

Section 4

Customer experience

Enhance connections for all users and harness technology for an overall easier trip

The customer experience factors into every aspect of a passenger's interaction with WSF, from looking up a schedule online, to purchasing a ticket, to knowing what to expect at the terminal, to staying informed during their trip for a safe and timely completion of their journey. Customers increasingly expect multimodal travel to be seamless, with an experience that extends beyond the terminal and to their front door. Therefore, the Plan recommends strategies for partnerships and enhancements that consider all legs of a journey to and from a WSF terminal.

In many cases, customers' first interaction with WSF occurs through technologies such as the WSF website, the Save A Spot vehicle reservations system, or the Wave2Go ticketing system. Those interactions can set the tone and expectations for the rest of their trip, as well as their overall impression of ferry service. Reliable, accurate information can help customers better navigate travel challenges that occur if a vessel or terminal is not operational.

Since the 2009 Plan, WSF has made a major technology investment in the launch of the Save A Spot system, as well as enhancements to Wave2Go ticketing and the customer website. Before customers begin their journey, they may consult WSF's website for sailing schedules, alerts and space availability. They can find scheduled ferry departure and predicted arrival times through VesselWatch, vehicle reservation availability, and even view live video images of the terminal holding areas, giving them an idea of what kind of traffic congestion to expect. Although this information is helpful, it can be difficult to derive the amount of time a customer will wait in line based upon a video image of cars in line, particularly for infrequent travelers. Anecdotally, customers approaching the tollbooth still frequently ask the question, "What sailing will I be on?"

Currently WSF relies on manual processes to collect data, which is segmented and limits the amount of information that is communicated regarding travel and wait times. The manual data input limits the amount of service alerts and notifications that can be sent

WSF's technology needs and opportunities

- Increased system integration.
- Enhanced data management and analytics.
- Reliable customer information.
- Automation of current manual processes.
- Accurate and reliable passenger counting.
- Enhanced electronic fare system.
- Improved communications infrastructure.
- Integration with landside infrastructure and coordination with other agencies.



to customers. Automating certain manual processes can free up staff time to provide additional services and support. Technology investments focused on system integration and automation would enable WSF to respond more quickly and enhance ferry customers' experience door to door.

In addition to technologies, accessibility within the terminal (terminal design) and adjacent to the terminal (transit connections and infrastructure) can affect the customer experience. Knowing how to navigate the terminal and the ease of traveling through the terminal can affect how customers make their connections to continue their trip. Currently, the WSF Terminal Design Manual calls for standards for accessibility and improving multimodal connections for preservation and improvement projects.

The Plan's main goals for improving customer experience include:

- Provide better trip planning information.
- Reduce customer wait times.
- Enhance multimodal connections and accessibility.

Plan Recommendations

This Plan provides the following recommendations and strategies for enhancing the customer experience with the ferry system from the online search bar to the journey home:

- Invest in technology that gives customers more information to support better trip planning.
- Modernize fare collection to provide operational efficiencies and meet customer preferences and expectations.
- Increase accessibility and wayfinding in and around the vessels and terminals to improve access and multimodal connections.
- Enhance mobility by improving pedestrian, bike and transit connections to and from terminals.
- Plan vessel and terminal spaces to be flexible and responsive to emerging technologies and new transportation options.

The sections below describe specific strategies to help implement these recommendations.

Invest in technology that gives customers more information to support better trip planning

The first interaction between the customer and WSF often occurs long before arrival at the terminal. It may be on the website looking up sailing schedules, making a reservation or looking for somewhere to park. The Plan provides strategies to improve the customer experience through technologically updated and coordinated systems that provide easily accessible, real-time information—all with the purpose of utilizing resources most efficiently and allowing customers to make informed decisions about how and when they travel.

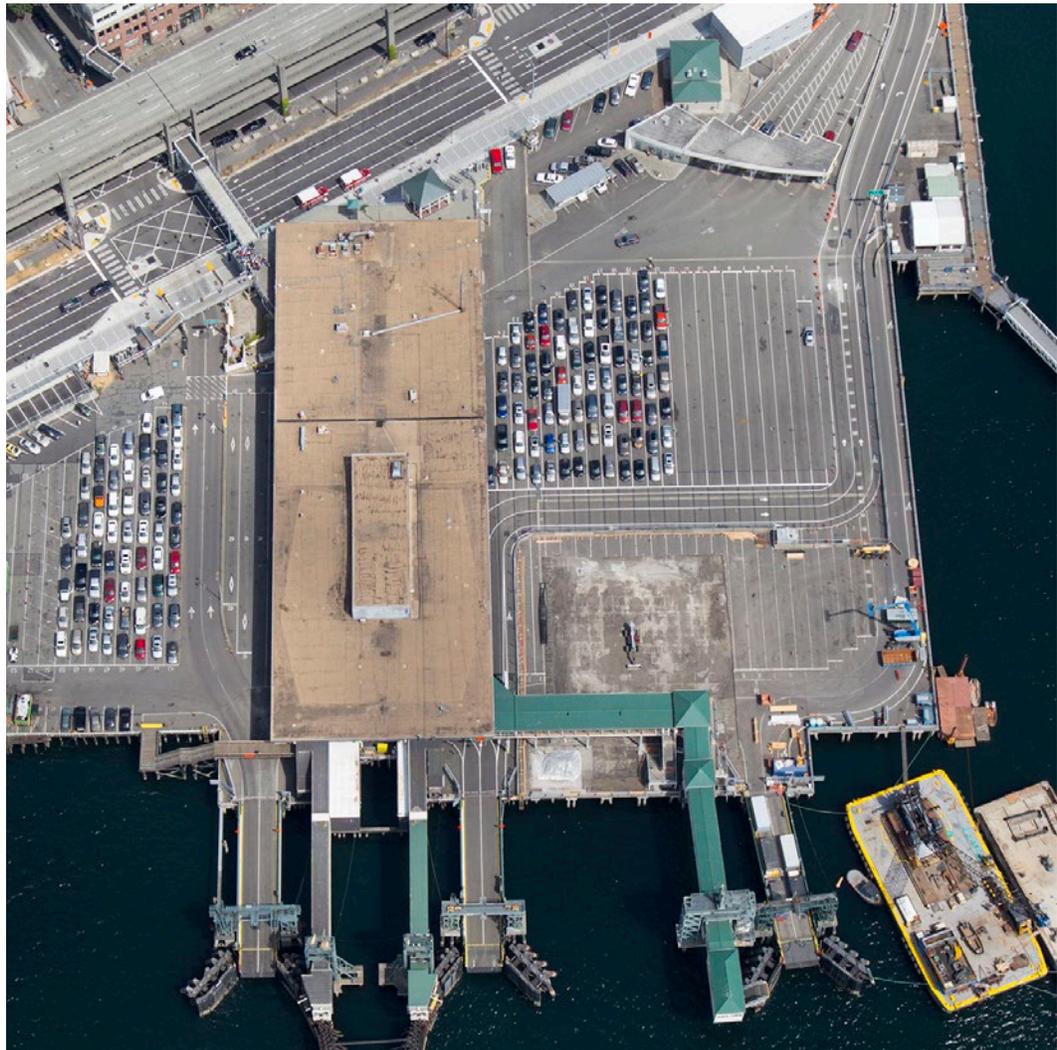
WSF already manages several information databases, and many are accessible through their existing website. However, the right information is sometimes hard to find and not always as up-to-date as customers would like to help them make traveling decisions. Currently, Wave2Go, Save A Spot and customer alerts subscriptions require multiple passwords and usernames. Similarly, wait time and traffic congestion information is not always easily understood or updated in a timely manner because of reliance on manual processes. Information related to parking availability around terminals is also not available, providing uncertainty about which sailing time a customer may take and whether they would prefer to take the journey, by walking on or driving. A unified, multi-platform system would allow travelers to be able to access ticketing and up-to-date travel information using one login.

Additionally, with the replacement of vessel communication systems and the internal schedule database, service changes would be automatically updated and pushed out to customers through a unified notification. This upgrade would also offer the opportunity to provide customers with public Wi-Fi, allowing for the potential to work onboard and provide flexibility in commuting hours.

The following strategies could be implemented in the near term to help improve data collection and communication of information to customers:

- **Upgrade the website:** Create a more user-friendly interface and minimize the number of pages that customers need to view to obtain key information.
- **Move toward a unified, multi-platform alerts system:** Automate the dissemination of service alerts (including queues and wait times) across multiple channels.
- **Automate queue detection and wait time information:** Explore opportunities to electronically detect the length of vehicle queues approaching terminals in real time, which would be reported to customers via a variety of communications channels, including electronic signage at the terminals and at decision points on roadways, and via web and mobile applications.

- **Provide real-time parking information:** Invest in technology that detects and communicates where parking is available and what it costs at high demand terminal parking locations.
- **Replace the vessel communications system:** Replacement of the ship-to-shore communications system and onboard wireless network would facilitate real-time data transfer between vessels and shoreside locations, more quickly update customers about service changes and offer the ability to provide public Wi-Fi.
- **Upgrade the common schedule database:** Upgrade and integrate core schedule data with other systems to provide automated updates and coordination to the other systems that rely on this information.



Modernize fare collection to provide operational efficiencies and meet customer preferences and expectations

WSF's existing fare collection system is efficient at collecting fares and validating tickets; however, it does not offer certain fare collection alternatives that customers are beginning to expect, such as mobile ticketing. WSF plans to continue allowing customers to pay for their travel using the regional ORCA transit smart card as the next generation ORCA system is planned for release in 2021. WSF is exploring the possibility of collecting fares with *Good To Go!* toll transponders that some customers with vehicles already use when driving on tolled facilities.

WSF is also monitoring the development of advanced automated technologies for vehicle length measurement and in-vehicle passenger counting, which could further increase the efficiency of fare collection and provide more efficient vessel load management.

Implementation of the following short-term strategies would help to make travel more convenient for customers and also encourage pre-payment of ferry fares, reducing congestion at tollbooths.

- **Upgrade ticketing and reservations systems:** Update the existing electronic fare system with features such as integration with a customer relationship management system; new payment and ticketing capabilities to support payment with mobile devices, *Good To Go!* and next generation ORCA passes; and improved customer information and account functions.

To meet the long-term goal of automating portions of the loading process and data collection, WSF should monitor the progress and development of two available technologies:

- **Automatic vehicle length detection:** Installation of equipment to automatically detect the physical dimensions of vehicles would result in the most accurate fare pricing and the most efficient vessel loading. However, this technology is considered to be emerging.
- **Automatic vehicle passenger counting:** Implementation of a solution that would automatically detect the number of passengers in a vehicle could allow prepaid vehicles to drive directly onto the ferry without stopping for inspection. If proven successful, this emerging technology could ultimately speed up the boarding process and be more convenient for customers.

As fare collection technology is explored, a simplified fare structure could be used to facilitate the implementation of automated systems. Fare structure and pricing strategies are discussed in more detail in the Manage growth section.



Increase accessibility and wayfinding in and around the vessels and terminals to improve access and multimodal connections

Accessible wayfinding that is compliant with the Americans with Disabilities Act (ADA) in and around the terminal is crucial for customers to understand how to travel between the ferry and their transit connection or destination. ADA-compliant signage allows all persons—including those with disabilities or impairments—to visualize the information provided. Appropriately designed signage and wayfinding help to provide the information customers need. Additionally, electronic signage can provide customers with real-time arrival and departure information for these connections. As funding becomes available or other terminal projects are undertaken, the Plan recommends the following strategy:

- **Implement ADA-compliant electronic signage at terminals:** Provide directional information, service alerts and real-time schedule information, such as the time until the next sailing.

Enhance mobility by improving pedestrian, bike and transit connections to and from the terminal

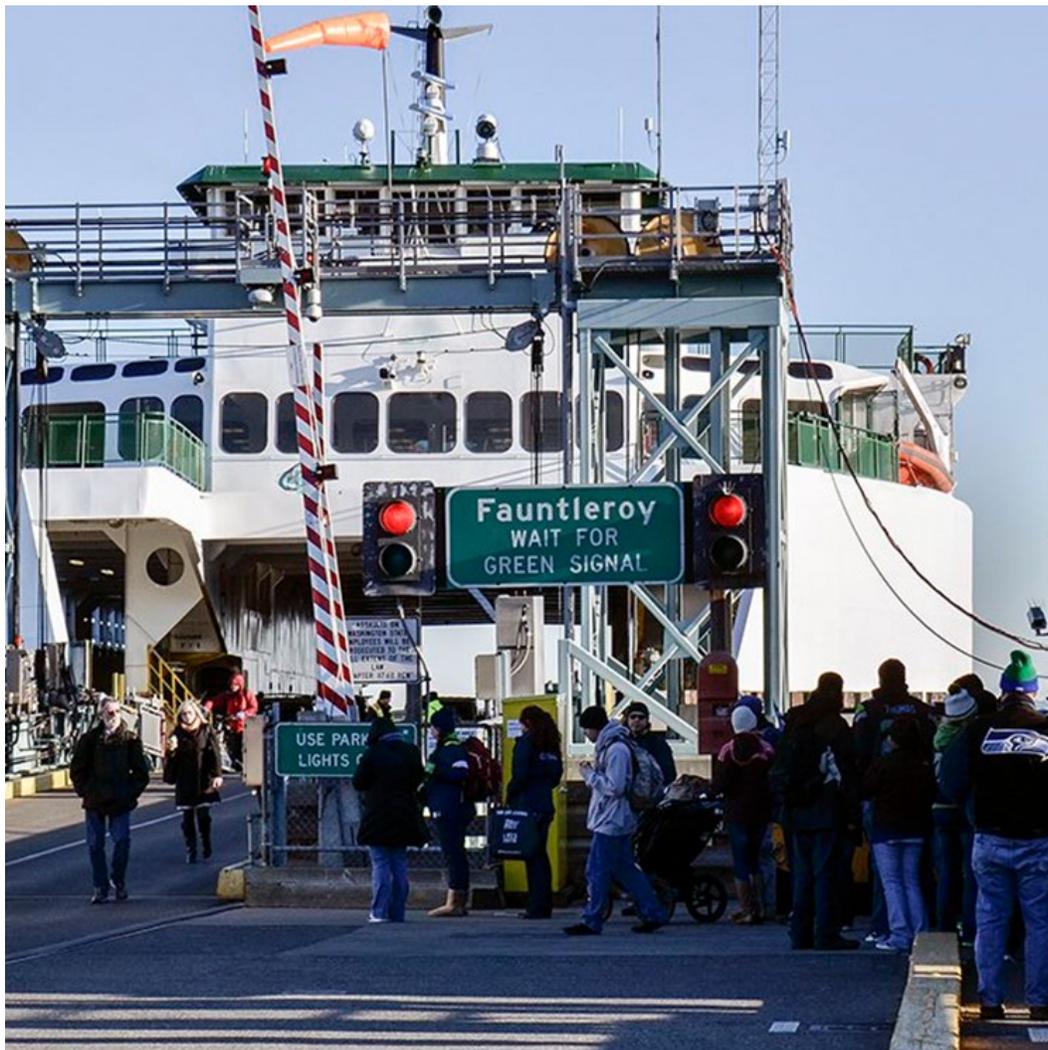
Traffic congestion approaching WSF's terminals is an issue that not only affects ferry customers but also affects some of the surrounding communities. WSF has already begun partnering with transit agencies to improve transit connections by more closely synchronizing schedules to minimize transfer times. As mentioned earlier in this section, approaches such as accepting the same fare payment methods, providing automatic fare transfers between transit modes, and improving signage and wayfinding could streamline connections from ferries to other modes of transportation.

In addition to transit connections, improving bike and pedestrian connections to and from terminals and providing alternatives to driving alone can help to reduce traffic congestion. Improving traffic control at terminal access points would also improve vehicular traffic flow and safety for bikes and pedestrians.

Although increasing bike and pedestrian connections can reduce traffic congestion, pedestrian traffic is forecast to grow more than vehicle traffic on most WSF routes, and bike ridership is also expected to grow significantly. According to 2040 forecasts, bike ridership is expected to increase by 67 percent on the Seattle/Bremerton route and by 76 percent on the Seattle/Bainbridge island route during peak evening sailings.

To support and encourage bike and pedestrian traffic, the Plan recommends implementing the following strategies throughout the planning horizon as opportunities arise or need grows:

- **Prioritize bike and pedestrian loading:** Continue to prioritize loading bicycles before and after vehicles to accommodate all bikes on each sailing.
- **Look for opportunities to incorporate improved bike and pedestrian infrastructure in terminal preservation and improvement projects:** One example is through overhead loading walkways that allow walk-on passengers to load and unload the vessel completely separated from vehicles, which increases pedestrian safety and efficiency of terminal operations.






Plan vessel and terminal spaces to be flexible and responsive to emerging technologies and new transportation options

WSF is beginning to see the effects of congestion from transportation network companies such as Uber and Lyft at terminal curbside pick-up and drop-off zones. Additionally, as autonomous vehicles become available, demand for curb space is likely to continue increasing, as it is expected that driverless taxis and shared vehicles will further reduce the cost of ride-hailing.

As these services grow and parking becomes scarcer, more customers may opt to ride-hail or rideshare to the terminal—or in the future be dropped off by an autonomous vehicle, resulting in increased traffic in pick-up and drop-off zones. This congestion can spill over to neighborhoods and cause confusion with ferry queues. To address these challenges, the Plan recommends the following strategy:

- **Assess the evolution and expansion of pick-up/drop-off areas at terminals:** as part of capital improvements planning.

Operationally, autonomous vehicles brought on board ferries are likely to be able to optimally position themselves, or “platoon,” so that they take up the least amount of space. This advancement would allow more vehicles to board per sailing. Currently, customers space themselves at the direction of terminal staff who try to minimize gaps between vehicles, but the amount of space between vehicles can still add up significantly during busy times when it is important to get as many vehicles on board as possible.

Flexible design of new vessels would maximize WSF’s ability to manage passenger and vehicle space as demand potentially shifts. Lost revenue from vehicle fares could be offset by electronically charging a fee to vehicles providing pick-ups and drop-offs (Although with the heavy demand forecasted, it is more likely that the space will simply be filled by the greater demand.) Because of the difficulty of predicting the effect on ridership of emerging technologies such as autonomous vehicles, the Plan recommends the following strategy:

- **Design new vessels with flexible vehicle and passenger spaces:** in order to accommodate changing ratios of vehicle, walk-on and bike passengers in the future.

The next section of the Plan outlines the goals and strategies for how to approach, plan for and ultimately manage the growth in demand for the system. The section will outline opportunities for greater system utilization and infrastructure investments to enhance capacity.