

RESERVATION SYSTEM: ROUTE-LEVEL DETAILS

The following document describes how a reservation system might work on different WSF routes, and how a customer could access and use the system.

This document does not constitute a formal pre-design; it is simply a working document that lays out the potential operating policies of a reservation system.

Reservation System Route-Level Operating Scenarios

If WSF is to continue moving forward in implementing a reservation system, it is logical to build on the current program at Port Townsend-Keystone while developing reservations at related terminals in the north Sound area. Aside from being related to one another with some common travelers, the Edmonds-Kingston and Mukilteo-Clinton routes will be among the first to trigger the level of service standards based on the relationship of demand to capacity. Therefore, using these routes to both pilot and stage the implementation of the reservation system has multiple benefits to the users and the system.

Once reservations at these terminals are implemented, moving to the challenging terminals at Seattle, Bainbridge and Bremerton would be a logical progression and lessons learned will be directly applicable to these routes. Finally, the very challenging terminal at Fauntleroy could be addressed. By using this order of implementation the uncertainties surrounding the future of the Seattle Central Waterfront and on-going discussions about different organization for the Fauntleroy-Vashon-Southworth route will be clearer and will reduce possible customer confusion about why reservations are being implemented, as well as reduce the potential of deploying equipment that needs to be modified or re-deployed in the near term.

It is recommended that implementation in the North Sound is accompanied by a nearly simultaneous approach with Anacortes-San Juan Islands on a parallel, but quite different, implementation pathway. Implementation on the Anacortes-San Juan Islands routes is likely to require several seasons. The system could be fully implemented on the Edmonds-Kingston and Mukilteo-Clinton routes before full roll out of the system is reached in Anacortes.

This Appendix describes what the system could look like from the customer's perspective. The first section describes how different routes could have different policies. The second section leads a customer step by step on how they could use the system.

I. OPERATING SCENARIOS

**Edmonds-Kingston, Seattle-Bainbridge, Seattle-Bremerton,
Mukilteo-Clinton, Port Townsend-Keystone**

Desired End State, or how the desired characteristics of the system after full implementation:

- Peak sailings, (those with an average volume to capacity ratio of more than .9) -- 90% reserved, V/C ratio .8 to .9; 80% reserved, all others 50% reserved. The V/C ratios would be evaluated on a seasonal basis. It is also possible that the base level of reserved capacity could be higher as any unreserved space simply becomes available to those who wish to travel on a standby basis. This also has the benefit of making possible the conversion of non-reservation users into reservation use without the need to adjust the available reserved capacity.
- Reservation release could be uniform: 30% of reserved capacity at one month, 50% at one week, 80% one day prior, 100% day of sailing. Although this would be adjusted based on

actual experience with reservation-making into multiple rates. Experience will be very important in establishing the rate of release. It may be advisable to begin with a less complex release rate where 50% of reserved capacity is available a month ahead with 80% made available a week ahead and 100% the day of sailing.

- Establish Commercial trucking travel agents to encourage truck use where it is most advantageous to commercial interests and WSF.

Prerequisites:

- A fully functional reservation system, i.e. one that meets all the business requirements of WSF, has been procured and tested at WSF for at least one summer season at Port Townsend-Keystone.
- Reservations and fare collection must be coupled – no fare, no reservation, etc.
- Prior to start up must have automated in-processing of vehicles
- Real time information on status of reservations and standby space must be available by phone, through on-road information systems (HAR) and on the web. These information links must be fully automated.

Possible Implementation Schedule

System could be rolled out on a 1-year roll out per route basis:

- Begin in Fall, with roll out on Friday, Saturday, Sunday peak sailings.
- Winter, continue to add in sailings but with lesser percent of capacity reserved.
- Spring dial up % of space reserved
- Summer bring to full end state.

Anacortes/San Juan Islands/Sidney, B.C.

Desired End State, or how the desired characteristics of the system after full implementation:

- All sailings to and from mainland at minimum 85% reserved, 95% for peak sailings.
- Two different rates of reservation release: One for sailings that are predominantly visitors another for predominantly islanders. Visitor: 15% of reserved capacity 3 months, 25% at two months, 50% at one month, 75% at one week, 90 % one day prior, 100% day of sailing. Resident: 30% of reserved capacity at one month, 50% at one week, 80% one day prior, 100% day of sailing. Both of these should be adjusted based on actual experience with reservation-making.

Prerequisites:

- Island agents must be very involved in design and implementation of a workable system.
- Reservations and fare collection must be coupled – no fare, no reservation.
- Eastbound reservations would be confirmed by possession of a travel document issued at the time an Eastbound reservation is accomplished. The form, function and method for how this document is issued and processed at the island terminals must be in place prior to system roll out.

- Could begin with less than fully automated in-processing at Anacortes, i.e. the system in place for the islands could be used temporarily at Anacortes, but prior to full roll out must have automated in-processing of vehicles at Anacortes
- Real time information on status of reservations and standby space must be available by phone, through on-road information systems (HAR) and on the web. These information links must be fully automated.

Implementation: 3 year roll out.

- Begin in Fall with roll out on Friday/Saturday Westbound sailings and Sunday Eastbound sailings.
- Summer add popular Friday afternoon/Saturday and Sunday sailings
- Off-Season install automated in-processing system -- continue weekend reservations
- Summer – reservations on all sailings at varying rates of capacity reserved
- Next off-season – continue to move to end state
- Summer – implement full end state.

Fauntleroy-Vashon-Southworth, Point Defiance-Tahlequah

Desired End State: Reservations for sailing at Fauntleroy, Southworth and Point Defiance.

- Peak sailings, (those with an average volume to capacity ratio of more than .9) -- 98% reserved, V/C ratio .8 to .9; 90% reserved, others 80% reserved.
- Reservation release would be uniform: 30% of reserved capacity at two weeks, 60% at one week, 90% one day prior, 100% day of sailing. Although this would be adjusted based on actual experience with reservation-making into multiple rates.

Prerequisites:

- Reservations and fare collection must be coupled – no fare, no reservation, etc.
- Prior to start up must have automated in-processing of vehicles
- Real time information on status of reservations and standby space

Implementation:

- It is recommended this would be after the North Sound routes are implemented where lessons learned could be applied.
- Full time roll out with some initial testing on selected sailings.
- Start with roll out on Fauntleroy, then add Southworth in about six months. Point Defiance would follow six months later.
- Consider – As Fauntleroy is the most capacity constrained point, fast processing of reservations will be crucial. Vehicle fares are needed to assist in controlling the reservation system at Fauntleroy, but eliminating passenger fares could significantly speed in-processing of vehicles at Fauntleroy. Another option worth considering is to implement proof of payment fare system on this route due to the unique nature of the route.

II. RESERVATION SYSTEM A USER PERSPECTIVE – STEP BY STEP

The reservation system will result in a significant shift in how customers use the ferry system. The following is a brief overview of how the system might look to an infrequent ferry rider and a regular daily commuter.

Infrequent Ferry Rider

- Customer decides they want to take a ferry, on a particular day at a particular time.
- Customer either:
 - Goes to on-line reservation system, or
 - Calls the reservation call center
- This could be accomplished as much as a month ahead or as little as 30 minutes ahead of desired time.
- Customer relates their desired travel and determines if space is available.
- If space is not available customer modifies requested sailing times or views all sailings with capacity available and makes another selection
- Once space is confirmed as available, customer confirms travel details including details of vehicle and number of passengers traveling
- Customer then proceeds to make a fare transaction (100% of fare) to complete the reservation either on phone or on-line.
- Fare paid by credit card, direct bank transaction, pre-paid account, or, if adequate time ahead, sends in cash.
- Confirmation number is provided once payment transaction is completed.
- At date and time of sailing customer arrives at terminal as much as 30 or as little as 10 minutes ahead of sailing.
- At the terminal reservation check-in is confirmed automatically. (Note: there are various technologies for accomplishing this, all in current use)
- There is a brief check in with terminal personnel to ensure details of reservation match details of travel, type of vehicle, number of passengers.
- Customer is directed into vehicle holding area
- Customer is loaded onto the boat.

Daily Commuter

- If pattern is daily and very regular, a person may decide to become a qualified commuter
- A qualified commuter:
 1. Establishes an account for fares with a minimum deposit, equivalent to buying a vehicle commuter book of tickets and agrees to maintain a positive balance with

re-charge of account at initial minimum deposit. This could be accomplished automatically, if desired.

2. Declares a particular sailing for particular days of the week may be as few as four up to seven days per week, may be a different sailing on some days, etc.
 3. Guarantees a reasonable, percentage, 60 to 75% of actual use of the reservation,
 4. Guarantees they will cancel or change reservation if they need to move to a different sailing or are gone for a day or days.
- There is an available pool of commuter only capacity declared for each sailing, higher on some sailings during regular commute times and lower at other times. Only qualified commuters have access to this capacity until one week prior to the sailing, then any unreserved capacity in the commuter pool becomes available for other reservations.
 - Once commuter establishes reservation for desired sailing, only exceptions or a change to the base reservation require interface with the reservation system.
 - If changes are needed commuter either makes change on-line or with call center, as long as change is made 30 minutes prior to sailing.
 - Commuter shows up for sailing up to 30 minutes before and as little as 10 minutes ahead of sailing.
 - Commuter vehicle is automatically processed into holding area with brief check for passenger fare. Commuter's account is charged appropriate vehicle fare, automatically, like "Good to Go" pass on Tacoma Narrows.
 - Commuter vehicle loaded onto ferry for desired sailing.

III. CUSTOMER QUESTIONS AND ANSWERS

The following are some of the common questions that were raised during the public outreach process.

- ***What happens if the user misses reservation?*** This will be a system-wide policy with the same application at all terminals.
- ***What happens if the ferry (system) misses a reserved sailing?*** This will be a system-wide policy with the same application at all terminals. In many respects, however, options are limited as there will be a load of vehicles already on the dock if a sailing is cancelled at the last moment. While the monetary policy needs to be established, the most straightforward answer to this question is that the ferry system will work with all customers to complete their travel needs in the most expeditious way possible whether the customer has a reservation, or not.
- ***How can WSF ensure customers that reservation system will work?*** Every major ferry system in the world either has moved or is moving to a reservation system for exactly the same reasons WSF is considering a similar action; the ability to predict the size of terminal facility needed and maintain the site in a constrained environment with constrained capital, to

help flatten out demand and to act as a customer benefit. Private ferry operators are using reservation systems to minimize costs for shore side facilities, because they produce little, or no revenue.

There are several software developers that have reservation products already on the market, specifically built around the business needs of ferry systems. One vendor lists 50 ferry systems as a client base. Automated fare collection has already been introduced in Washington State and is working flawlessly on two state facilities. WSF intends to take advantage of the experience and the infrastructure already in place within the state.

- ***Should a reservation system be designed one-size-fits-all or route by route?*** The basic system will be the same for all routes, but the unique characteristics of that route will be reflected in how the system is deployed and what features of the system are used to best meet the needs of the customers and the ferry system. The amount of the vessel reserved and when capacity becomes available will almost certainly vary by route, but the customer interface will be the same from route to route.
- ***How do we integrate a reservations system with the fare system?*** The design of the system will be such that fare collection and reservation will be fully integrated. Payment of fare will be required when reservations are made and will be a seamless part of the process. Confirmation of travel will be accomplished electronically.
- ***How do we treat residents v. frequent users v. tourists?*** There are both practical and legal aspects to this question. We do not have answers currently on what may be possible in terms of favoring local residents over non-local residents. An informal opinion from the Attorney General is being sought as this is largely a legal and constitutional issue.

However, there are characteristics that can be built into the system that would favor the trip-making frequent users (the assumption is that most frequent travelers are also residents) over non-frequent users. Most infrequent users tend to make travel decisions further ahead. If reservation space is not available when they try to reserve it is likely they will pick another time to travel. When the space is released closer to sailing date this will allow residents and frequent users access to the space that had been assumed to be unavailable by the infrequent traveler.

- ***How do customers deal with the perceived loss of spontaneity?*** While a different approach to using WSF, the reservation system will improve the ability to make spontaneous travel decisions. Today, if one decides to take a ferry, spur of the moment, they could reach the dock only to find the ferry that they want to take is full and have to wait for the next. With a reservation system in place, one can find out ahead of time if there is space available on the desired sailing and can make a reservation if needed or desired. While this does involve a little more planning, it does enhance the predictability of ones travel, even trips that are planned on the spur of the moment.
- ***What is the cost/benefit of reservation system?*** Compared to building terminal facilities of adequate size to accommodate unconstrained arriving vehicles, a reservation system is highly cost beneficial. The estimated system-wide capital cost for a reservation system is approximately \$45 million.

This is a fraction of the cost of expanding one terminal in the WSF system. Using Edmonds-Kingston as an example, both terminals are regularly over capacity at peak times. The traffic and economic impacts on the host communities are negative. Fixing the problem with capital investment is very high. Fixing the problem using a remote holding facility also increases costs for acquisition, maintenance and operation of a facility that is only used part of the time. In this case a reservation system could avoid very significant capital costs while reducing the impact of the terminal on the host communities. Annual operating costs are currently unknown. These will be explored in greater detail during the pre-design process.

- ***How does a reservations system affect “equity?”*** “Equity” is a term that is difficult to define, since everyone has a different view of what is “equitable.” However, a reservation system will be designed as inherently open, with no design feature intended to benefit a particular class or type of rider. As currently conceived, the system would not require additional fare payment to reserve a space on a crossing.