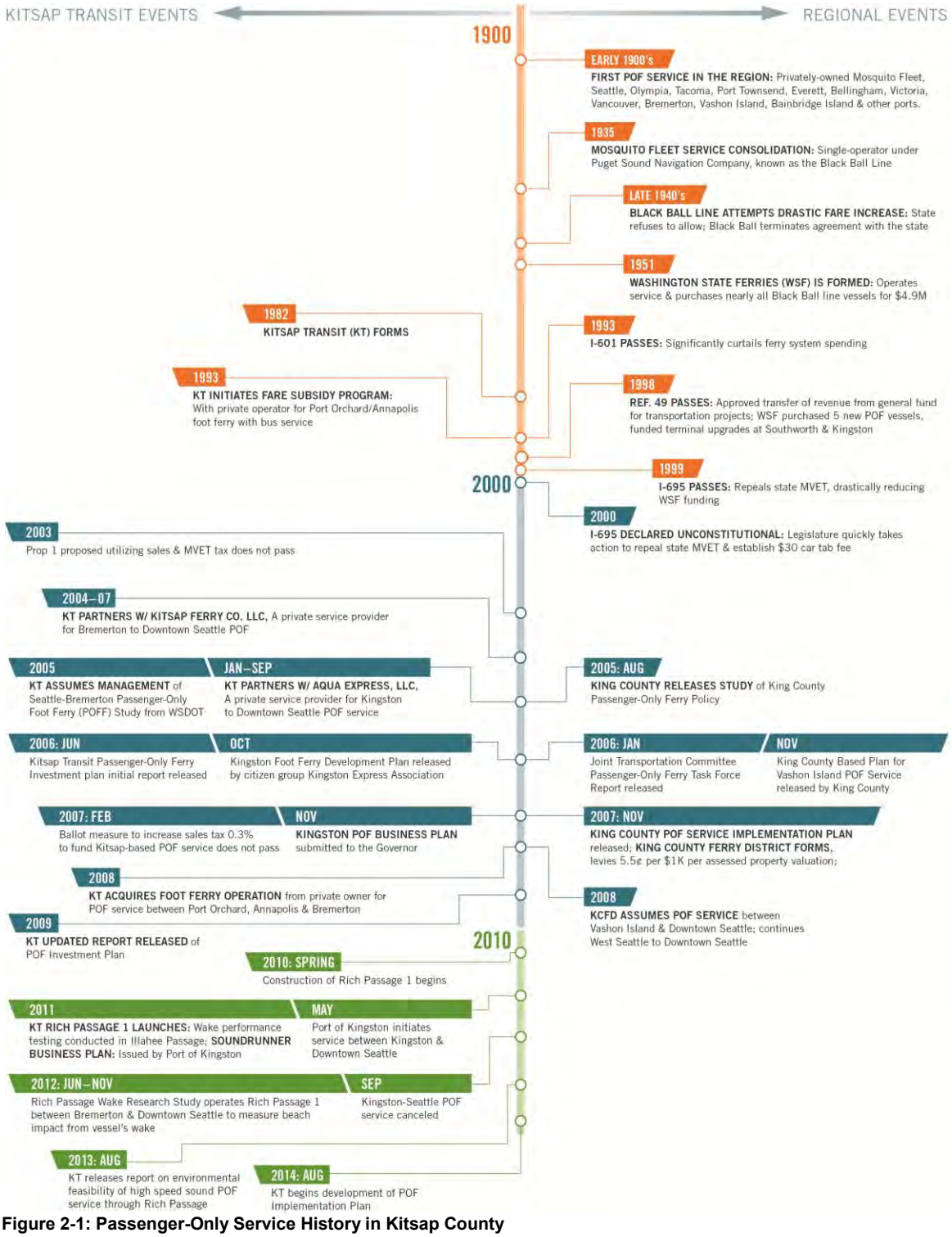


Figure 2-1: Passenger-Only Service History in Kitsap County

3 What Should the Governance Structure Be?

There are a number of different governance structures that Kitsap Transit could adopt for POF service, which include a Public Transportation Benefit Area (PTBA), Ferry District, or Port District. Of these, the PTBA model appears to be the best fit for the envisioned service by providing the most flexibility and funding authority. Additionally, Kitsap Transit is currently designated as a PTBA, therefore no additional legislative action would be required.

A PTBA is a special taxing district established by Washington State for the purpose of providing public transportation. As a PTBA, Kitsap Transit has the authority to raise funds through voter-authorized tax packages by way of the sales and use tax up to 0.9 percent, as well as the motor vehicle excise tax (MVET) up to 0.4 percent. As a PTBA with a boundary located on the Puget Sound, Kitsap Transit is authorized to provide POF service; however, prior to introducing such service, the development of a POF business plan is required. This body of work will serve as that business plan.

4 What Do Potential Riders and the Community Tell Us About POF Service?

As part of the public involvement effort on the project, two public surveys were administered. The surveys were administered online and advertised on several internet news sites, at tabling events around the community, on WSF Ferries, and through Kitsap Transit's rider alert system. The first of the surveys focused on general interest in POF, understanding that additional local funding is needed to run the service, and the public's willingness to pay higher than current prices for alternative travel modes. The second survey focused on opinions regarding fares and funding as well as service preferences for the proposed and extended service.

4.1 SURVEY RESULTS

More than 1,200 respondents completed the online survey in June 2014 and 950 more completed the survey in August 2014. Potential Bremerton riders were the largest group of survey responders. The majority of respondents strongly agreed with statements about the benefits of POF service, particularly that a 35-minute or shorter trip is important, and that this POF service will help create easier access to jobs. Other factors regarding the service that were identified as important include: travel time, schedule flexibility, and fares. Refer to Figure 4-1.

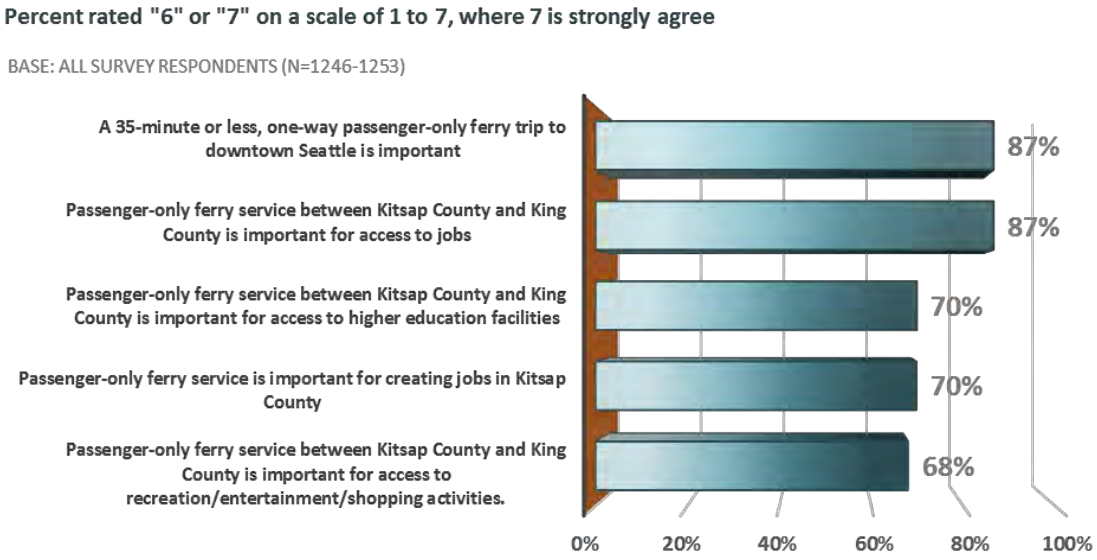


Figure 4-1: Survey Results—Benefits of POF Service

When asked about service schedules, respondents indicated that arrival and departure times should revolve around the commute period. If additional service is provided outside of those commute periods, the majority of respondents indicated that additional sailings should be offered on weekday evenings.

While it was clear that responders were willing to pay a premium for faster service, there was no consensus on what that fare level is reasonable. Contrary to common wisdom and past experience with voter tax preferences, more respondents said they preferred the MVET over the other tax options. However, when asked how much sales tax is reasonable for passenger only ferry service, more than half (58%) said they consider a 0.2 to 0.4 percent increase in sales tax a reasonable way to pay for POF. Refer to Figure 4-2.

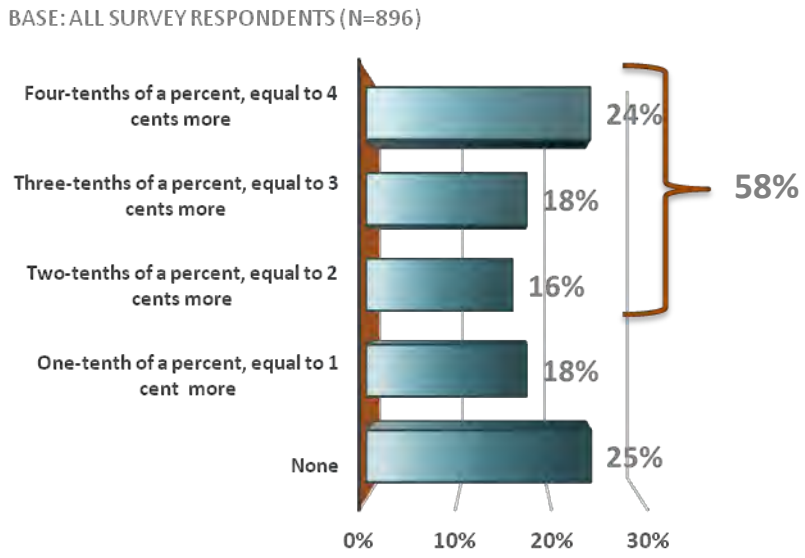


Figure 4-2: Survey Results—How Much Sales Tax is Reasonable to Support POF Service.

4.2 STAKEHOLDER INTERVIEWS

Stakeholder interviews were held over the phone with nine leaders of the Kitsap County community. Questions ranged from their understanding of public opinion regarding POF to potential benefits, challenges, advice, and specific funding ideas. The stakeholder interview participants were:

- Scott Bosch, Harrison Medical Center
- Pete DeBoer, Commissioner for Port of Kingston
- Walt Draper, Bremerton Community Leader
- Charlotte Garrido, Commissioner for Kitsap County
- Patty Lent, Mayor of the City of Bremerton
- Mary McClure, Kitsap Regional Coordinating Council
- Dan Mundle, South Kitsap
- Rex Nelson, Ferry Advisory Committee
- Guy Stitt, President of AMI International

Key Themes

Key themes from these conversations included input and impression of general public opinion about POF and its potential, the benefits and challenges associated with POF service, and advice regarding implementation (Refer to Figure 4-3).

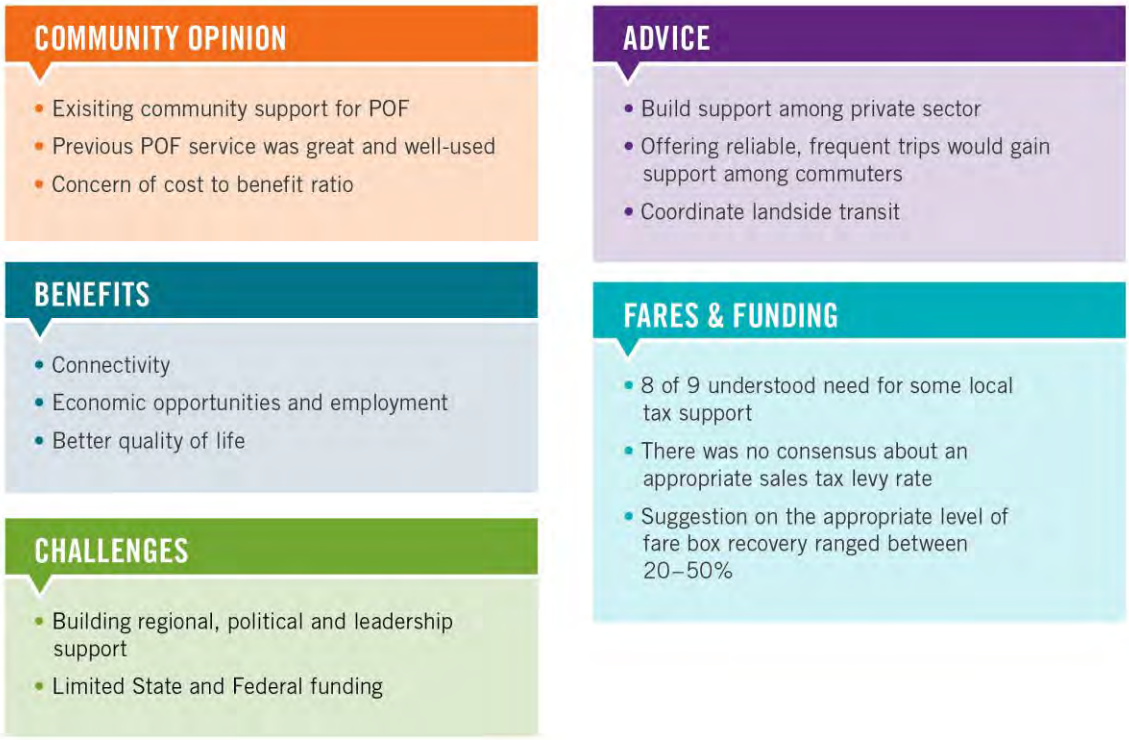


Figure 4-3: Stakeholder Interview Key Themes

5 Where Are The Riders?

Ridership projections for the proposed POF service were developed through a mode-choice model using census data and past POF ridership. Figure 5-1 below defines the catchment area used in this analysis, which in some cases extended just beyond Kitsap County. The population data shows an increasing population alongside a slight decrease in commuters to downtown Seattle. This could be due to the current, slower modes of transportation available to commuters or a demographic shift to living closer to the workplace, or the ability for some commuters to occasionally telecommute.

Figure 5-1: Ridership Catchment Area

Table 5-1: Market Demand for POF Service

	2000 Total	2010 Total	Compound Annual Growth Rate 2000-2010
Population	329,500	371,965	1.39%
Labor Force	157,615	182,681	1.49%
Commuters to Downtown Seattle	5,851	4,367	-2.88%

Note: Population of Kitsap County in 2010 was 251,133. The catchment area represents an area larger than the County as identified in Figure 5-1 above.

5.1 PAST RIDERSHIP

The ridership analysis was calibrated using past ferry ridership. The following Figure 5-2 illustrates the high level of foot passengers on the WSF vehicle ferry (in blue), as well as the high ridership experienced on WSF's previous Bremerton-Seattle POF (in green). The POF service experienced a significant drop in ridership when speeds were slowed and the service became less competitive with the existing WSF vehicle ferry service. The other past services represented on the figure were operated for short periods of time with relatively small capacity vessels. Limited operating schedules and unsustainable funding led to the discontinuation of these services. The latest experience with passenger-only service was the RP1 test service out of Bremerton.

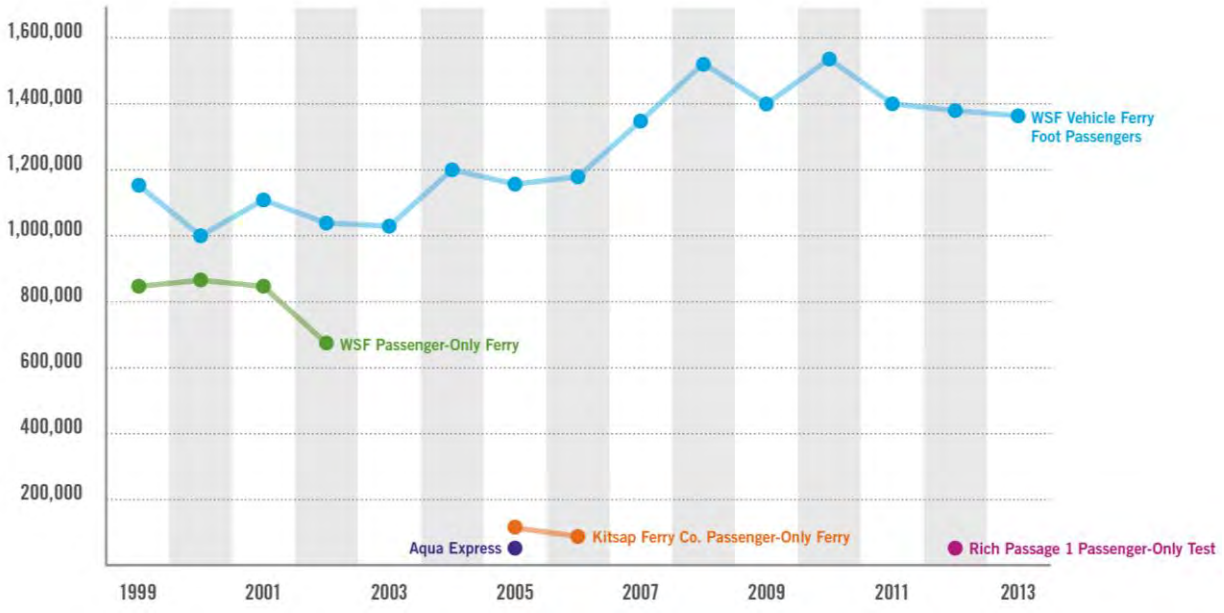


Figure 5-2: Past Ferry Ridership

5.2 ALTERNATIVE ROUTES

The mode-choice model used to determine ridership is based on the likelihood of someone choosing a specific route or mode of travel based on the competing or alternative route. In order to analyze this for our three routes, the alternative routes were outlined for each proposed service (Bremerton/Seattle, Kingston/Seattle and Southworth/Seattle), including major components such as cost, travel time, and availability of trips during the commute period. Transit time to the initial departure terminal are not included in the alternatives analysis.

The alternatives for Bremerton are relatively straight forward. One can take the 60 minute Bremerton/Seattle WSF ferry, at $8 for a roundtrip cash fare, or walk-on at the Southworth terminal and take transit to downtown Seattle. Refer to Table 5-2.

Table 5-2: Bremerton to Seattle Modeling Alternatives

Alternative Routes	Proposed POF Service	Existing WSF Bremerton Ferry	Existing Southworth Ferry + Auto/Transit
Travel Time	35 minutes	60 minutes	70 minutes (crossing + transit)
Round Trip Cost	$11.00	$8.00	$19.85
Round Trips	6 and 12 during commute period	6 during commute period	7 during commute period

WSF does not offer ferry service from Kingston to downtown Seattle. Therefore, the alternatives for Kingston range a bit more than Bremerton. In these scenarios, one could take the ferry from Kingston to Edmonds, either in their car with the intent to drive and park in Seattle or on foot with the intent to use public transit. Additionally, one could take the Bainbridge Island WSF ferry directly to downtown Seattle. Although this trip is a quick 35 minutes, it would require parking on Bainbridge Island. While transit time to the ferry was not taken into account in the modeling, Bainbridge Island experiences very high traffic volume and can become very congested, therefore increasing transit time to and from the ferry. Refer to Table 5-3.

Table 5-3: Kingston to Seattle Modeling Alternatives

Alternative Routes	Proposed POF Service	WSF Kingston – Edmonds + Drive to Seattle	WSF King - Edmonds + Transit to Seattle	WSF Bainbridge - Seattle
Travel Time	40 minutes	60 minutes	80 minutes	35 minutes
Round trip cost	$15.00	$47.80*	$15.00	$17.95
Round Trips	6 and 12 during commute period	8 during commute period	8 during commute period	8 during commute period

** Denotes parking costs are included in round trip costs.*

The Southworth to Seattle route offers the most travel alternatives. WSF currently provides service via a triangle route from Southworth (Kitsap County) to Vashon Island (King County) and on to Fauntleroy, located approximately nine miles from downtown Seattle in West Seattle. From Fauntleroy, King County Metro transit would need to be used to access downtown, adding more time to the commute. Additionally, the King County Water Taxi provides service from Vashon Island to Seattle. Alternatively, one could drive around the Sound, utilizing an often congested I-5 freeway. Each alternative is identified as 50 to 90 minutes in travel time, which greatly exceeds the proposed 30 minute direct route from Southworth to downtown Seattle. Refer to Table 5-4.

Table 5-4: Southworth to Seattle Modeling Alternatives

Alternative Routes	Proposed POF Service	WSF Southworth - Fauntleroy + Drive to Seattle	WSF Southworth - Fauntleroy + Transit to Seattle	WSF Southworth - Vashon + Water Taxi to Seattle	Drive + WSF Bremerton – Seattle	Drive to Seattle
Travel Time	30 min	60 min	80 min	50 min	60 min	75-90 min
Round Trip Cost	$11.00	$55.40	$11.25	$11.00	$17.95*	$30-35*
Round Trips	6 and 12 during commute period	7 during commute period	7 during commute period	4 WSF trips in AM commute and 3 KCMD trips in PM commute period	6 during commute period	N/A

** Denotes parking costs are included in round trip costs.*

5.3 RIDERSHIP PROJECTIONS

Ridership projections for each proposed route predict ridership for a mature service and are not adjusted for the ramp up period typical for a new service. Six round-trips in the commute period window were analyzed for all three routes. Ridership for a 12 round-trip schedule was also examined for the Bremerton route, due to the high ridership demand, cross-directional traffic and the limited capacity of the RP1 Vessel (118 passengers) in comparison to the other two routes. Refer to Figure 5-3.

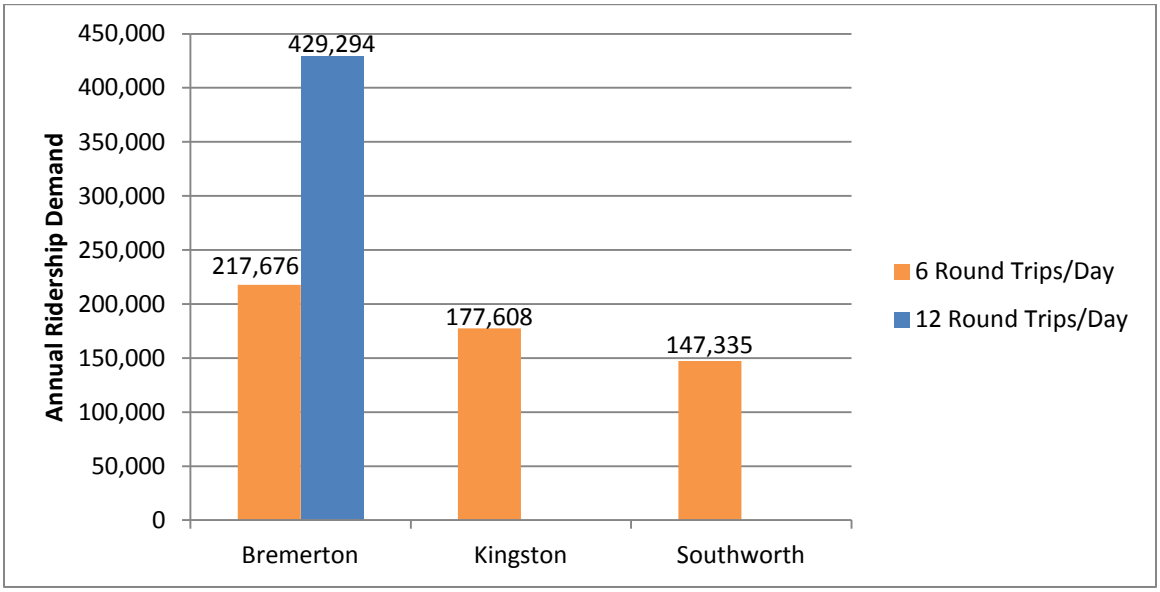


Figure 5-3: Ridership Demand Forecast Summary

5.4 PEAK SAILINGS

The ridership analysis also estimated peak sailings for each route, with the highest peak coming from the west in the AM commute and from the east in the PM commute period. As mentioned above, there will be a ramp-up period before full ridership projected will be experienced. While ferry systems are not designed to the apex of peak ridership, this information is useful when deciding on vessel size, as outlined in the following section. Refer to Table 5-5. The table identifies the number of expected riders at system maturity by sailing. For Kingston and Southworth, one directional ridership (Kingston to Seattle) ridership has been shown. For Bremerton, cross directional traffic has been included, which is why the low end of the range is lower than the range provided for Kingston and Southworth, where cross directional flow would be even less.

Table 5-5: Peak Sailing Ridership Projections

	Scenario	Bremerton	Kingston	Southworth
Peak Sailings	*6 RT/Day*	36-128/per sailing	71-178/per sailing	59-147/per sailing
	12 RT/Day	29-173/per sailing		

6 What Terminal Facilities and Vessels Do We Need?

6.1 TERMINAL LOCATIONS

Four terminal locations have been identified for analysis. Three of these terminals are located in Kitsap County: Bremerton, Kingston, and Southworth. The fourth location is in downtown Seattle at Pier 50, the current location of the King County Water Taxi service.

6.2 TERMINAL PROGRAMMING

Facility requirements for a Kitsap County POF terminal should be consistent for all terminal locations.

- Accommodate berthing of two vessels and passenger loading (to accommodate a back-up vessel if needed)
- Ticket vending machines
  - Two each at Bremerton and Southworth
  - One at Kingston
- Fresh water, shore power, and communications
- ADA compliant
- Midday and overnight tie up and routine maintenance capabilities
- Multi-modal connections (transit, parking, bicycle, and pedestrian infrastructure)

6.3 PROPOSED TERMINAL IMPROVEMENTS

Improvements proposed at each terminal location vary based on the existence and condition of infrastructure in place. Terminal infrastructure needed is very minimal for the Bremerton and Kingston routes. A whole new terminal is needed at Southworth and would require substantial capital and time to design, permit, and construct the facility. It is estimated that it would take approximately 18 months for Kingston improvements and four years for Southworth improvements.

Figure 6-1: Bremerton Terminal Improvements

Bremerton Terminal

Due to recently completed work (Fall of 2014) at the A and B floats, no additional infrastructure improvements are recommended for this site in order to begin POF operations. Wayfinding features, such as branding and signage, may be proposed; however this work would be minimal in nature. Refer to Figure 6-1.

Kingston Terminal

Proposed improvements include potential repair or replacement of the existing wooden elevated walkway as well as architectural and/or aesthetic improvements to the existing covered walkway.

Additionally, in the long term, fuel, potable water, and sewage services should be provided at the Kingston terminal. A new fuel line should be run from the existing Port of Kingston fuel pier to a fueling station on the boarding float. Refer to Figure 6-2.

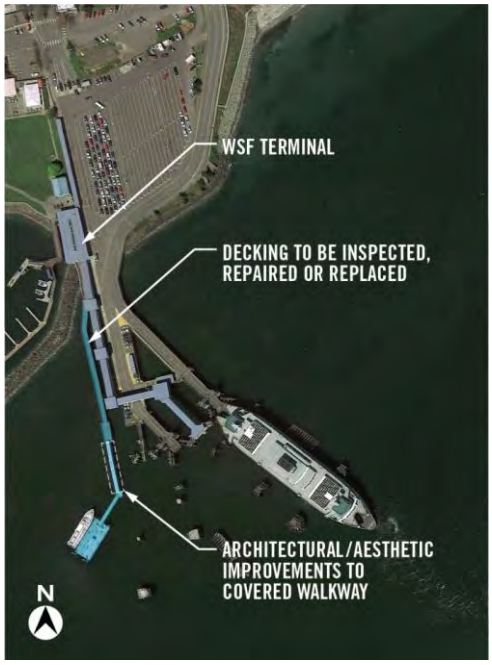


Figure 6-2: Kingston Terminal Improvements

Southworth Terminal

Proposed passenger-only improvements would attempt to follow WSF's past plans as applicable. Proposed improvements would include an elevated walkway, a gangway, and an approximately 100-foot-long by 40-foot-wide float to accommodate the berthing of two 150-passenger vessels. Refer to Figure 6-3.

The existing WSF terminal building could be utilized for waiting and weather protection as needed.

The improvements required at this location are extensive and would require much interagency coordination and environmental permitting, as further discussed in the Terminals Report in Appendix C.

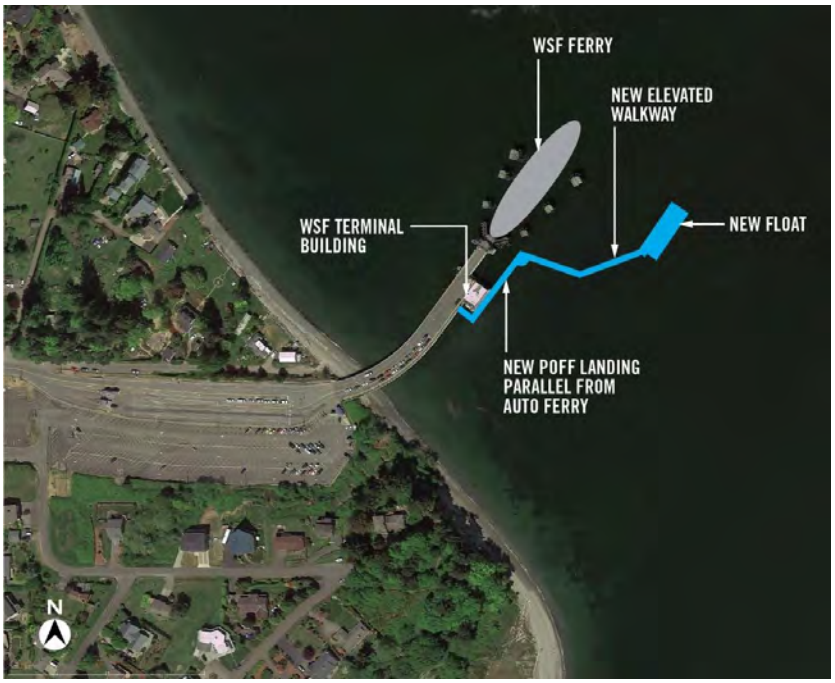


Figure 6-3: Southworth Terminal Improvements

Seattle (Pier 50) Terminal

Improvements at Pier 50 are currently in the design phase and include plans to accommodate additional routes from Kitsap County. The design, as currently proposed, would serve four routes with a new fixed pier built adjacent to the WSF trestle expansion. Refer to Figure 6-4.

Figure 6-4: Pier 50 Proposed Improvements

6.4 MAINTENANCE FACILITIES

Facilities must be available for a range of vessel maintenance tasks. On a daily basis, west side terminals will be equipped to handle day to day light maintenance needs of the vessels. Additionally, partnership with King County will allow for the potential sharing of the new King County Maintenance Barge, where intermediate maintenance can be performed. Major maintenance needs will be met at one of the region's shipyards. By utilizing terminal facilities and King County assets, additional dedicated maintenance facility space will not be needed.

6.5 VESSEL DESIGN CRITERIA

Vessel design criteria were guided by ridership demand by route, taking into account the speed and hull form needed to meet the proposed schedule requirements.

The Bremerton route is the only route with specific vessel requirements for wake wash performance. The RP1 vessel, which Kitsap Transit currently owns, has been specially designed and tested to meet the wake wash requirements for the Bremerton route. This is currently the only vessel design that can serve this route and meet the desired transit times. The RP1 has capacity for 118 people and 15 bicycles.

Passenger demand indicates that a 150-passenger (T-boat) vessel will accommodate the Kingston and Southworth routes. Due to the varying lengths of the routes, vessel speed requirements also vary in order to meet the program of a minimum of three trips in the AM commute and three in the PM commute period. For example, Kingston is a greater distance away from Seattle than Southworth and therefore will require a vessel that can achieve much higher speeds. Proposed crossing times and associated speeds by route are outlined below.

- Bremerton – 35 knots – 35 Minute Route
- Kingston – 34 knots – 40 Minute Route
- Southworth – 28 knots – 30 Minute Route

The Kingston route is the longest in distance of the three and requires a fast, 150-passenger, long-hull-form vessel. This specialized vessel will likely need to be built for the Kingston route. The Southworth route is the shortest distance and requires an average speed, 150-passenger vessel. This type of vessel may be available on the market for lease or purchase. While a standardized system is ideal to streamline maintenance and operation training, the Bremerton route necessitates vessel-type restrictions to minimize damage to the beaches of Rich Passage from both natural and wake impacts, making standardization difficult. Efforts should be made to standardize when possible while also utilizing shared or available assets in the area, such as those vessels currently owned or leased by King County Marine Division.

In addition to capacity and speed requirements, there are standard regulatory criteria any passenger vessel must meet. Those regulations include the Americans with Disabilities Act (ADA) as well as the US Coast Guard (USCG) regulatory compliance 46 CFR T.

Passenger amenities are not required by law, however prove to be important when passengers chose a mode of travel, as confirmed by respondents in the project's first customer survey. Design amenities identified by survey takers include:

- Bicycle Racks
- Comfortable Seating
- Wi-Fi
- Bathroom Facilities
- Adequate Ventilation

6.6 BACKUP VESSEL REQUIREMENTS

As mentioned above, there are three different types of vessels required for the three routes. In a short-term back-up situation; however, there may be some opportunities for standardization and/or vessel sharing between agencies. The extent to which the routes are phased will play a role in which vessels are available to serve as back-up vessels. For the system in its maturity, with two vessels operating out of Bremerton and one each out of Kingston and Southworth, the following vessel back-up strategy could be assumed.

Table 6-1: Back-Up Vessel by Route

Route	Primary Vessel	Backup Vessel
Bremerton (1)	RP1 (118 PSGR)	RP2 (118 PSGR)
Bremerton (2)	RP2 (118 PSGR)	RP3 (118 PSGR)
Kingston	T-Boat (150 PSGR) – 34 knot capable	RP2/3 & KCMD Spirit of Kingston
Southworth	T-Boat (150 PSGR) – 28 knot capable	RP2/3 & KCMD Spirit of Kingston

7 How Should We Manage and Operate the Service?

Several service delivery alternatives were initially considered for appropriateness and feasibility. The results of this initial evaluation process can be summarized by the following list of options that were considered further:

- Direct agency delivery of ferry services including capital assets such as vessels and terminals.
- Private contractor provision of all ferry services including capital assets.
- Public/Private partnership to share delivery of ferry services (two similar options with the only difference being who performs system maintenance).
    - Public agency owns and maintains vessels, owns or leases facilities; Private contractor crews and operates vessels and facilities.
    - Public agency owns vessels, owns or leases facilities; Private contractor crews, operates, and maintains vessels and facilities.
- Public/Public partnership as means to deliver, or share delivery of, all ferry services with vessels and some terminal assets provided by Kitsap Transit.

Each of these service delivery options was evaluated for potential benefits and drawbacks to determine the most appropriate option.

7.1 RECOMMENDED SERVICE DELIVERY MODEL

The recommended service delivery option is a partnership between Kitsap Transit partners and King County Marine Division (KCMD) in a Public/Public partnership. This option takes advantage of KCMD's passenger ferry expertise and in-place management, and allows for sharing of some assets. With this model, Kitsap Transit can leverage its resources most effectively and, if successful, it could be used as the model for expanded regional interagency public cooperation and efficiency. This option also serves as an intermediate step to a publicly owned and operated Kitsap Transit system in the future.

Through a dedicated, in-house marine unit, Kitsap Transit, would directly provide:

- Needed interagency oversight for terminal leasing or purchase
- Appropriate terminal facilities (through purchase or lease).
- Vessels, including those necessary to provide back-up services (may be shared vessels).
- Needed support staffing to perform oversight and hire appropriate staff.
- Interagency agreement with public operator to provide all ferry operating services.
- Coordination for Kitsap Transit policy decisions regarding fare levels, media, collection, service levels, and schedules.

KCMD would provide the full range of direct operating services, including:

- Vessel operating, crewing, training, and maintenance services.
- Terminal operating, staffing, and maintenance services as applicable.
- Compliance with all applicable vessel-related safety, security, environmental protection, and emergency response requirements.

7.2 PROPOSED STAFFING

The marine operating environment is unique and requires specific knowledge and expertise in both operations and management. Vessels will operate in varying sea-state conditions, utilizing fast vessels, safely navigating around other vessel traffic, and abiding by maritime regulatory requirements for safety and security. Figure 7-1 represents an example of how this service could be staffed, with the orange boxes representing Kitsap Transit staff and the blue boxes representing King County staff.

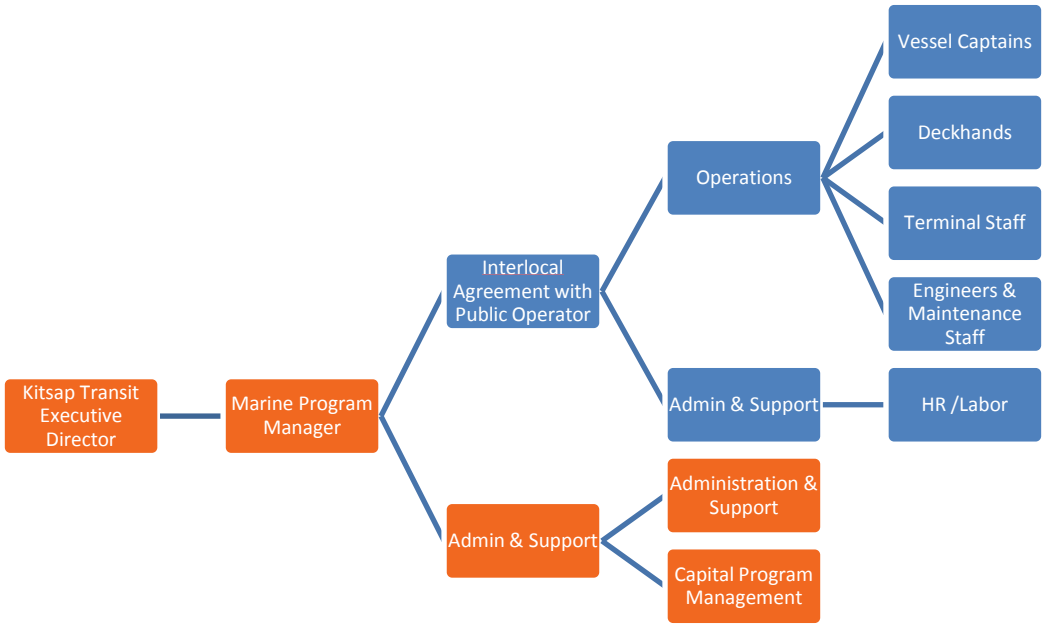


Figure 7-1: Recommended Service Delivery Model—Public/Public Partnership

Vessel Crew

Vessel crew size is determined by the local US Coast Guard. A Coast Guard licensed Captain is required on all passenger ferries. Additionally, due to the high-speed nature of the proposed service, a senior deckhand will be required.

Customer Service and Shoreside Staffing

It is assumed that each west side terminal will have a customer service agent present during the AM commute period during start-up to handle crowd management and ticketing questions for passengers. Additionally, adequate customer service staff will be available at Pier 50 to accommodate the PM peak rush.

7.3 MAINTENANCE REQUIREMENTS/PLAN

Provisions must be made for both terminal and vessel maintenance. Generally, when possible, vessel crew and/or KCMD maintenance crews will undertake the daily and scheduled routine maintenance work on both vessels and terminals. To supplement this effort, it is recommended that a mobile maintenance crew, managed by KCMD, be assembled to service the west side Kitsap terminals. This mobile crew could assist with both vessel and terminal needs.

Terminal

Terminal maintenance will include light preventative and regular maintenance, scheduled preventative maintenance and repairs, and heavy maintenance, upgrades, and repairs. Light, day-to-day maintenance will be performed by the vessel crew. This will include tasks such as sweeping and garbage removal. Scheduled preventative maintenance and repairs may be performed by a mobile maintenance crew. Heavy maintenance, upgrades, and repairs will be accomplished by other Kitsap Transit departments, or will be contracted to outside vendors.

Vessel

Much like the terminal maintenance, vessel maintenance will involve a similar three tier approach. Daily maintenance needs such as vessel cleaning, fueling, water tank fill, and sewage pump-outs will be performed by the vessel crew. Intermediate maintenance such as heavy oil changes and minor repairs could be completed by a mobile maintenance crew or by King County maintenance crews at their maintenance barge. Annual dry-docking and major repairs would be serviced by local shipyards.

7.4 OPERATING SCHEDULE

An example service schedule was developed for the proposed service, assuming six roundtrips per day for each route: three roundtrips in the AM commute period and three roundtrips in the PM commute period. The crossing times for each route differ due to the distance from downtown Seattle and/or operating constraints. The total route time includes the crossing time, approach time, and a seven minute dwell time to account for passenger loading and unloading at the dock.

The example schedules outlined below were created through careful review of existing passenger-only sailings out of Pier 50, existing WSF sailing schedule, and fueling requirements. They also address the most effective use of crew time. Operating hours indicated in Table 7-1 include 20 minutes for start-up activities and approximately 15 minutes for shutdown activities.

Table 7-1: Operating Schedule Example

Bremerton (35 Min Route)		Kingston (40 Min Route)		Southworth (30 Min Route)	
Depart Bremerton	Depart Seattle	Depart Kingston	Depart Seattle	Depart Southworth	Depart Seattle
5:45	6:20	5:40	6:20	6:00	6:30
6:55	7:30	7:00	7:40	7:00	7:30
8:05	8:40	8:20	9:00*	8:00	8:30
3:25	**4:00**	**3:20**	**4:00**	**3:05***	**4:20**
4:35	**5:10**	**4:40**	**5:20**	**4:50**	**5:20**
5:45	**6:20**	**6:00**	**6:40**	**5:50**	**6:20**

*Notes: **BOLD** indicates PM. Asterisk (*) indicates a crossing without passengers for fueling.*

Landside Transportation Coordination

To create an efficient system for commuters, several adjustments will need to be made to bus transit to meet the POF schedule. These alterations will vary from 3 to 15 minute arrival time revisions or, in the case of Kingston and Southworth, additional bus service to serve planned POF departures. The majority of this coordination will occur internal to Kitsap Transit.

7.5 FARE COLLECTION STRATEGY

The fare collection strategy recognizes POF customers have a choice of services, and will seek the best value for their transportation budget. This value extends beyond the dollar amount; however, as the rider survey indicates customers see the value in the time savings offered by POF and are willing to pay an additional amount for this and other amenities. A properly-priced service that balances the advantages with the costs of premium service will help to achieve ridership targets and support the long-term sustainability of the service. Recommendations for Kitsap Transit's fare collection strategy are summarized as follows:

- Fares are priced and collected in each direction to help mitigate AM and PM ridership imbalances that can result when a free (no cost to the passenger) option is available for eastbound travel.
- Full-fare cash prices are set at the lowest-cost alternative plus a premium of one to three dollars per trip. Where appropriate, fares are set at common levels similar to WSF's central sound fare to address equity and community concerns.
- The majority of fares will be collected via the ORCA card. All currently-accepted pass products will be valid for POF travel. If the per-trip value of the pass is less than the POF fare, the remainder will be deducted from stored e-purse funds. The Kitsap Transit low-income fare will be supported.
- For frequent riders of both Kitsap Transit and POF who do not regularly ride transit on the east side of Puget Sound, a new monthly pass product that combines Kitsap Transit bus, foot ferry, and POF access should be provided as an alternative to current products, possibly along with a ferry-only pass. Pricing for these products should consider the current monthly cost a typical commuter incurs and the additional amount that person would be willing to pay for passenger-only service.
- For non-ORCA customers, tickets are sold at the terminals and cash (exact change) is collected on board. In the near term, the ticket vending machines will likely be the same or similar to models used by the King County Water Taxi; however, Kitsap Transit should seek opportunities to partner with KCMD to purchase an upgraded model. Cash/ticket fares may be priced slightly higher to incentivize ORCA use.

8 How Should We Phase Implementation?

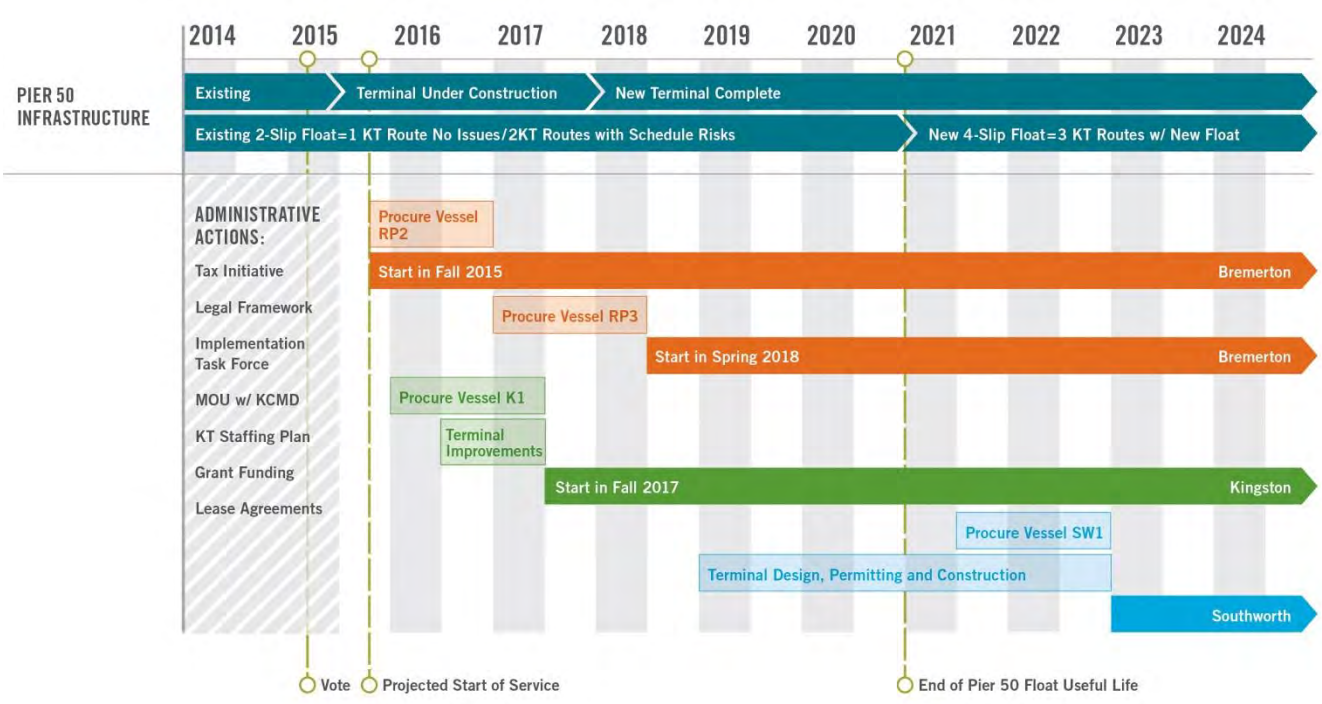
The Bremerton service is the first priority for implementation. This is due to the presence of existing infrastructure at the terminal and the fact that Kitsap Transit owns the RP1 vessel, specifically designed to serve the route. The successful implementation and operation of this route can serve as a model for the other two routes, providing insights along the way.

8.1 SERVICE DELIVERY PLAN

A proposed phasing/service schedule can be viewed below. This schedule represents an aggressive approach to service implementation with the goal of providing service shortly after tax revenues are available. Although the phasing is premised upon a successful tax measure early in 2015, the phasing plan can be moved out in time to reflect the tax measure schedule set by the Kitsap Transit Board and grant funding cycles for capital improvement.

The phasing plan (refer to Figure 8-1) recognizes the timing of key elements, such as the ability of Pier 50 in Seattle to accept new routes given existing redevelopment projects and current infrastructure, as well as capital improvements to both vessels and terminal infrastructure needed for each route.

As mentioned above, the first route proposed for service is the Bremerton route with its existing terminal and vessel infrastructure in place. The second route to come online would be the Kingston route. This route has existing terminal infrastructure in place that would need only minimal improvements. Vessel infrastructure will be the determining factor for when this route is ready for service. The third route to come online would be the Southworth route. This is due to the extensive infrastructure improvements required at this terminal and the timeframe required for designing, permitting, and constructing the facility.



Note: Actual start date dependent upon successful ballot measure.

Figure 8-1: Proposed Phasing Plan

8.2 IMPLEMENTATION STRATEGY

Prior to service start-up, a host of administrative and organizational actions will need to be completed. Most important among them is determining a reliable local funding source. Determining the structure and efficacy of a ballot measure, properly setting a levy rate, and obtaining the necessary votes in support of said measure and levy requires organization and time. Additional required administrative actions should be identified with a plan for action based on the voting timeframe decided upon by the Kitsap Transit Board. This section discusses the recommended administrative actions in more detail, including the convening of an implementation task force consisting of representatives from King County, Kitsap Transit, and WSF. It also includes the identification of potential grant funding sources, internal Kitsap Transit staffing planning, and the acquisition of lease agreements.

Recommended Actions

The majority of immediate action items are organizational, involving legal structure, funding, operating arrangements, and interagency planning and coordination. These organizational actions are identified in Table 8-1 and can be summarized as follows:

- **Legal Framework**: Once the Kitsap Transit Board identifies their preferred governance structure and local funding source for the service, they may need to seek additional statutory authority.
- **Structure and Staffing**: Staffing adjustments will need to be made within Kitsap Transit to manage the additional work load, and a partnership agreement with King County must be outlined.
- **Implementation Task Force**: An interagency implementation task force should be established to identify specific POF implementation tasks and to ensure that the necessary coordination occurs. This task force would include policy makers and staff from the public partnering agencies (Kitsap Transit, King County, and WSF.
- **Existing Transit Service Modifications**: Modifications may be required to service the new POF routes. It is important to ensure these landside transportation connections are in place to serve the commuter.
- **Fare Collection**: A fare collection plan should be developed to address new fare products, fare levels, revenue apportionment, and modifications to ORCA.
- **Capital Grant Sources**: Applicable state and federal grant programs should be identified and preliminary work should be completed to ensure that grant applications are submitted in a timely manner once local funding is secure.

Table 8-1: Implementation Strategy

	Recommended Actions	Partner Agencies	Prior to Tax Measure	Implementation			
				Year 1	Short-Term	Mid-Term	Long Term
Organizational							
1	KT Board decision to move forward with tax initiative	KT	*	■	→	→	→
2	Prepare for tax initiative	KT	*	■			
3	Identify applicable grants	KT	*	■			
4	Alterations to legal framework	KT	*	■			
5	Interagency Implementation Committee	KT/KCMD/ WSF/POK		■	- - →	- - →	- - →
6	Amend CIP to prioritize for POF improvements	KT		■			
7	Apply for grant applications	KT/KCMD		■			
8	Develop and execute MOU for KCMD partnership	KT/KCMD		■			
9	Develop and initiate internal KT staff organization to accommodate service	KT		■			
10	Fare collection program development	KT		■			
Bremerton							
B1	Prepare RP1 for service	KT		■			
B2	Commission building of RP2	KT		■			
B3	Capital terminal improvements (minimal)	KT		■			
B4	Implement service (w/o back-up vessel)	KT/KCMD		■			
Kingston							
K1	Lease agreement with Port of Kingston	KT/POK			■		
K2	Capital terminal improvements at Kingston	KT/POK			■		
K3	Procure vessel	KT			■		
K4	Implement service (Share RP2 as back-up vessel)	KT/KCMD				■	
Southworth							
S1	Lease agreement with WSF	KT/WSF				■	
S2	Capital terminal improvements at Southworth	KT/WSF					■
S3	Procure vessel	KT					■
S4	Procure back-up vessel	KT					■
S5	Implement service	KT/KCMD					■
Pier 50							
KC1	Lease agreement with KCMD	KT/KCMD		■	→	→	→
KC2	Capital infrastructure contribution	KT/KCMD		■	■	■	

KT=Kitsap Transit
KCMD=King County Marine Division
WSF=Washington State Ferries
POK=Port of Kingston
CIP=Capital Improvement Plan
MOU=Memorandum of Understanding

9 How Much Will This Cost and How Do We Pay For It?

A comprehensive financial plan was developed for the cross-sound passenger-only ferry program. The plan addresses capital and operating costs as well as tax, grant, and operating revenue.

9.1 HOW MUCH WILL IT COST?

Costs for construction of both vessels and terminals were estimated and inflated over the investment period. Operating costs, including terminal and vessel operations and management and support, were estimated and projected over a 20 year period.

- $45 Million in capital investment will be required between 2015 and 2023 to launch all three routes, including two vessels operating in Bremerton.
- $26 Million of that total will be needed between 2015 to 2018 for the launching of the Bremerton and Kingston services.
- Ongoing operating subsidy requirements are:
  - $2.0 Million for one boat in Bremerton
  - $5.5 Million for two boats in Bremerton and one for Kingston
  - $8.1 Million when all three routes are operating in 2023

9.2 HOW DO WE PAY FOR IT?

Adequate funding is critical to a sustainable service. While a portion of operating costs will be covered by farebox revenue, a large portion of capital outlays will need to be covered through other funding sources. Grant funding will be utilized whenever possible; however, competition for these funds can be very competitive. Local funding in the form of tax levies will be required to support capital needs and sustain the service over the long-term. Short term bond funding will help cover cash flow in the first few years.

Operating Revenue

Fare revenue estimates were calculated by applying a range of full-fare levels to the forecasted ridership demand, and then discounted by 25 percent to address incremental ridership growth and uncertain economic conditions.

Grant Revenue

A number of state and federal grant programs offer funding for passenger ferry capital assets such as the U.S. Department of Transportation's (USDOT) New Starts, Ferry Boat Discretionary, Surface Transportation Funds, and Fixed Guideways programs. State administered grant programs such as the Regional Mobility Program are also viable funding sources for passenger ferry assets. The USDOT's Small New Starts program is a very promising funding source and might provide the majority of the required initial capital funding.

Bond Funds
Depending upon the project schedule, a relatively small bond issuance might be required to meet cash flow needs while grant and local revenues are assembled. The cost of issuance and debt service will be paid back as local and grant revenue funds become available.

Local Tax Revenue
It is assumed that a sales tax levy would be pursued to provide local funds to subsidize ongoing operations and to supplement grant funds for capital requirements. Based on past sales tax collection experience, it is estimated that a two-tenths countywide sales tax would be sufficient. Additional analysis would be required if a smaller ferry taxing district was established or other tax mechanism selected.

9.3 PROJECTED FINANCIAL PLAN

Route financial projection statements are prepared for each of the three identified routes and include operating revenue, operating costs, and capital costs. They reflect the implementation schedule proposed in the overall business plan and are consolidated into a system-wide route financial projection statement that incorporates funding for both the operating subsidy and the capital program. Refer to Attachment 1.

10 What Economic Benefits Will The Service Bring?

The proposed POF service offers economic benefits to both the users of the service and the community at large. Drawing from experience with other land-based transit services, potential benefits were calculated for the user of the service, proximate real estate, and wider economic benefits.

10.1 USER BENEFITS

User benefits are a measureable direct impact to users of the POF service. These benefits include:

- Travel time savings for the users who ride POF
- Increased accessibility for users who take other modes of transportation

Potential user benefits from the proposed POF service were calculated utilizing the ridership model in place for the project. A value was assigned to time savings, and overall totals were calculated based on the projected ridership demand by route. The findings indicate that annual user benefits are nearly double the annual projected revenue by route. This is a common finding in economic benefit analysis of increased transit service. Refer to Table 10-1 for total projected economic benefits by route.

10.2 REAL ESTATE BENEFITS

Real estate benefits relate to the increase in property values in proximity to the ferry terminal. While Kitsap County is a much more rural environment than the dense urban centers many of these studies focused on, the conclusion that property values do increase when this premium service is provided can be drawn from this research alongside past experience in Kitsap with WSF POF service. These premiums can be expected within a half-mile of the ferry terminal, but may extend beyond as well.

10.3 WIDER ECONOMIC BENEFITS

Wider Economic Benefits (WEBs) refer to the positive impact in productivity due to enhanced transportation services. This productivity is realized through easier interaction between firms, higher-density employment clusters, and a more accessible labor force. This clustering provides increased efficiency though improved communication, lower infrastructure costs, and increased small business interaction.

10.4 TOTAL ECONOMIC BENEFITS

It is clear that this faster commute service from Kitsap to Seattle would bring value to those who use the service. Additionally, those who opt not to use the service will see benefit in the form of decreased congestion and enhanced transportation options. The region as a whole will benefit from increased efficiency, and Kitsap County real estate will see value increases due to decreased travel time to and from a major employment center, downtown Seattle. While user benefits and WEBs can be calculated annually, real estate values will only be realized at the time of transaction.

Table 10-1: Total Projected Economic Benefits by Route

	Annual Benefits		**One Time Benefits**
	User Benefits in Travel Time Savings	Wider Economic Benefit	Total Real Estate Value Created within ½ Mile
Bremerton / Seattle	$3.2M	$0.8M	$3.8M
Kingston / Seattle	$2.2M	$0.5M	$3.6M
Southworth / Seattle	$2.1M	$0.5M	$2.1M
TOTAL	**$7.5M**	**$1.8M**	**$9.5M**

11 Conclusions and Next Steps

The demand for POF service between Kitsap County and Seattle is clear. Both ridership demand projections and community input indicate strong potential ridership to support service in Bremerton, Kingston, and Southworth. There are no insurmountable challenges to acquiring the vessels, building or modifying the terminals, or making the arrangements needed to manage and operate the service. Furthermore, as demonstrated by past experience, passenger-only service can improve the economic well-being of the county and improve the overall quality of life of many county residents.

However, passenger-only service, like any other public transportation mode, is not self-sustaining and will require sustainable local tax support. To implement the plan outlined in this study, local voters must approve a tax measure to supplement fare and grant revenue. This plan identifies additional work that should be undertaken by the Board and Kitsap Transit to prepare for implementation before a final decision is made regarding the form and timing of a ballot measure.

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Attachment 1

Kitsap Passenger-Only Ferry Projected Financial Plan
All Routes 2015 -2034

Attachment 1: Kitsap Passenger-Only Ferry Projected Financial Plan – All Routes 2015 -2034

Kitsap Passenger-Only Ferry Financial Projection
Consolidated- All Routes
2015 -2034

Operations	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	Bremerton Service Introduced			Kingston Service Introduced					Service Introduced											
Fares	190,000	800,000	839,000	2,732,000	2,869,000	3,012,000	3,163,000	3,321,000	4,239,000	4,451,000	4,674,000	4,907,000	5,153,000	5,410,000	5,681,000	5,965,000	6,263,000	6,576,000	6,905,000	7,251,000
Total Operating Revenue	190,000	800,000	839,000	2,732,000	2,869,000	3,012,000	3,163,000	3,321,000	4,239,000	4,451,000	4,674,000	4,907,000	5,153,000	5,410,000	5,681,000	5,965,000	6,263,000	6,576,000	6,905,000	7,251,000
Expenses																				
Direct Vessel Operating Expense																				
Labor	176,000	740,000	777,000	2,383,000	2,502,000	2,627,000	2,758,000	2,896,000	4,015,000	4,216,000	4,426,000	4,648,000	4,880,000	5,124,000	5,380,000	5,649,000	5,932,000	6,228,000	6,540,000	6,867,000
Fuel	168,000	706,000	741,000	2,425,000	2,546,000	2,674,000	2,807,000	2,948,000	3,568,000	3,747,000	3,934,000	4,131,000	4,337,000	4,554,000	4,782,000	5,021,000	5,272,000	5,536,000	5,813,000	6,103,000
Maintenance	46,000	192,000	202,000	642,000	674,000	708,000	743,000	780,000	1,051,000	1,103,000	1,158,000	1,216,000	1,277,000	1,341,000	1,408,000	1,478,000	1,552,000	1,630,000	1,711,000	1,797,000
Other Operating Costs	57,000	240,000	252,000	562,000	590,000	619,000	650,000	683,000	829,000	870,000	914,000	960,000	1,008,000	1,058,000	1,111,000	1,166,000	1,225,000	1,286,000	1,350,000	1,418,000
Subtotal Vessel Operations	447,000	1,878,000	1,972,000	6,012,000	6,312,000	6,628,000	6,958,000	7,307,000	9,463,000	9,936,000	10,432,000	10,955,000	11,502,000	12,077,000	12,681,000	13,314,000	13,981,000	14,680,000	15,414,000	16,185,000
Direct Terminal Operating Expense																				
Labor	24,000	100,000	105,000	221,000	233,000	244,000	256,000	269,000	422,000	443,000	465,000	489,000	513,000	539,000	566,000	594,000	624,000	655,000	687,000	722,000
Maintenance	5,000	20,000	21,000	43,000	45,000	48,000	50,000	53,000	79,000	83,000	87,000	91,000	96,000	101,000	106,000	111,000	117,000	123,000	129,000	135,000
Other	31,000	131,000	137,000	261,000	274,000	288,000	302,000	317,000	488,000	512,000	538,000	565,000	593,000	623,000	654,000	686,000	721,000	757,000	795,000	834,000
Subtotal Terminal Operations	60,000	251,000	263,000	525,000	552,000	580,000	608,000	639,000	989,000	1,038,000	1,090,000	1,145,000	1,202,000	1,263,000	1,326,000	1,391,000	1,462,000	1,535,000	1,611,000	1,691,000
Total Direct Expenses	507,000	2,129,000	2,235,000	6,537,000	6,864,000	7,208,000	7,566,000	7,946,000	10,452,000	10,974,000	11,522,000	12,100,000	12,704,000	13,340,000	14,007,000	14,705,000	15,443,000	16,215,000	17,025,000	17,876,000
Management and Support																				
KT POF Management and Support	142,000	149,000	156,000	246,000	259,000	272,000	285,000	300,000	318,000	334,000	351,000	368,000	387,000	406,000	427,000	448,000	470,000	494,000	518,000	544,000
Contractor Management and Support	248,000	521,000	547,000	1,414,000	1,484,000	1,558,000	1,636,000	1,718,000	1,559,000	1,637,000	1,719,000	1,805,000	1,895,000	1,990,000	2,089,000	2,194,000	2,303,000	2,419,000	2,540,000	2,667,000
Total Management and Support	390,000	670,000	703,000	1,660,000	1,743,000	1,830,000	1,921,000	2,018,000	1,877,000	1,971,000	2,070,000	2,173,000	2,282,000	2,396,000	2,516,000	2,642,000	2,773,000	2,913,000	3,058,000	3,211,000
Total Operating Expenses	897,000	2,799,000	2,938,000	8,197,000	8,607,000	9,038,000	9,487,000	9,964,000	12,329,000	12,945,000	13,592,000	14,273,000	14,986,000	15,736,000	16,523,000	17,347,000	18,216,000	19,128,000	20,083,000	21,087,000
Net Operating	(707,000)	(1,999,000)	(2,099,000)	(5,465,000)	(5,738,000)	(6,026,000)	(6,324,000)	(6,643,000)	(8,090,000)	(8,494,000)	(8,918,000)	(9,366,000)	(9,833,000)	(10,326,000)	(10,842,000)	(11,382,000)	(11,953,000)	(12,552,000)	(13,178,000)	(13,836,000)
Net Operating Subsidy Required	707,000	1,999,000	2,099,000	5,465,000	5,738,000	6,026,000	6,324,000	6,643,000	8,090,000	8,494,000	8,918,000	9,366,000	9,833,000	10,326,000	10,842,000	11,382,000	11,953,000	12,552,000	13,178,000	13,836,000
Farebox Recovery	21.2%	28.6%	28.6%	33.3%	33.3%	33.3%	33.3%	33.3%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%

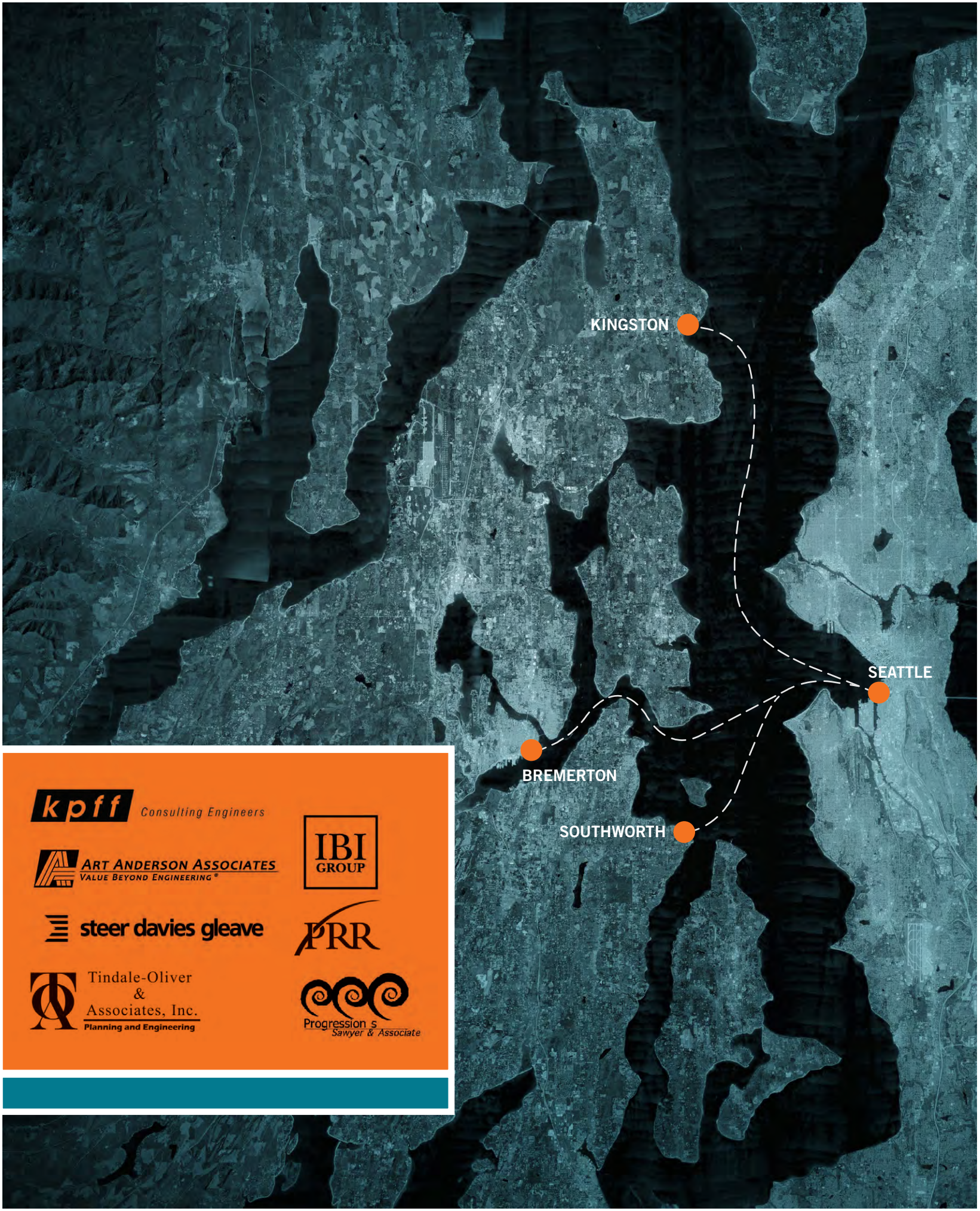
Note: Numbers may not add up due to rounding.

Attachment 1: Kitsap Passenger-Only Ferry Projected Financial Plan – All Routes 2015 -2034

Kitsap Passenger-Only Ferry Financial Projection
Consolidated- All Routes
2015 -2034

Capital	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue	Bremerton Service Introduced			Kingston Service Introduced					Service Introduced											
State Grant Funding			1,600,000	-	-	-	2,000,000	-	-											
Federal Grants- New Small Starts			6,695,000	2,436,000	1,545,000	703,000	5,476,000	5,388,000	-											
Federal Grants-Ferry Boat Discretionary			-	280,000	280,000	280,000	1,080,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000
Total Capital Grant Revenue	-	-	8,295,000	2,716,000	1,825,000	983,000	8,556,000	5,668,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000	280,000
Expenses																				
Vessels																				
Vessel Leases			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vessel Acquisitions	1,461,000	8,930,000	6,348,000	1,611,000	-	-	1,645,000	4,934,000	-	-	-	-	-	-	-	-	-	-	-	-
Rich Passage Monitoring	160,000	224,000	235,000	247,000	259,000	272,000	286,000													
Subtotal Vessels	1,621,000	9,154,000	6,583,000	1,858,000	259,000	272,000	1,931,000	4,934,000	-	-	-	-	-	-	-	-	-	-	-	-
Terminals																				
Seattle Terminal	-		2,625,000	862,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kitsap Terminals	165,000	486,000	486,000	-	1,348,000	957,000	6,265,000	2,151,000	-	-	-	-	-	-	-	-	-	-	-	-
Bremerton Terminal Debt Repayment		675,000	675,000	675,000	675,000															
Subtotal Terminals	165,000	1,161,000	3,786,000	1,537,500	2,023,000	957,000	6,265,000	2,151,000	-	-	-	-	-	-	-	-	-	-	-	-
Future Capital Contingency															1,000,000	1,000,000	280,000	280,000	280,000	280,000
Total Capital Expenditures	1,786,000	10,315,000	10,369,000	3,395,500	2,282,000	1,229,000	8,196,000	7,085,000	-	-	-	-	-	-	1,000,000	1,000,000	280,000	280,000	280,000	280,000
Net Capital Funding Required	(1,786,000)	(10,315,000)	(2,074,000)	(679,500)	(457,000)	(246,000)	360,000	(1,417,000)	280,000	280,000	280,000	280,000	280,000	280,000	(720,000)	(720,000)	-	-	-	-
Total Local Funding Required for Capital and Operating	(2,493,000)	(12,314,000)	(4,173,000)	(6,144,500)	(6,195,000)	(6,272,000)	(5,964,000)	(8,060,000)	(7,810,000)	(8,214,000)	(8,638,000)	(9,086,000)	(9,553,000)	(10,046,000)	(11,562,000)	(12,102,000)	(11,953,000)	(12,552,000)	(13,178,000)	(13,836,000)
Total PTBA-POF Tax Funding at Two Tenths	2,553,000	7,927,000	8,204,000	8,491,000	8,788,000	9,096,000	9,414,000	9,743,000	10,084,000	10,437,000	10,802,000	11,180,000	11,571,000	11,976,000	12,395,000	12,829,000	13,278,000	13,743,000	14,224,000	14,722,000
Bond Funds		5,050,000																		
Debt Service		617,000	617,000	617,000	617,000	617,000	617,000	617,000	617,000	617,000	617,000									
Reserve for Port Orchard Foot Ferry			1,050,000	1,103,000	1,158,000	1,216,000	1,276,000	1,340,000	1,407,000	1,477,000	1,551,000	1,629,000	1,710,000	1,796,000	1,886,000	1,980,000	2,079,000	2,183,000	2,292,000	2,407,000
Projected Cash Balance	60,000	106,000	2,470,000	3,097,000	3,915,000	4,906,000	6,463,000	6,189,000	6,439,000	6,568,000	6,564,000	7,029,000	7,337,000	7,471,000	6,418,000	5,165,000	4,411,000	3,419,000	2,173,000	652,000

Note: Numbers may not add up due to rounding.



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