

Washington State Ferries Service Restoration Plan – February 2023 Update

Introduction and Overview

Released in March 2022, Washington State Ferries' COVID-19 Service Restoration Plan (SRP) describes the process by which WSF will increase its service to meet increasing demand as the ferry system recovers from the COVID-19 pandemic and responds to ongoing crew and vessel availability challenges. The goals of the SRP are to maintain reliability of service, ensure that service restoration can be maintained, prioritize routes based on ridership needs, and facilitate transparency and customer communications.

A return to full capacity of the system will be dependent on several variables, including:

- Ridership levels and accommodating the seasonal increase in summer peak season ridership.
- The ability of WSF to recruit, hire and train new employees to fill key positions.
- The rate of retirements and other separations that contribute to overall staffing levels.
- Vessel availability due to the timeline for new vessel construction, necessary vessel maintenance, unanticipated breakdowns, vessel retirements and an aging fleet.
- Recovering from the impacts of the COVID-19 pandemic.

Because these variables are continuously shifting, it is exceedingly difficult to pinpoint an exact date when ferry service will fully return to “normal,” however this update to the SRP lays out a timeline for restoring the remaining routes and outlines ongoing challenges with maintaining reliable ferry service systemwide. Four of WSF's eight routes – Anacortes/San Juan Islands, Seattle/Bainbridge, Mukilteo/Clinton and Edmonds/Kingston – have been restored to full service. This doesn't mean there are never crewing cancellations, or sailings impacted by unplanned vessel repair issues, but WSF is able to commit to regular service 95% of the time. The remaining routes are operating on an

“Alternate Service Plan,” a reduced level of service that is sustainable and provides predictability while WSF works to replenish and realign its resources. As crew and vessel resources become available WSF will continue restoring ferry service on a route-by-route basis in four stages:

Stage 1: Route Prioritization

To better focus its resources and efforts, WSF has prioritized ferry routes based on ridership, service performance, availability and directness of travel alternatives, and vessel and crew availability. This is the order in which remaining routes will be restored to full capacity:

Stage 2: Alternate Service

While a route is operating on its alternate, reduced schedule, WSF will assess crewing and vessel resources to determine when to increase service levels on the prioritized route.

Stage 3: Trial Service

The prioritized route will operate on its regular seasonal schedule on a trial basis. A route will be considered “restored” if it can operate at a 95% reliability rate for three weeks, which gives WSF enough time to measure the sustainability of the restored service.

Stage 4: Route Restoration

Route restoration is the point in which service schedules are restored to seasonally appropriate levels that meet ridership demand, and service meets reliability targets. Once a route is restored, the process begins again until all routes are restored to full capacity.

On top of lingering impacts from COVID-19, WSF must also continue to address other systemic challenges to system reliability identified by previous planning efforts, including the 2040 Long Range Plan, and to implement recommendations resulting from these efforts.

Status of the Four Pillars of Service

WSF’s COVID-19 Response Service Plan, published in June 2020, outlined four necessary elements that must all be present for WSF to be able to provide sufficient ferry service. These “four pillars of service” are ridership, crewing, vessels, and funding.

WSF has been continuously monitoring the health of the four pillars in order to assess its ability to provide and restore service where possible. The SRP explains the background and context for these pillars of service.



Graphic representation of the four “pillars” of ferry service.

As of Feb. 2023, the latest status is:

Ridership

Early in the pandemic, ridership fell dramatically. In late March 2020, total ridership had fallen 78% compared to the same week in 2019. Vehicle ridership fell by 67%, with walk-on passenger ridership falling by 93%. Total system ridership in 2022 rose to roughly 73% of 2019 pre-COVID-19 numbers, with vehicles climbing to 83% and walk-on customers up to 50% of pre-pandemic levels. These levels are nearly identical to 2021 with a slight decrease in vehicle ridership and increase in walk-on ridership due to vehicle capacity constraints on routes not yet fully restored. However, changes in travel patterns and several routes still running alternate service levels mean that ridership has not yet stabilized.

Vessels

Vessel availability has recovered from the maintenance backlog in the initial months of the pandemic; however, the vessel pillar remains at high risk because of an aging,

diminishing fleet. In coming years, vessel availability will become a major constraint, especially in restoring international service to Sidney, BC. With no WSF vessels built between 2000 and 2010, due to the passage of I-695 in 1999, the fleet is aging, with 11 of the 21 vessels over 40 years old, including five over 50 years old.

Vessels are in service more than 20 hours each day, making required maintenance time difficult to schedule. To restore service reliably, WSF must be able to schedule planned maintenance for all vessels by rotating them in and out of service, which is made more challenging due to the lack of spare vessels and limited drydock space in Puget Sound. New vessels take multiple years to build, with the next not expected to be completed until 2027. WSF will not be able to add to the fleet quickly enough to address the loss of vessels due to recent and planned retirements.

Crewing

Currently, WSF is facing severe staff shortages that are unprecedented in its 70-year history. The effects of an international shortage of mariners, attrition due to the COVID-19 pandemic and other factors, and the aging demographics of the workforce have combined to reduce staffing below levels necessary to reliably operate the system. This shortage has resulted in unplanned service reductions and a decrease in system reliability, especially as ferry ridership approaches pre-pandemic levels.

Funding

WSF’s operating budget is based on legislatively-approved service levels and is appropriated to the service level WSF was operating before the COVID-19 pandemic. Funding is adequate to support current and restored service levels at this time. However, the pandemic-induced loss of ridership—and the loss of other business, such as advertising and galley service—has led to a corresponding loss in revenue. For the last 40 years, WSF’s fare recovery rate (the percentage of operating costs covered by direct fares and miscellaneous revenue) has averaged about 75%. With the reductions in ridership, the fare recovery rate is now about 58%. For the remainder of the current biennium (21/23) and the next (23/25), the gap in revenue is being filled with federal COVID relief funds. So, for now, the federal relief funding is providing a stop-gap, however, this funding source is not sustainable beyond the next biennium.

Current Service Levels

WSF has prioritized route restoration based upon ridership, service performance, availability and directness of travel alternatives, and vessel and crew availability. Four of WSF’s eight routes – Anacortes/San Juan Islands, Seattle/Bainbridge, Mukilteo/Clinton and Edmonds/Kingston – have been restored to full service, and remaining routes will be restored in order as staffing and vessel resources become available. The other routes are operating on reduced levels of service known as the “Alternate Service Plan.”

Alternate Service Plan

Since October 2021, WSF has been working through service restoration on a route-by-route basis and operating other routes on an “Alternate Service Plan,” which is a reduced level of service that better aligns with available resources. The purpose of the “Alternate Service Plan” is to provide customers with more predictable and reliable travel by minimizing unexpected cancellations while still providing critical links to island communities and travelers who depend on the ferry system.

Table 1 summarizes the gaps between the service that is currently provided and budgeted, traditional service levels based on the number of vessels assigned to each route. These “gaps” in service are what WSF needs to restore

Route	Restoration Stage
ANACORTES/ SAN JUAN ISLANDS	4 Regular Service
SEATTLE/BAINBRIDGE	4 Regular Service
MUKILTEO/CLINTON	4 Regular Service
EDMONDS/KINGSTON	4 Regular Service
FAUNTLEROY/VASHON/ SOUTHWORTH	2 Alternate Service
SEATTLE/BREMERTON	2 Alternate Service
PORT TOWNSEND/ COUPEVILLE	Late-Fall/Winter Regular Service
	Late-Spring Alternate Service
ANACORTES/SIDNEY, B.C.	No Service
POINT DEFIANCE/ TAHLEQUAH	4 Regular Service

Table 1: Alternate Service Plan Compared to Traditional Service Levels for Remaining Routes

ROUTE	Current Alternate Service (as of Feb. 2023)	Traditional Winter Service	Traditional Spring Service	Traditional Summer Service
Fauntleroy/ Vashon/ Southworth	2 vessels on weekdays, 2 vessels on weekends, late-night sailings suspended	3 vessels on weekdays, 2 vessels on weekends	3 vessels on weekdays, 3 on weekends with #3 boat at 8 hrs/day	3 vessels on weekdays, 3 on weekends with #3 boat at 16 hrs/day
Seattle/ Bremerton	1 vessel	2 vessels	2 vessels	
Anacortes/ Sidney, BC	No sailings to Sidney		1 sailing to Sidney	2 sailings to Sidney
Port Townsend/ Coupeville	1 vessel	2 vessels in “shoulder” season (begins early May); 1 for early spring		2 vessels

Service Restoration Approach

The Legislature has established a series of performance metrics and goals that WSF continually strives to meet. One of those metrics is service reliability; the goal is for WSF to complete 99% of its scheduled sailings. From 2018 through 2020, WSF exceeded this goal systemwide, though some individual routes experienced less than 99% reliability. For January 1 through December 31, 2022, WSF completed 97.8% of scheduled sailings.

WSF's approach to service restoration is grounded in this metric. WSF has prioritized the order of route restoration based on several factors, including ridership, crew and vessel availability and alternate access. Once full service can be maintained on a route for a three-week period at 95% reliability compared to traditional service levels, WSF considers that route "restored" and focuses on restoring the next route. When service has been restored across the system, WSF will then work to bring all routes up to 99% reliability.

The SRP outlines the service restoration process in detail.

Service Restoration Process

When considering the restoration of a route, WSF analyzes information and makes service decisions in four phases. The graphic on the right illustrates the service restoration process and the four phases.

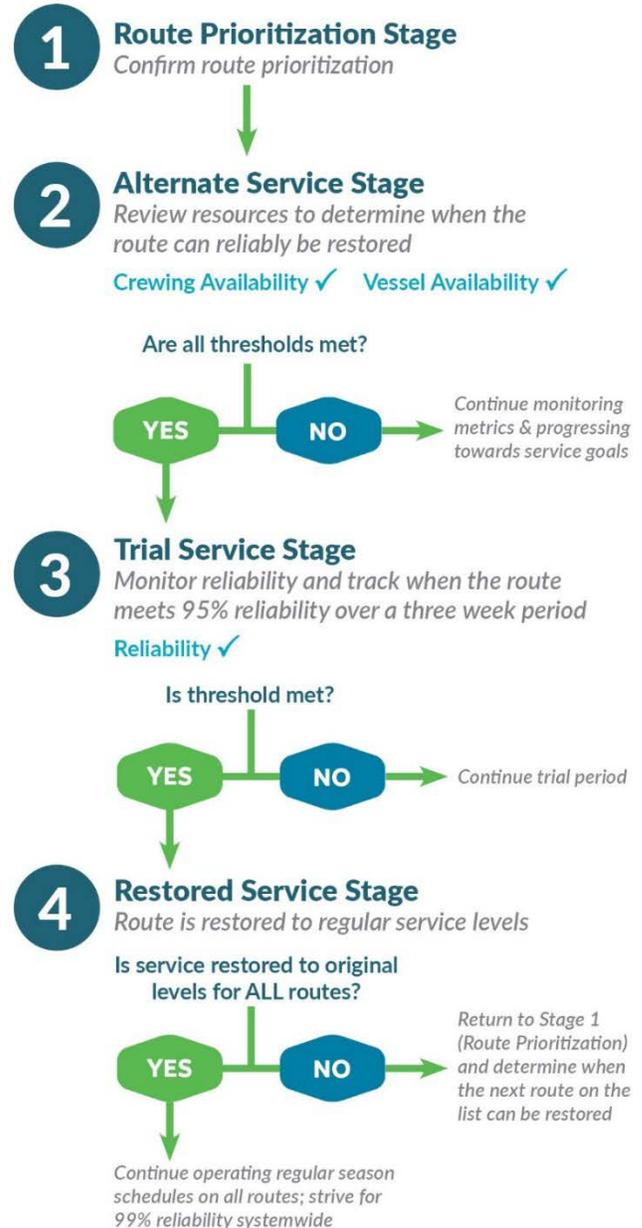
Stage 1: Route Prioritization

WSF is restoring service on a route-by-route basis. In the SRP, WSF prioritized the routes to guide where to focus resources as they become available. The prioritized list of routes is:

- Anacortes/San Juan Islands
- Seattle/Bainbridge Island
- Mukilteo/Clinton
- Edmonds/Kingston
- Fauntleroy/Vashon Island/Southworth
- Seattle/Bremerton
- Port Townsend/Coupeville
- Anacortes/Sidney BC

In late 2022, WSF reassessed route prioritization according to the key factors laid out in the SRP. Ridership and service performance on routes currently

Service Restoration Process



on alternate service indicate the inadequacy of lower service levels in moving our riders. Routes on alternate service often have larger loads on their limited sailings, which has meant longer dwell times at the terminal and late-running vessels.

The assessment verified the current order of route priority. Of note, the Seattle/Bremerton route suffers less from a lack of capacity compared to other routes but more due to the long times between sailings on one-vessel service. Because of limited options for travel to/from Vashon Island, the Fauntleroy/Vashon/Southworth route remains the next priority for service restoration.

Stage 2: Alternate Service

The two key metrics for determining when to move from alternate service to full service are crewing and vessel availability. The status of these two constraints, which are both critical to reliable service restoration, is discussed in greater detail later in this update.

Stage 3: Trial Service

When a route moves to the Trial Service stage it operates on its regular seasonal schedule on a trial basis. This stage is focused on monitoring the reliability of a route to ensure stability of crew and vessel resources and potential impacts to the system as a whole. Before service is considered permanently “restored,” a route must operate with 95% reliability for a minimum of three weeks to capture trends from crew scheduling which occurs in two-week scheduling increments.

Stage 4: Route Restoration

Route restoration is the point in which service schedules are restored to seasonally appropriate levels that meet ridership demand, and service meets reliability targets. The latest route to be restored was Edmonds/Kingston, which WSF considered fully restored as of late February 2023. Once a route is restored, the process begins again until all routes are restored to full service. When service returns to traditional levels, a route is still subject to cancelled sailings due to weather, unplanned vessel repairs, law enforcement activity and many other operational impacts that contribute to lower service reliability.

Timeline for Service Restoration

The timeframe for restoration is a delicate balance of providing needed service with reliability for customers. As service restoration progresses, WSF anticipates the system will face increased risk to reliability as crewing and vessel resources become more strained, especially as ridership increases in the late spring and summer months.

Timeline for service restoration of remaining routes

Anacortes/San Juan Islands

Restored January 2022

Seattle/Bainbridge

Restored April 2022

Mukilteo/Clinton

Restored May 2022

Edmonds/Kingston

Restored February 2023

Fauntleroy/Vashon/Southworth

Estimated restoration: May 2023 (weekday service); Fall 2023 (full service)

- WSF expects to begin trialing full weekday three-boat service in early-April, or once a vessel and crewing is available. Because the three-boat schedule is so different from the two boat schedule, the Trial Service stage will be more challenging than trials on other routes. WSF will communicate with customers regularly about each day's expected schedule and anticipates it may take longer than three weeks to reach full route restoration.
- The route will be considered fully restored once it reaches 95% reliability on the three-boat schedule for a period of three weeks. At this time, WSF expects weekday service on the Fauntleroy/Vashon/Southworth route to be restored by the end of May 2023 and to be operating the full weekly schedule by Fall 2023.
- While waiting for both the vessel and crewing availability necessary to trial three-boat service, WSF will add some additional midday and evening

service to fill gaps in the two boat schedule.

Seattle/Bremerton

Estimated restoration: October 2023

- At this time, WSF does not anticipate having crewing available to restore full service to Seattle/Bremerton until after the end of the summer 2023 season, beginning a trial of two-boat service at the end of September. The route will be considered fully restored after it reaches 95% reliability over a period of three weeks.
- In the meantime, WSF will add additional morning and midday trips as crewing and a vessel is available, restoring partial two-boat service before the start of the summer season.
- WSF will continue to support additional Kitsap Transit passenger-only fast ferry service until Seattle/Bremerton is restored to full two-boat service in fall 2023.

Port Townsend/Coupeville

Estimated restoration: Spring 2024

- Port Townsend/Coupeville will remain on one-boat service through spring, summer and fall 2023.
- As the route typically operates on one-boat service in the late-fall through early-spring, WSF will begin trialing full, two-boat service in spring 2024. Once the route reaches 95% reliability for a three-week period it will be considered fully restored.
- Because of the impacts of operating one-boat service during the busy summer season, WSF will increase passenger levels on busy event weekends to carry as many people as possible, as well as add a late-evening trip on Sundays and Memorial Day using crew already on watch.

Anacortes/Sidney, BC

Estimated restoration: 2030

- Due to lack of vessels, specifically a vessel certified to sail internationally, WSF is not able to restore service to Sidney, BC until at least spring 2030.
- WSF will continue to explore opportunities to restore service to Sidney sooner than 2030.

Crewing and Vessel Availability Challenges

Crewing and vessel availability are the primary challenges and considerations that WSF faces as it implements the service restoration plan described above and are the key metrics used to decide when to restore service on a route.

In addition to the profound effects of the COVID-19 pandemic, WSF faces numerous ongoing challenges that compound the immediate crew and vessel shortages. Many of these challenges were identified in the WSF 2040 Long Range Plan (LRP), submitted to the Legislature in January 2019. The LRP provides a proposal for investments and policy recommendations that support reliable, sustainable, and resilient ferry service through 2040 and beyond. The LRP identified investment in WSF’s workforce as one of the top priorities to ensure continued system reliability. It also placed particular attention on stabilizing the ferry fleet by building 16 new vessels and providing adequate time for vessel maintenance.

Noting how intertwined the issues are, the LRP notes that new infrastructure is only valuable if WSF has the skilled workforce to operate and maintain it, calling for significant investment in attracting, retaining and strengthening the workforce and in building new vessels as soon as possible. In the context of service restoration timing, these two metrics are the foundation of WSF’s ability to restore and provide full, reliable service systemwide.

Crewing Availability

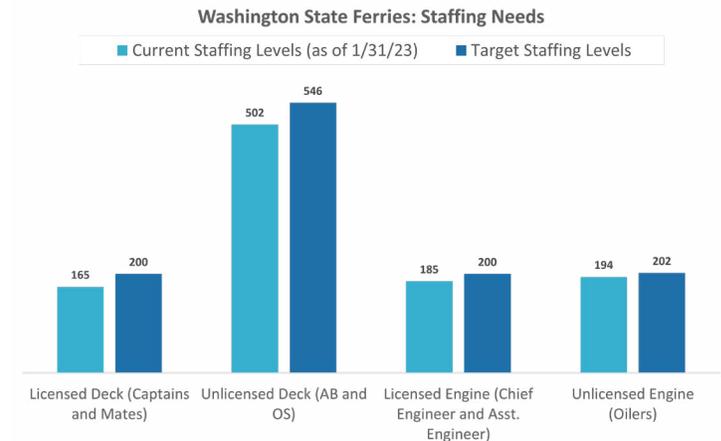
WSF employs nearly 1,900 people on vessels, in terminals, at the Eagle Harbor Maintenance Facility, and at the headquarters facility in Seattle. The management, maintenance, and operation of the ferry system depend on many specialized positions responsible for transporting people and goods in a marine environment 24 hours a day, 365 days a year. These specialized employees, such as deck officers and engineers, undergo years of training, certifications and sailing time before they are qualified to serve in these positions.

Due largely to funding provided by the Legislature in spring 2022 that allowed WSF to change the way it recruits, hires and trains employees for marine positions, the agency has made good progress in

addressing crew availability challenges. In 2022, WSF hired 202 fleet personnel. With 42 retirements and 99 separations for other reasons, that’s a net gain of 61 new fleet employees. With attrition still an issue, WSF continues to focus on the recruiting and training necessary to restore service across the system.

Staffing Levels

The number of positions needed to provide scheduled service on a given route is based on the U.S. Coast Guard-mandated crew required to sail each assigned vessel, and the number of watches (crew shifts) to provide the scheduled service. However, WSF must maintain more than the minimum levels of crewing needed to operate the system on a daily basis, to replace crewmembers who are out for long-term and short-term reasons, such as vacation, sick and other



protected leave, and employees who are in required training. As of the end of January 2023, the number of WSF vessel employees, deck and engine, is below staffing targets for being able to reliably operate full service systemwide.

Because ferries are crewed at the minimum levels required by the U.S. Coast Guard, the loss of a single crewmember means a vessel cannot sail, and a trip or multiple trips must be cancelled. Cancellations are only made after WSF’s dispatchers make hundreds of calls to on-call and other staff trying to fill vacancies.

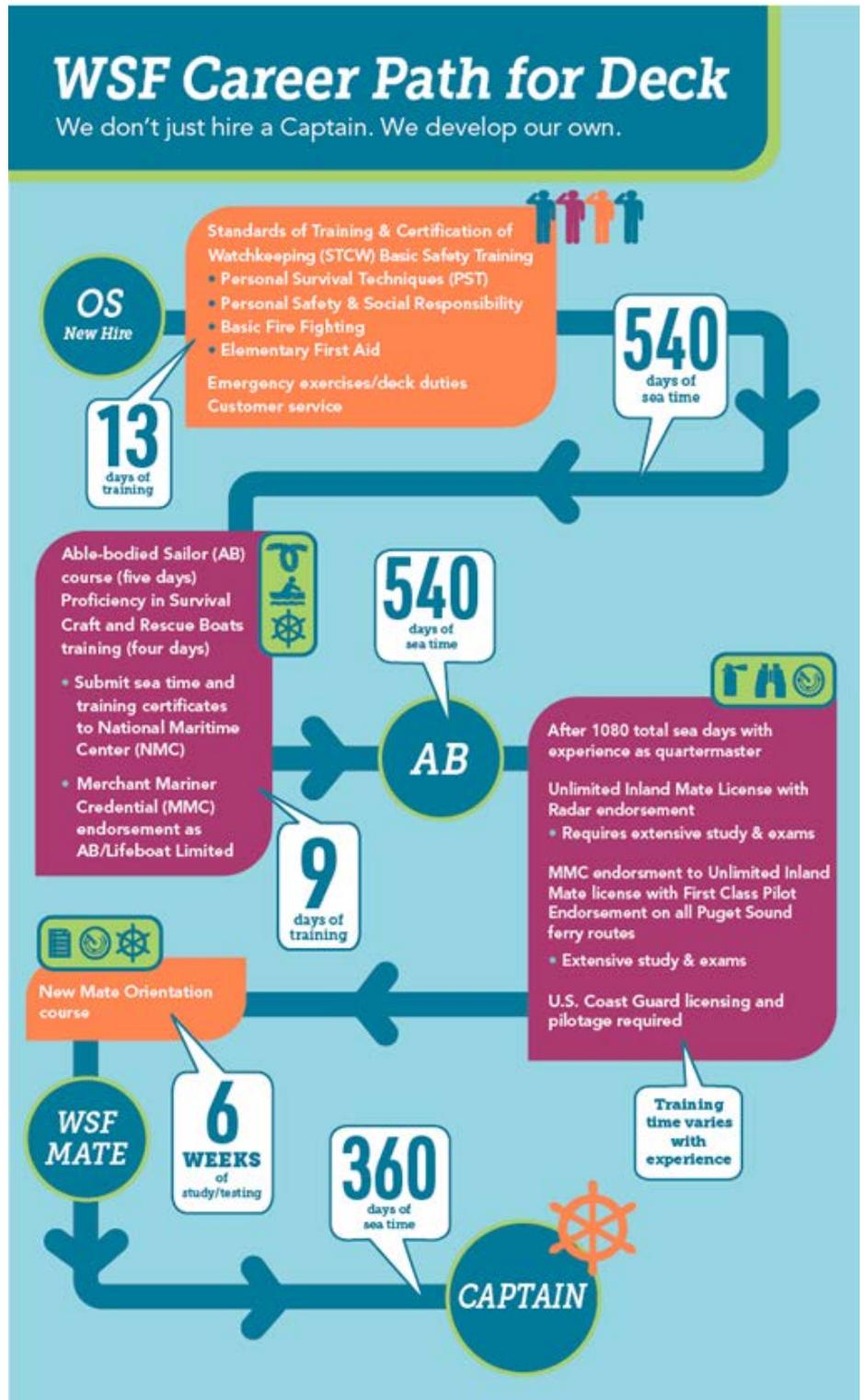
Shortage of Licensed Deck Officers

The number of licensed deck officers (captains and mates) is the biggest crewing challenge facing WSF. Ideally, WSF would have approximately 200 licensed deck officers in the system. As of Feb. 15, 2023, WSF has 165 LDOs.

These highly skilled and highly credentialed positions are challenging to fill. To sail as a LDO at WSF, a crew member must not only possess the required U.S. Coast Guard licenses but must also acquire the necessary piloting and working knowledge of the vessels, as outlined in the graphic below. Historically, while obtaining this training, they were also expected to work in an unlicensed position in the fleet, which can be undesirable for those coming in with hard-earned maritime experience and credentials they could not use until the training element was completed.

Employees wishing to move up from unlicensed to a LDO in the fleet must complete New Mate Orientation (NMO) which is a six-week intensive training program. This training is designed to not only assess a candidate's ability to safely navigate a WSF vessel under any circumstances, but also includes safety, security, leadership, ship management and other factors that create a successful career deck officer. Fifteen crewmembers completed NMO in spring 2022. With these new officers eligible to work in the system, it helped alleviate some of the crewing constraints that contributed to reduced service, but WSF still needs additional LDOs to restore service to pre-pandemic levels.

To sustain staffing required to provide reliable service, WSF has taken a proactive approach to workforce development by easing the career growth restrictions for internal unlicensed deck crew (ABs) to become licensed mates. Previously, employees had to obtain mate credentials and pilotage on their own time, using their own money. WSF is now paying for these credentialing classes and paying employees' wages while they are obtaining their mate credentials and pilotage creating a cleaner path from AB to Mate for those who wish to take it.



One of the added benefits of these programs is that in the past WSF often didn't know exactly how many ABs were engaged in working toward their mate license or how far along they were in the process and was, therefore, unable to plan ahead with a reliable view of the pipeline for new LDOs. With these new programs in place, WSF can now forecast out how many mates will have the necessary training each year.

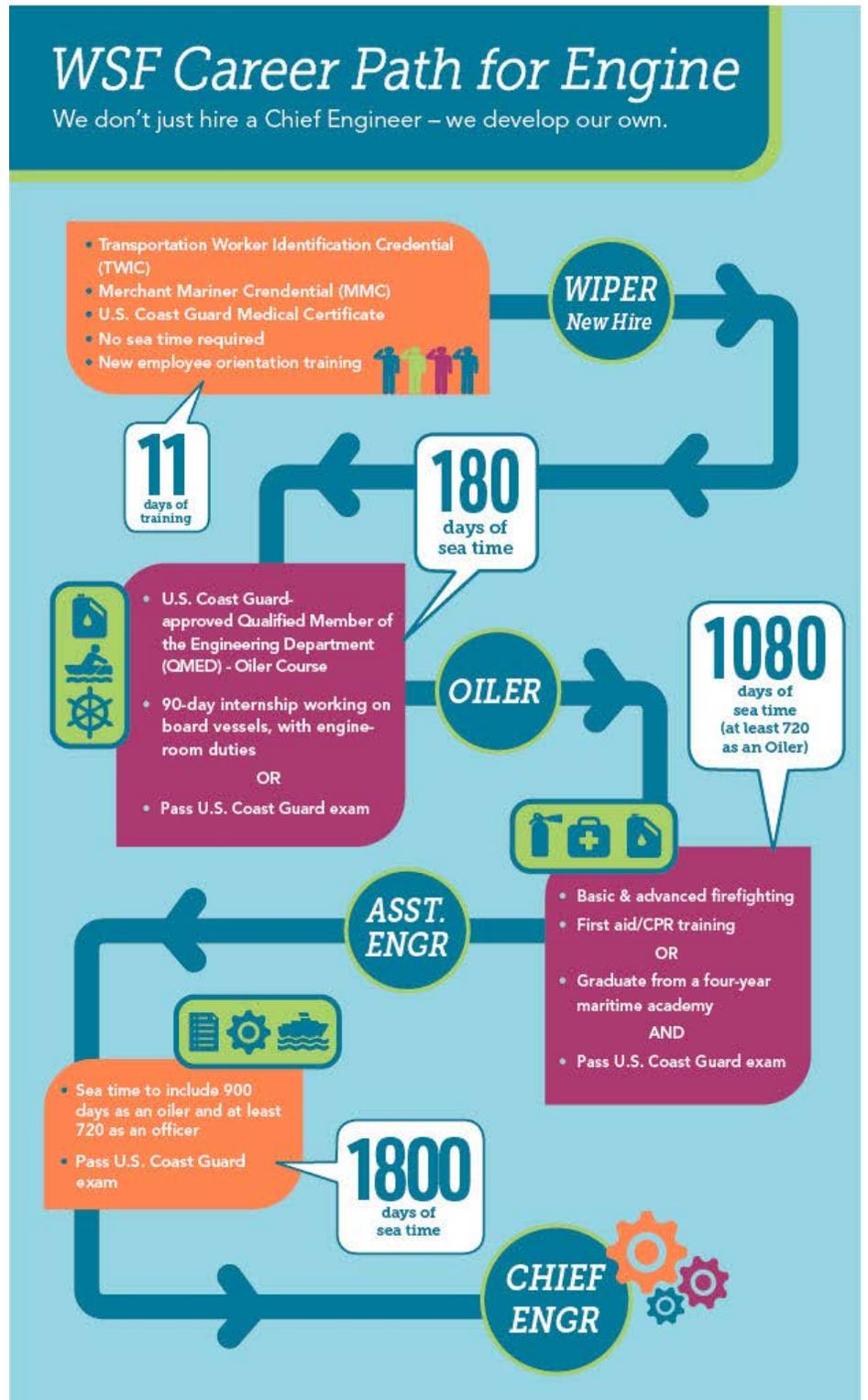
At the same time, WSF will address barriers to attracting external LDO candidates. Training costs are a barrier to many candidates, which is an equity issue. Private maritime industry absorbs these costs as a business cost, and WSF needs to be able to compete with those businesses for new recruits. There are two parts to this program, the AB to Mate Credentialing Program and the AB to Mate Pilotage Program, both of which are already showing benefits to addressing WSF’s shortage of LDOs.

WSF currently has 17 crewmembers in NMO which is scheduled to be completed in Spring 2023, 11 of whom came from the newly created AB to Mate program. Without this program WSF would only have six crewmembers going through NMO.

Hiring Progress and Success: Engine Crew

Unlike deck crew, which are assigned to a specific route, engine room crew are assigned to a vessel. This means that all vessels must be staffed at all times, even if not in service. Finding and retaining qualified engine room crew at all levels has proven to be extremely challenging. A nationwide shortage of vessel engineers and oilers predates the pandemic but has become critical since the outbreak. Training programs for oilers and licensed engineers last approximately one and four years, respectively, and there are a limited number of training resources. In addition, WSF must compete in the national labor market to attract and retain these employees.

A persistent recruitment and hiring effort this past year has improved our engine workforce numbers. The situation is improving due to the recent hiring and training of new oilers and wipers. This influx of new oilers supports WSF’s ability to replace vacated licensed engine room positions with promotions and new



hires. Recent new employee trainings for engine room employees have averaged 12 people per class compared to classes of three to five people during the height of the pandemic.

Licensed engine crew vacancies are filled by seniority bidding, so any licensed vacancy creates a cascading series of vacancies that must be filled both in the licensed and unlicensed ranks. Contractual timelines for reassigning employees to vacancies and subsequent

vessel-specific training timelines make this a protracted process. As a result, the simple number of total engine room employees does not directly affect WSF's ability to provide service, and there are additional complexities in ensuring the fleet has the right type of employee to staff each individual vessel on each route.

WSF will need to continue hiring to support needed training and upcoming retirements and separations.

Additional Crewing Challenges

WSF is making significant progress toward workforce stabilization, but there are broader challenges that will continue to affect WSF's ability to crew its vessels.

- **Global shortage of maritime workers:** Ferry systems and maritime industries around the world have experienced a decreasing number of available workers. WSF has identified several strategies to support recruiting efforts over the coming years, including hiring an external recruiting consultant and increasing focus on employee retention through increased training and development opportunities.
- **Aging workforce:** WSF is experiencing the same pressures felt by other employers nationwide, as a wave of people born during the post-World War II population boom start to retire. Many of the retirements are in senior positions that are harder to fill due to the amount of training, sea time and level of credentials required. According to the recent JTC study commissioned by the legislature 81 LDOs will become retirement eligible between now and 2027. In addition to the 35 LDOs currently needed, this means that WSF will need to hire and train 116 LDOs between now and 2027. The JTC study also shows that 86 licensed engine room crew will be eligible to retire by 2027. There are other impacts on reliable service created by an aging workforce, such as an increase in sick and other forms of protected leave.

Vessel Availability

As WSF continues the recruitment, hiring, training, and retention necessary for the crewing required to restore service on remaining routes, vessel availability will become a major constraint, especially in restoring international service to Sidney, BC.

With no WSF vessels built between 2000 and 2010, due to the passage of I-695 in 1999, the fleet is aging, with 11 of the 21 vessels over 40 years old, including five over 50 years old.

Vessels are in service more than 20 hours each day, making required maintenance time difficult to schedule. To restore service reliably, WSF must be able to schedule planned maintenance for all vessels by rotating them in and out of service, which is made more challenging due to the lack of spare vessels and limited drydock space in Puget Sound. New vessels take multiple years to build, with the next not expected to be completed until 2027. WSF will not be able to add to the fleet quickly enough to address the loss of vessels due to recent and planned retirements. Therefore, while funded and committed to restoring all routes as soon as possible, vessel availability is likely to be a challenge for the next decade, affecting operations systemwide.

Fleet Status and Needs

In 2016, WSF operated a fleet of 24 vessels. With the retirements since then of the *Elwha*, *Hiyu*, *Hyak*, and *Klahowya*, the fleet is now at 21 vessels. WSF is funded and directed to operate those 21 vessels in service to 20 terminals, in eight counties, on 10 routes. Legislatively directed schedules require:

- **Summer Sailing Season – 19 vessels in service.** This is comprised of five boats operating on the Anacortes/San Juan Islands/Sidney, BC routes, two on Port Townsend/Coupeville, two on Clinton/Mukilteo, two on Edmonds/Kingston, two on Seattle/Bainbridge, two on Seattle/Bremerton, three on the Fautleroy/Southworth/Vashon "Triangle" and one on Point Defiance/Tahlequah. This allows two vessels to be out for planned preservation and maintenance work, as WSF does not have sufficient time or shipyard capacity to do that work in only non-summer months. During the summer there is no service relief vessel and when a vessel is out of service for unplanned repair work, a route is downsized.
- **Fall and Spring "Shoulder" Seasons – 18 vessels in service.** This is comprised of four boats operating on the Anacortes/San Juan Islands/Sidney, BC routes, two on Port Townsend/Coupeville, two on Clinton/Mukilteo, two on Edmonds/Kingston, two on Seattle/Bainbridge, two on Seattle/Bremerton, three on the Fautleroy/Southworth/Vashon "Triangle" and one on Point Defiance/Tahlequah.

- **Late Fall, Winter, and Early Spring Sailing Seasons – 17 vessels in service.** This is comprised of four boats operating on the Anacortes/San Juan Islands/Sidney, BC routes (no international service in Winter), one on Port Townsend/Coupeville, two on Clinton/Mukilteo, two on Edmonds/Kingston, two on Seattle/Bainbridge, two on Seattle/Bremerton, three on the Fauntleroy/Southworth/Vashon “Triangle” and one on Point Defiance/Tahlequah.

To keep the fleet in a state of good repair, two vessels need to be out of service for maintenance during the summer, and up to four in the winter.

Vessel Availability in the Near Future

Beginning in September 2023 and continuing in September 2024 and September 2025, a Jumbo Mark II Class vessel will be taken out of service for eight to nine months for its propulsion upgrade. These three vessels were built between 1997 and 1999. This work, necessary regardless of propulsion type, was due at the vessels’ 20-year mark and is required to keep the vessel in service for its legislatively required 60-year lifecycle. The propulsion systems for these three vessels will be updated to hybrid-electric power, as directed by the legislature. This will put the fleet at 20 vessels for the months this work is being done.

Following the propulsion system preservation and hybrid upgrades, the Jumbo Mark II vessels will require a mid-life renovation. The steel preservation, passenger space renovations and obsolete equipment replacement are needed at the 30-year point to ensure the vessels can meet their 60-year service life. Completion of this work would likely be performed in similar eight to nine month performance periods outside of the peak summer season.

The LRP calls for three vessels (the 64-year-old *Tillikum*, 56-year-old *Kaleetan*, and 56-year-old *Yakima*) to be retired before 2027, when WSF expects the next new vessel will be added to the fleet. As the LRP calls for each new vessel to replace a retiring one, this would mean the *Tillikum* would be replaced in 2023, the *Kaleetan* in 2026, and the *Yakima* in 2027, maintaining a 21-vessel fleet through the end of the decade, with the six Issaquah Class vessels (*Cathlamet*, *Chelan*, *Issaquah*, *Kitsap*, *Kittitas*, and *Sealth*), built between 1979-1982, to be retired and replaced beginning in 2029.

Should WSF not be funded for the preservation and maintenance work necessary to keep the *Tillikum*, *Kaleetan*, and *Yakima* in service until the late 2020s, service reductions would be necessary due to the smaller size of the fleet. It is simply not possible to operate the full schedule with less than 21 vessels. If WSF is funded to keep the *Tillikum*, *Kaleetan*, and *Yakima*, the vessels will have to be removed from service for the maintenance and preservation work necessary to extend their lives through the end of the decade. This will, of course, temporarily reduce the number of vessels available for service.

Additionally, due to the age of most of WSF’s vessels, obsolescence adds complexity to an already challenging maintenance and preservation schedule. The shelf life of equipment has been reduced over the years from around 20 years to approximately eight to 10 years, which impacts service reliability as parts are simply not available anymore to do maintenance. Just as with other technology such as cell phones or televisions, parts are designed to be replaced much sooner than in the past. Equipment for our specialized ferries is not built to have a lifespan of 20-30 years, especially for vessels in service nearly 24 hours a day, seven days a week.

SOLAS (Safety of Life at Sea) Vessel for International Service to Sidney, BC

WSF vessels assigned to the Anacortes/Friday Harbor/Sidney, BC route need additional features required for international travel. With the retirement of the *Elwha* in 2019, this leaves WSF with only one [SOLAS](#) vessel, the 124-vehicle *Chelan*, built in 1981 and scheduled to be retired in 2036. With the first new Hybrid Electric Olympic Class vessel not expected until 2027, and the need to replace vessels kept in service until far past their planned retirement date, it’s unlikely WSF will have the capacity to convert a second boat to SOLAS until at least 2034, requiring the *Chelan* to be consistently available in order to restore service to Sidney, BC.

As stated earlier, based on its current service restoration timeline, WSF does not anticipate being able to restore service on the Anacortes/Sidney, BC route until at least Spring 2030.

Because Washington residents subsidize 25% of WSF's operating budget and nearly 100% of its capital costs, their ability to travel to work, medical appointments, and other essential travel is prioritized over international service. It is important to note however, the "international" route provides substantial economic activity to Skagit and San Juan counties, as well as some domestic service to the San Juan Islands in spring, summer, and fall.

WSF has examined two other alternatives for restoring international service sooner than 2030:

- **Provide service on the Anacortes/Sidney, BC route for just the summer season:** Unfortunately, operating the route in summer, the season that makes the most sense, is when vessel availability is the biggest issue as all routes operate at peak service levels, with a second boat on the Port Townsend/Coupeville route, and the San Juan Islands Interisland vessel operating seven days a week. Moving the *Chelan* to the Sidney, BC route means a 19-vessel schedule, leaving only two vessels free for maintenance or to cover for unplanned repairs, which would likely mean *Chelan* would regularly be pulled from the route to cover domestic service when another vessel must be removed from service for repairs. This stop-start of the international route would provide less, not more, reliability throughout the system, especially for this vehicle reservations route where customers plan their travel months in advance.
- **Leasing a vessel from another company:** This would be challenging for two reasons. First, vehicle traffic is a major driver of both ridership and revenue for this route – passengers need a car when they get to Sidney, as most are accessing other areas of Vancouver Island, not staying in Sidney. It would be challenging to find a vehicle ferry fitting the Anacortes, Friday Harbor, and Sidney terminals. Second, adding another vessel to the route would require the crewing to operate it and would take crewmembers out of the system to train on the leased vessel. This would threaten the reliability of domestic service. Additionally, any vessel operating between two U.S. ports, such as between Anacortes and Friday Harbor, is subject to the Jones Act and must be built in the U.S.

Next Steps

As service restoration progresses through the route prioritization list, WSF will continue to assess route and system service reliability and review the metrics used to decide when service can be restored on the next route, adjusting timelines if needed. Concurrent to service restoration, WSF will continue planning and implementation of strategies to address workforce shortages and vessel availability. Due to the smaller size of the WSF fleet, as more routes are restored to full service, when a vessel unexpectedly goes out of service for a mechanical issue, there may be no vessel to replace it, which will cause unplanned service disruptions. Although disruptive and frustrating

for customers, they may be unavoidable until there are enough vessels in the fleet to reliably provide service and provide the necessary maintenance and preservation work to keep Washington's ferries operating for their full service life.

WSF will continue to provide regular progress reports on the status of service restoration. The latest information is available at: wsdot.wa.gov/travel/washington-state-ferries/rider-information/rider-updates.

Americans with Disabilities Act (ADA) Information: This material can be made available in an alternate format by emailing the Office of Equity and Civil Rights at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

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