PASSENGER VESSEL ASSOCIATION

WSF Expert Panel Report

Prepared for: Washington State Office of Financial Management
and Washington Department of Transportation
Ferries Division • Seattle, Washington

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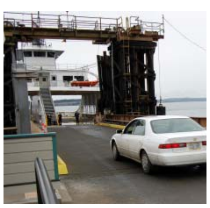



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EXECUTIVE SUMMARY

General

Washington State Ferries (WSF) is a division of the Washington State Department of Transportation (WSDOT). It provides vital transportation connections on nine routes in Puget Sound and the San Juan Islands, including an international run to Sidney, BC. They have an annual FY 2011 operating budget of $219 million to cover the operations of 20 vessels, 20 terminals, and approximately 1,800 employees.

In a letter dated March 8, 2010, Governor Christine Gregoire (Appendix A) asked the Passenger Vessel Association (PVA) to "conduct a management review of the Washington State Department of Transportation, Ferries Division." This review would bring a Panel of ferry system experts together that could examine subjects such as capital finance, organizational structure, and operational efficiency. Specifically, the Governor asked the Panel to look at recent reviews by the Joint Legislative Audit and Review Committee, the Office of the State Auditor, and the Joint Transportation Committee and to review current operations of the ferry system. PVA is a member organization actively engaged in shaping regulations, legislation, and policies that affect ferry operators in the United States, and represents the majority of the public and private ferry operators in the U.S. This made PVA the logical organization to assemble a Panel of industry experts who would provide a truly independent assessment of Washington State Ferries (WSF).

What the PVA Expert Panel (Panel) learned was that WSF management and employees are dedicated to providing the best service possible to the citizens of Washington State. After the very detailed and diverse review, the Panel found that some practices that have been standard for WSF are outside of the norm for the majority of ferry operators. In some cases, this is appropriate due to the unique nature of the system. In other cases, the Panel has made recommendations to WSF to bring their operation into alignment with industry best practices. The Panel sees very positive steps forward from the new team which is focused on making reforms necessary to provide the most efficient and cost-effective system possible.

Background

WSF is the largest ferry system in the United States and by number of passengers carried; it is the largest in North America and the 4th largest in the world. WSF carries more vehicles annually than any other ferry operator around the globe. They have an outstanding record of safety with approximately 100 passenger injuries annually, mostly minor, out of 22.4 million passengers. It should be noted that WSF has never had a major accident. Objective measures of on-time performance, trip reliability, and farebox recovery are among the best for U.S. ferry operators serving metropolitan areas.

In 2007 the Washington State Secretary of Transportation, Paula Hammond, withdrew the four vessels of the Steel-Electric Class from service due to concerns about the safety of operating ferries that were 80 years old. This caused a great disruption to the system, but demonstrated that safety was the primary concern of the Secretary and WSF. Prior to this and subsequently, there have been numerous studies on ways to improve the operation and to correct the systemic issues that led to having old equipment on key transportation routes. The studies included eight reports commissioned by the Joint Transportation Committee, one review by the Washington State Auditor, and a funding study by the Washington State Transportation Commission.

Two years ago, Governor Gregoire and Secretary Hammond brought in a new management team that has made a number of changes to improve the ferry system. The Panel sees very positive steps from the new team, and believes that the Governor can expect to see continuous improvement under the current leadership. Some of these changes were in response to issues raised in the reports commissioned by the Joint Transportation Committee conducted by the Cedar River Group while others were initiatives developed by WSF management. Following is a summary of some of the reforms that WSF has enacted under this new team:

- Reduced $26M in ongoing WSF costs
- Decreased staff in capital and operating budgets
- Shifted WSF capital program to vessel procurement and maintenance from terminal expansion
- Revised WSF overtime policy to improve assignment of discretionary overtime
- Consolidated WSF administrative functions with WSDOT headquarters
- Reorganized administrative, operational and engineering functions within WSF
- Instituted flexible crew work rules utilizing crew endurance management principles
- Improved communication with ferry communities
- Focused on fuel conservation

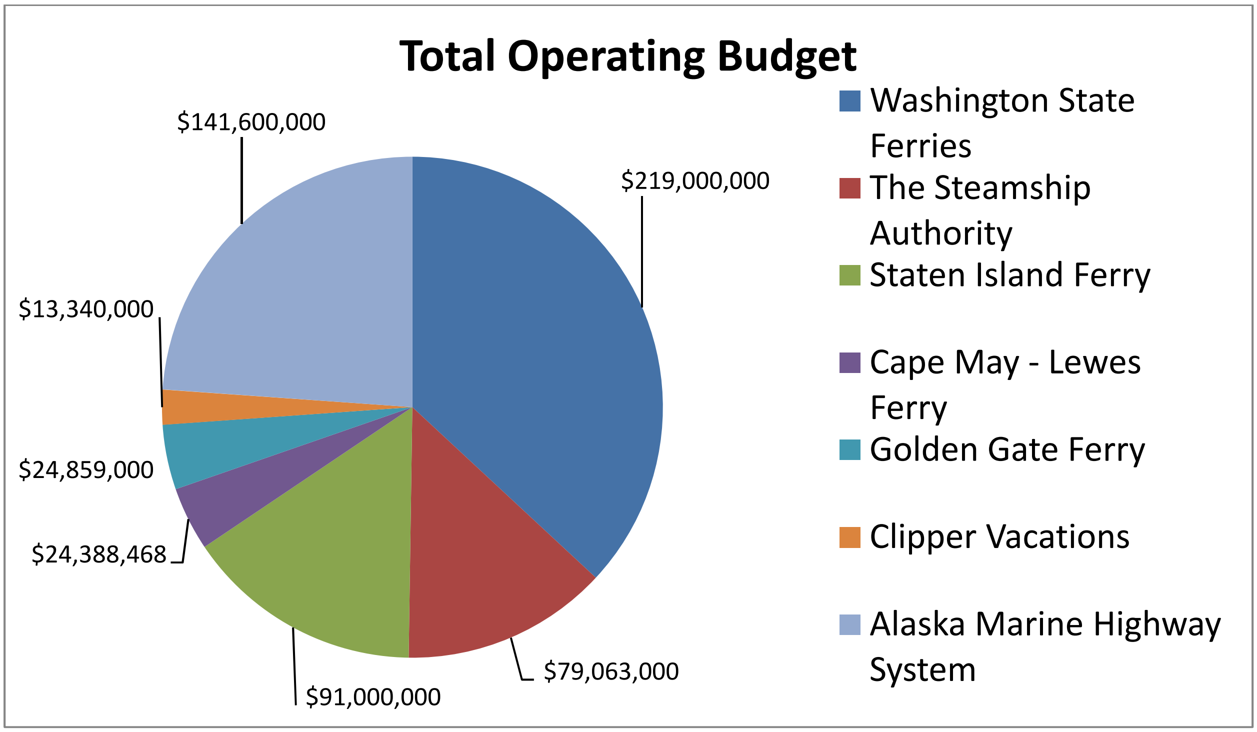
Recent survey data shows 72% of WSF customers as either "Somewhat Satisfied" (47%) or "Extremely Satisfied" (25%). For freight customers 76% perceive the ferries as offering "Good Value" (58%) or "Very Good Value" (18%). Clearly, the WSF management team is successful in providing safe, reliable transportation at a reasonable cost. However, like any large system, there are always ways to improve. To this end, the Office of Financial Management (OFM), at the request of the Governor and Legislature, has commissioned PVA to assemble a national Panel of ferry system managers to review WSF practices and to offer recommendations on whether they represent best practices within the US Ferry Industry. Best Practice Examples are included in Appendix B.

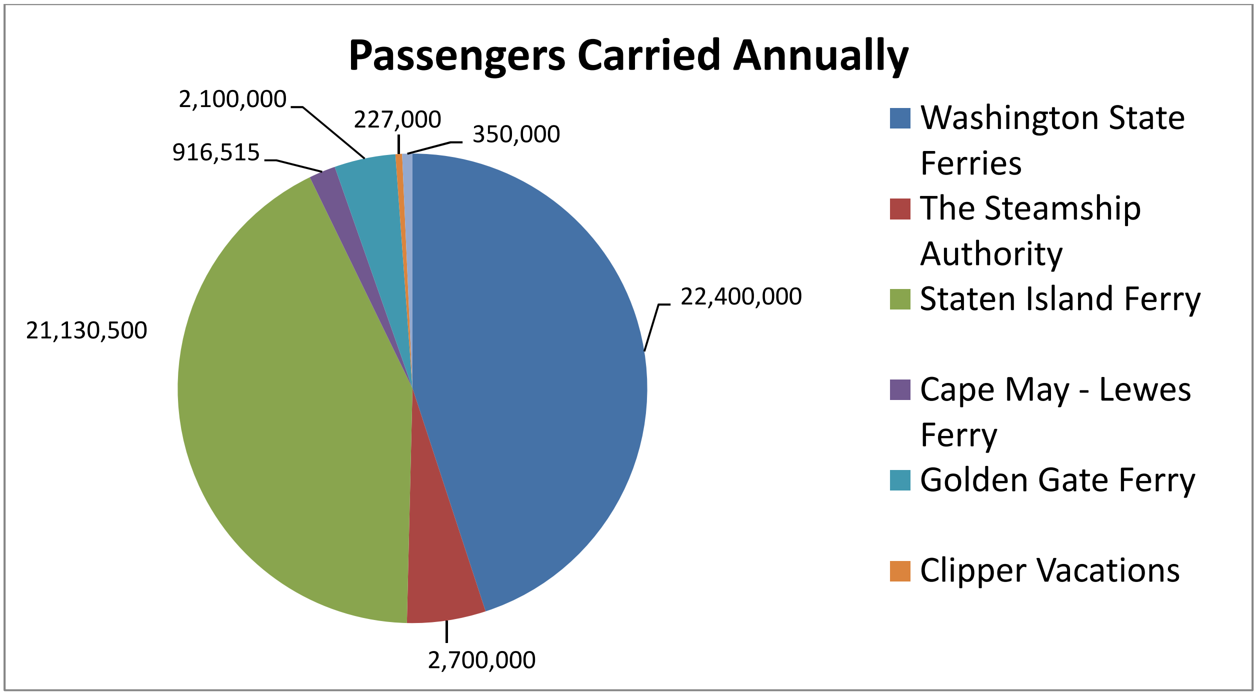
Expert Panel Organization

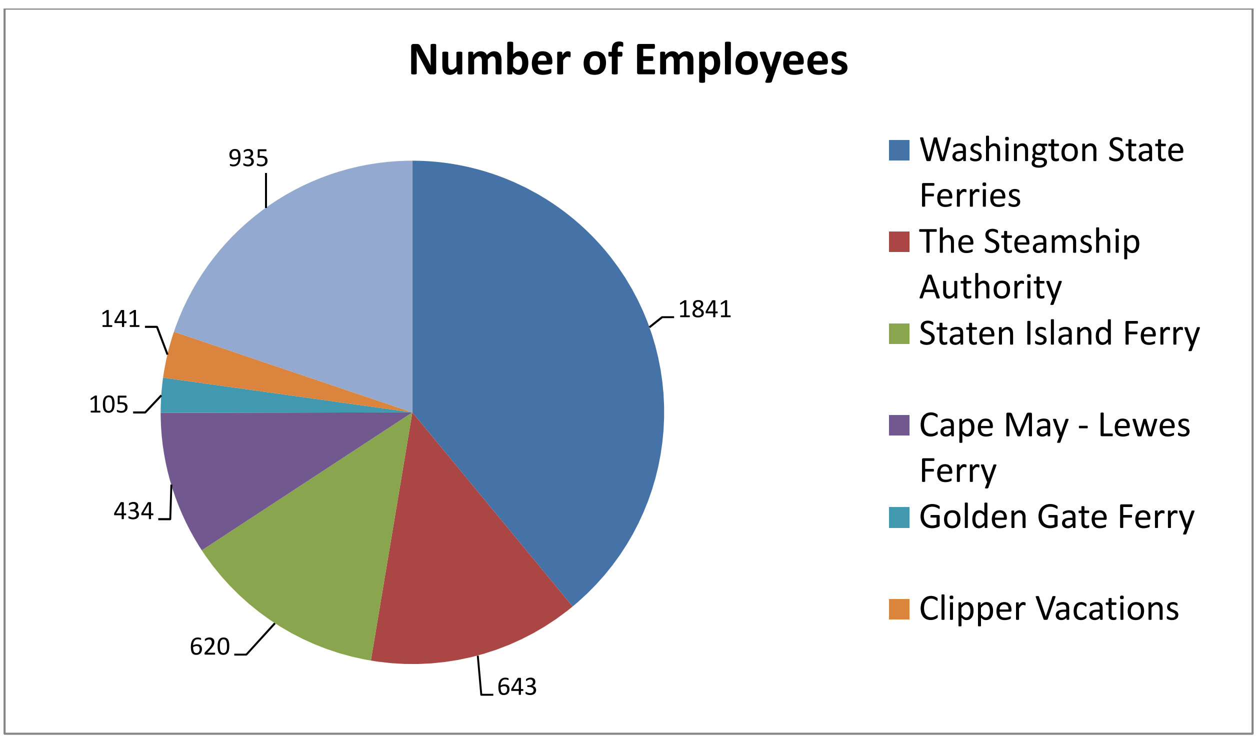
This Panel was assembled under the auspices of the PVA which is the national member association for passenger vessels operators throughout the United States. PVA is involved with legislative, regulatory, and public relations issues at the federal and state level. As an independent party, PVA's role has been to select the Panel members, coordinate the Panel's activities, and ensure that the Panel's deliberations are comprehensive and objective.

The Panel consists of 5 people, each of whom is the senior marine manager for a ferry system. Each ferry system represented by a Panel member has similarities with WSF but none of them is a peer as regards size of the fleet and complexity of the operations. However, in aggregate the ferry systems provide wide experience in labor relations, budgeting, oversight and governance, and operational strategies. The Panel members truly represent a "brain trust" of ferry operations in the U.S.

The Panel consists of a mix of east coast: Woods Hole Martha's Vineyard Nantucket Steamship Authority (SSA), Staten Island Ferry (SIF), and Cape May – Lewes Ferry (CMLF) and west coast: Golden Gate Ferries (GGF) and Clipper Navigation, Inc. (CN) operations. They serve a range of metropolitan areas and more remote areas which reflects the range of WSF's operations. With four public agencies and one for-profit business, they offer different fare structures, business models, and performance metrics. Three charts comparing operations, plus west coast operator Alaska Marine Highway System (AMHS), to WSF is given below.







Note that while none of the systems represented by the Panel members are equal to WSF in terms of size, the aggregate of the firms represents a true "peer" to WSF. It is also worth noting that WSF ratios of number of passengers carried to both operating budget and number of employees is comparable to the other systems.

The Panel looked at six basic areas of operation:

- Management
- Vessel & Terminal Maintenance
- Finances
- Scheduling
- Labor
- Customer Interaction

Each of these areas is briefly discussed below. The Panel recommendations are noted but greater detail can be found in the appropriate section in the report.

Management

The Panel took a very careful look at WSF's organizational structure, number of employees, budgeting process, and critical policies. The Panel believes that oversight for WSF should be based on a clear set of objectives, many of which are suggested in this report, along with appropriate direction on how to achieve those objectives. The level of oversight for WSF is greater than any ferry system represented by the Panel.

The Panel feels that the current governance model for WSF is outside of the norm for public ferry operators and suffers from excessive oversight. WSF has a high profile in Washington State with the Legislature, the Governor's office, the DOT, visitors to the state, and to the population base located around Puget Sound. WSF also receives recommendations and input from the Washington State Transportation Commission and the entire Legislature. In contrast, all of the Panel member ferry systems report to Board of Directors or a governmental entity with management oversight. Most have greater autonomy and are able to make crucial business decisions that have impacts on revenue and expense. Three of the five ferry systems (CMLF, SSA and GGF) all have very similar governance and give these systems varying degrees of autonomy. Ferry management for each of these organizations is given fairly broad latitude to make important decisions concerning operations, capital asset allocation and staffing. To establish an appropriate level of oversight, the governing bodies set clear performance standards and performance goals for ferry management. They then have scheduled audits and oversight to assess their performance against these standards. The Panel feels strongly that further review of WSF governance is necessary as it could deliver process improvements and budgetary savings.

The Panel also looked at the role of vessel masters as part of the management team. We strongly recommend that WSF clearly establish a policy that the Master (Captain) of a vessel is management's representative of the crew and is responsible for the performance of the vessel and the crews under his/her watch. The Panel believes this position is supported by the collective bargaining agreement and the Safety Management System, as well as U. S. Coast Guard (USCG) regulations and reflects the practice of other ferry systems.

WSF is unique among large ferry operators in the size of their in-house staff for design and management of capital projects. All other operators rely upon outside resources for engineering, planning and construction management. They use in-house staff for oversight of the contractors and for verifying compliance with the contract package requirements. The Panel recommends that WSF examine their current structure and determine whether the costs are balanced by the benefits.

The average age of WSF's fleet is 36.3 years, which is higher than any of the fleets operated by the Panel members and significantly higher than the norm in Europe. The Panel recommends that WSF hold to a strict standard of retiring their vessels when they reach 60 years of age if WSF also provides a mid-life refit when the vessels reach 30 years of age. Should budget constraints prevent the mid-life refit; the useful life of the vessel will be no more than 40 to 45 years of age.

At the time of this review, WSF owns a fleet of 20 vessels with varying vehicle capacity, is leasing one vessel of 54-car capacity, has three 64-car vessels under construction, and a 144-car ferry being designed by a shipyard. The intention is to have the new ferries replace those vessels in WSF's fleet that are over 60 years of age plus replace the leased vessel. The Cedar River Group, as part of a Vessel and Sizing Study commissioned by the Joint Transportation Committee, initially recommended that WSF plan around a 21 vessel fleet with 19 vessels in service during the peak season. This Panel believes that a 21 vessel fleet is insufficient. The marine environment, combined with a vigorous operating schedule, means the ferries receive more "wear and tear" than typical commercial vessels. WSF has seen differences themselves between routes, such as the Mukilteo - Clinton run that sees many dockings every day versus fewer at the Fauntleroy - Vashon - Southworth operation. With the need to maintain vessels for 60 years, at least one ferry will be out of service for intermediate maintenance or for a major overhaul at any given time. This leaves only one vessel as a reserve. The Panel believes that WSF needs more reserve capacity as a mass transit system. The Cedar River Group's later Long-Range Finances Final Report Financing Study II concurred with WSF's Long-Range Plan for a 22 boat fleet. WSDOT is currently under contract to procure three 64-car ferries, with the option to procure a fourth vessel. The Cedar River Group report indicated that the WSF system could operate sufficiently with the fourth vessel being a 64-car ferry. The Panel concurs that WSF should plan around a 22 vessel fleet, however the Panel believes that future construction needs to be larger vessels that give WSF the greatest flexibility.

In conjunction with the fleet size, the Panel looked at how WSF procures their ferries. The approach of vessel construction that is restricted to shipyards within Washington State is unique to WSF. The Panel believes that the argument about building ferries within the state to maintain the industrial base that supports WSF's fleet ignores the fact that new vessel construction is very different from vessel maintenance and repair. Based on their collective experience in purchasing and operating vessels, the Panel believes that WSF is paying a high price for requiring in-state construction.

The Cedar River Group's Vessel and Timing Report (p. 12), commissioned by the Joint Transportation Committee, recommends that the Legislature should consider opening vessel construction to national competition by determining the appropriate balance between WSF's new vessel construction costs, the potential for federal funding, and the policy goals of the state. This Panel likewise recommends that WSF consider bidding their vessel construction nation-wide.

Insurance coverage for a transportation system as extensive as WSF's is complex because it must cover traditional marine areas (hull and machinery, pollution, and war risk), civil tort areas (passenger slips and falls, premises liability, vehicle collision and injury), workplace areas (workman's compensation, discrimination, employment) plus building related areas (earthquake coverage, fire). The Panel looked at the marine portion of WSF's coverage since that is the area where their collective experience was most appropriate. A table comparing the coverage of each of the systems is included in the report, and WSF is insured with much higher coverage than the other systems. Most of the Panel members work with a classification society which offers a third party review of vessel condition. Marine underwriters use classification as a statement of condition of the vessel for assessing insured value. Classification societies are non-governmental organizations which provide safety standards for vessel construction and maintenance and are responsible for the inspection of vessels to ensure the enforcement of these standards. However, given WSF's good approach to maintenance and preservation, the Panel does not believe that registration with a class society is worth the added expense. This is in part due to the excellent relationship between WSF and USCG Sector Puget Sound where the USCG provides a valuable level of oversight to complement WSF's own Safety Management System.

The Panel recommends that WSF examine their insurance coverage to determine whether they have the proper types and levels of coverage. The Panel questions the amount of hull and machinery coverage since it is unlikely that multiple vessels would experience claims at the same time. We further encourage WSF to implement a vigorous system of passenger and crew accident investigation. The Panel strongly approves of WSF's new Injury Reduction Plan and hiring of a dedicated, independent investigator. Clipper Navigation has offered their process for documenting all injury claims as a model for WSF to build upon.

One key aspect of management is to find measurements that truly help manage the system. Basic data on "number of passengers carried" and "number of trips by vessel" are important but they do not directly provide metrics on how safely or efficiently a ferry system is operating. The Panel reviewed the metrics that WSF uses for their system and compared them to the metrics used by other operators. In general, the Panel believes WSF does a good job of tracking safety and reliability. Farebox recovery is a good overall financial metric but does not necessarily highlight efficiency because the ratio of fare income to operating expenses can improve simply by raising fares.

The Panel recommends that WSF manage with additional key metrics in the following areas:

- Level of Service
- Cost Efficiency
- Safety

Level of Service would include on time departures, vehicle deck utilization and customer satisfaction. These are all currently tracked by WSF. Cost Efficiency would include farebox recovery, operating cost per passenger mile by route, ratio of direct operating costs to indirect operating costs and overtime and paid time off. Some of these are currently tracked by WSF and the data is available for the others. Safety metrics would include passenger injuries and crew injuries. These are all currently tracked by WSF.

Panel Recommendations

- The Panel recommends that the State consider studying the ferry governance model to determine if opportunities exist for positive change.
- The Panel recommends that the vessel Master (Captain) should act as the management's representative for the vessel and all of its crew.
- The Panel recommends WSF modify its capital projects design and management structure to be more in line with industry norm.
- The Panel recommends that WSF study their 5 to 10-year roster of capital projects and adjust the staff sizing over time to reduce the numbers of engineers and designers.
- The Panel recommends that WSF continues its policy of operating vessels for 60 years.
- The Panel strongly recommends that a dedicated capital funding source for new vessel construction be identified and implemented.
- The Panel recommends that WSF plan around a fleet of 22 vessels.
- The Panel recommends that WSDOT bid the construction of their vessels nationwide.
- The Panel recommends that current marine insurance policies for vessels, terminals and other ferry facilities be examined further to determine whether they have the proper types and levels of coverage.
- The Panel recommends that WSF continue to develop a strong loss-prevention program for passenger and crew accidents.
- The Panel recommends that WSF establish additional key metrics in following areas: Level of Service, Cost Efficiency and Safety.

Vessel & Terminal Maintenance

This area has received a great deal of attention due to the retirement of the Steel-Electric Class and procurement of new ferries. The Panel appreciates the complex planning and budgeting required to keep 20-plus vessels of different classes in compliance with all USCG requirements and with a minimal disruption to service. It is clear that when one of the large ferries (Jumbo Class or Jumbo Mk II Class) are out of service for maintenance, the entire fleet must be redeployed - a 60 car ferry is not an adequate substitute for one that carries over 200 cars.

While the Panel was meeting in Seattle, the M/V WENATCHEE experienced a mechanical failure. The Panel was able to observe the team approach to resolution of the problem and hear from the managers at Eagle Harbor about the diagnosis of the problem, the communication to the customers, the modifications to the system to adjust for the out of service vessel, and the repair and return to service of the vessel, which occurred in less than 12 hours. The Panel was impressed by the level of response and commitment demonstrated by all employees.

On the terminal side WSF has to maintain and repair docks, buildings, parking lots, landscaping, and a maintenance facility in locations ranging from Tacoma to Friday Harbor. This work is split between WSF's own personnel (38%) and outside contractors (62%). This again is a scheduling challenge as WSF tries to minimize service impacts while accounting for weather, availability of personnel, and costs.

The Panel believes that WSF is doing a good job of managing their physical assets. Maintenance and repair standards can vary greatly depending upon the policy of the organization and budget constraints. For example, the time between exterior paint jobs can affect the appearance of a vessel with minimal impact on the underlying structure, but the public can believe that a rusty vessel reflects a poorly maintained vessel. Similarly, the presence of burned out light bulbs in a terminal has little impact on the movement of people or vehicles but says a lot about the standards of the organization.

The Panel recommends that WSF be provided with adequate funding to maintain their vessels to a standard that will allow the useful life of the vessels to safely reach 60 years. This is critical to the strategy for managing capital expenses and the vessel replacement cycle. The Panel believes that WSF should experiment with how they contract for shipyard work by bundling a class of vessels into one contract. This will certainly improve planning and may reduce some of the costs since shipyards will not have to bid for every docking. Staten Island Ferries has successfully used this approach and has provided samples of their contract documents for WSF to review.

On the terminal side, the Panel recommends that WSF use some outside resources to review cost estimates and contract packages if WSF continues to develop the maintenance and preservation engineering in-house. This will provide a fresh set of eyes to ensure that estimates are sound and the scope of work is appropriate. Currently, WSF is required by a budget proviso to develop a pre-design study on any improvements to the vessels or terminals. This work is usually being conducted by outside contractors and satisfies the need for independent estimate review. Should WSF contract out more engineering and design work, then the roles of WSF personnel can shift to reviewing the work prepared by contractors.

The Panel had a great deal of discussion regarding the role and structure of WSF's maintenance facility at Eagle Harbor. Eagle Harbor is an essential facility, allowing WSF a centrally-located facility to provide service to the entire fleet and terminals, while being conveniently located to WSF headquarters as well as suppliers and warehouse facilities. The Panel recommends that WSF increase their management-to-staff ratio to provide more budget oversight and to seek efficiencies. The Panel is aware of the recommendation from the Cedar River Group regarding adding additional shifts at Eagle Harbor. The Panel believes that WSF should review these recommendations and reconsider again possibly creating a second shift and/or third shift of maintenance staff that would be deployed directly to a vessel. This practice of deploying staff without reporting to Eagle Harbor is in place now, but the Panel believes this practice should be expanded. This would extend the normal work hours for maintenance staff, which are constrained by local ordinances at Eagle Harbor, and might improve access to the vessels. We believe this might result in savings in both overtime and travel costs for employees.

The Panel members also recommend that WSF evaluate the practice of sending large numbers of Eagle Harbor craftsmen with a vessel to a shipyard. This work may be better accomplished with shipyard staff or other sub-contractors.

Panel Recommendations

- The Panel recommends that WSF run a test project to contract dry-docking for one vessel class such as the Issaquah Class.
- The Panel recommends that WSF not adopt the Cedar River Group suggestion that WSF require, as part of their shipyard contracts, that a vessel in intermediate maintenance at a commercial shipyard be available within 24 hours in order to provide back-up service.
- The Panel strongly recommends that adequate funding and sufficient schedule be guaranteed to support a 60-year life for their vessels.
- The Panel recommends that WSF continue to emphasize vessel construction, not terminal construction as a priority. However, terminal maintenance and preservation must be supported appropriately to maximize the life of all current facilities.
- The Panel recommends that WSF explore different approaches to in-house maintenance.
- The Panel recommends additional Eagle Harbor Maintenance Facility supervisory staff that is part of management and not part of the labor force.

Finances

WSF is responsible for a bi-annual budget (FY 2009-2011) of approximately $733.7 million of which $427 million is for operations and the remainder is for capital projects. WSF capital budget varies by year according to preservation schedules and, in the case for the current fiscal year, new vessel procurements. The operating budget is divided approximately 80% for operation of vessels and terminals (including fuel costs), 15% for terminal and vessel maintenance, and 5% for management and support services per the Non-Labor, Non-Fuel Operating Costs Final Report. The Panel reviewed the budget metrics of farebox recovery, fare per passenger mile, and ratio of capital to operating budget for WSF. We believe that WSF's financial performance is comparable with other large metropolitan ferry systems in the U.S. That said, like any large operation, the Panel believes WSF could find further efficiencies. We concur with the Cedar River Group that zero-based budgeting would help provide scrutiny of cost areas and note that WSF is moving in this direction. For the 2011-2013 biennium, WSF is developing a "greater level of detail" budget, with a level of detail agreed to by the OFM and Legislative staff. The level of detail to be provided includes:

- Deck labor by route
- Engine labor by vessel
- Labor for vessel moves, training and sea trials
- Fuel needs per the service schedule
- Terminal operations labor by terminal
- Insurance
- Terminal maintenance contracts
- Eagle Harbor labor and contracts, administrative staffing
- Credit card fees
- Leases

The Panel recommends that WSF work with OFM and the Legislature to establish a permanent funding source for vessel replacement. We believe that WSF must be able to plan with confidence if they are expected to provide safe reliable service through periodic replacement of capital assets. A 60-year vessel life combined with a 22 vessel fleet means that on average, WSF must build a new vessel every 2.7 years. This requires predictable capital.

Customers are vocal when it comes to the subject of fares. No one likes fare increases but they are necessary if a ferry system is trying to keep revenues balanced against the impacts of inflation on expenses. The ferry systems represented by the Panel have a variety of fare structures, ranging from $0.00 for Staten Island Ferry to $222.50 (one way driver and vehicle) for The Steamship Authority. In a comparison of like routes, the WSF car and driver fare for Seattle to Bainbridge is $14.85 while a comparable route for The Steamship Authority Woods Hole to Vineyard Haven, is $75.00 for a car and driver. The Panel believes that WSF's fares are reasonable and in line with historical pricing as adjusted for inflation. The Panel recommends that WSF institute a policy of automatic fare increases tied to the start of the fiscal calendar and WSF should have fare setting authority.

Fuel is one of the major expenses for WSF, representing 21% of the operating budget. The Panel exchanged experience with managing fuel purchases to minimize expense. The Panel also reviewed the use of fuel surcharges as a means of dealing with fluctuating fuel prices. WSF and the Transportation Commission, at the request of the Legislature, developed a method for calculating and establishing a fuel surcharge, which was presented to the Legislature in January 2010. Further work is being done on developing fuel cost mitigation actions including fuel hedging. The Panel recommends that WSF continue their efforts on fuel surcharges and cost mitigation. The Panel also recommends that WSF continue to study means of reducing fuel consumption, which is beneficial both for cost control and reducing engine emissions.

Panel Recommendations

- The Panel recommends that WSF continue to transition to a zero-based budget.
- The Panel recommends that the Washington State Legislature establish a vessel replacement fund.
- The Panel recommends that WSF institute a policy of automatic fare increases tied to the start of the fiscal calendar and that WSF have authority to set fares.
- The Panel recommends that WSF continue to take steps to implement a fuel surcharge program.
- The Panel recommends that WSF investigate the pros and cons of a fuel price management program similar to that used by Clipper.
- The Panel recommends that WSF continue to seek new technologies that are more energy efficient and to refine operating procedures.

Scheduling

WSF has a challenge in scheduling vessels and their 1,100 crew members. They strive to please customers with a range of service hours, coordinate their vessels with other transit connections, balance costs against frequency of service, and juggle staff availability against operations. The Panel has reviewed WSF's procedures for developing service schedules and believes that they follow best practices in the ferry industry. The Panel particularly applauds the interaction between management and customers when schedules are changed. The Panel recommends that WSF continue to evaluate the demand for extended hours of service. Late night runs are important in an urban environment, so eliminating such runs may not reflect WSF's mission of providing vital transportation. If it is determined that these late night runs are essential, the Panel suggested that WSF explore ways to increase the fare box recovery by lowering prices on late night runs to stimulate demand. Increased fares could improve the cost recovery if the demand stayed constant, but increased fares could result in a considerable drop in utilization. The Panel also suggests that coordination with Kitsap Transit might allow customers to travel easily between Kingston-Bainbridge and Bremerton-Southworth if late night service is focused on only one of those destinations.

The Panel took a careful look at how WSF crews the ferries. The Panel helped gather data on USCG Certificates of Inspection for other large passenger vessels. Since WSF has shifts in passenger demand during the day and from season to season, there may be ways to adjust the crewing to reflect different passenger levels. The Panel recommends that WSF study ways to reduce crew levels when there are fewer passengers onboard. Of course, safety is the system's highest priority and any changes would be developed in collaboration with USCG Sector Puget Sound.

Like any other vessel, ferries require maintenance, repair, and inspection if they are to operate reliably and safely. The USCG requires inspections four times a year with vessel dry-docking (out of water inspection) twice every five years to inspect the underwater portions. With the current 20 vessel fleet, WSF is constantly moving vessels in and out of service. This is quite expensive for the system. Again, timing of these changes must be coordinated with vessel size route, and duration of the work. The Panel believes that WSF is doing a good job of vessel maintenance scheduling. The Panel recommends that WSF continue to seek ways to reduce out-of-service time, through increased maintenance while the vessel is underway and through the strategies identified in the Cedar River Group reports such as Under Water Inspection In Lieu of Drydock (UWILD). It is common practice on many ocean-going vessels to conduct repair and maintenance activities while the vessel is in service, either using the ship's crew or through the use of "riding" crews. However, the Panel believes that, given the average age of the fleet and the need for mid-life refurbishments, reducing the average out-of-service time from seven weeks to six weeks as recommended by the Cedar River Group is not practical.

Panel Recommendations

- The Panel recommends that WSF continue to evaluate the demand for extended hours of service and apply demand management tools as appropriate.
- The Panel recommends that WSF continue to seek ways to reduce out-of-service time through increased maintenance while the vessel is underway and through the strategies identified in Reference 7.

Labor

Staff is an expensive but vital part of the successful operation of a ferry system. With approximately 1,800 employees, 62.3% of WSF's operating budget was applied to labor costs for the FY 2010-2011 operating budget. All of the Panel members wrestle with staffing issues and budgets. It should be noted that WSF's $23 million biannual overhead budget is only 5.4% of the total operating budget, the lowest among the Panel member systems and lower in total dollars than Staten Island Ferries.

Four of the Panel members also deal with collective bargaining agreements that govern wages, work rules, staffing, and interaction with management. The Panel recognizes that becoming a licensed officer in either the deck or engine department of WSF requires years of technical training, experience and licensure. These employees rate of pay at WSF is fairly consistent with the Panel member's operations, and with marine industry norms. When the Panel compared their labor forces against WSF's, we found some areas that WSF should explore.

The deck crews on WSF vessels are assigned to the operating route, not to the vessel. This facilitates scheduling of crews and helps the crews harmonize with the operational tempo of the route. The downside of this arrangement is that the crew has less opportunity to feel "ownership" of the vessel which may result in varying approaches to operations and maintenance. The Panel recommends that short of the Master being assigned to a specific vessel, not to the route, WSF should identify alternate methods of building a sense of ownership by crew. This would provide a level of consistency that could, for one, improve coordination between the deck crew and the engine room crew, as well as help maintain a focus on the overall needs of the vessel as regards maintenance, operation and preservation.

Every vessel has a required number of engine room personnel and WSF's current policy is that the engine room is crewed 24 hours a day with two 12 hour shifts. This requires four "teams" of engine room personnel to comply with USCG rules regarding mandatory rest periods and to comply with the collective bargaining agreements. Even though the vessels do not operate 24 hours per day, the engine rooms are crewed to provide maintenance periods when the machinery is not operating. None of the other Panel members crew their engine rooms around the clock. Most of them rely upon a nighttime maintenance shift rather than a regular crew. The Panel recommends a pilot program where only the Chief Engineer's position is staffed 24 hours per day. The other engine room personnel can be assigned work schedules that mirror the deck crew schedules. The Panel believes that this will provide appropriate maintenance oversight while reducing labor costs. Work would be coordinated between the Vessel Chief and the maintenance staff, calling in assistance and expertise as needed. The Panel notes that this would require changes to the current Collective Bargaining Agreements.

The Panel closely examined how WSF crews their vessels when in shipyard for intermediate maintenance or for a major overhaul. WSF's practice is to have a full engine room crew on the vessel five days a week, eight hours a day, when the vessels are out of service. The goal of this policy is to allow the crew to perform maintenance on a not-to-interfere basis while other work is being performed on the vessel. None of the other Panel members send their entire crews along with the vessel to a shipyard. Standard practice is to have the Staff Chief Engineer accompany the vessel to help oversee the shipyard work along with a Port Engineer from the management staff. Together they will oversee the shipyard work, but the shipyard workforce actually accomplishes the work. The Panel recommends that WSF study the types of work performed by vessel crews while the vessel is in a shipyard and then determine the cost and benefit of this practice. The Panel recognizes that many of its recommendations will need to be addressed in the Collective Bargaining Agreements.

Panel Recommendations

- The Panel recommends that WSF study ways to right-size crew levels when there are fewer passengers onboard.
- The Panel recommends that WSF evaluate current staffing on the vessels versus the safe manning required by the COI.
- The Panel recommends that short of the Master being assigned to a specific vessel, not to the route, WSF should identify alternate methods of building a sense of ownership by crew.
- The Panel recommends a pilot program where only the Chief Engineer's position is staffed 24 hours per day.
- The Panel recommends that WSF study the types of work performed by vessel crews while the vessel is in a shipyard and then determine the cost/benefit of this practice.

Customer Interaction

The Panel believes that WSF is doing an excellent job with customer outreach and service delivery. If one simply uses on-time performance as a measure of satisfaction then the WSF record is excellent, particularly given some of the challenges and limitations of the facilities: vehicle queue, lack of walk-on passenger loading ramps and other restrictions such as coordinating with rail traffic. There was general agreement amongst the Panel that the traveling public has higher expectations now then just getting to their destination on time. Creating an "experience" for a customer and making a personal connection are important standards and each Panelist discussed a need to continue to promote their product and increase ridership.

While the Panel feels that the on-time performance of WSF is enviable, the Panel recommends some changes to the terminal procedures to reduce turnaround time. The Panel recommends that WSF experiment with loading procedures and their policies for when to stop loading to ensure on-time departures. The implementation of a reservation system, which is underway, was recommended by the Cedar River Group and is also endorsed by the Panel. The Panel understands that WSF completed a Pre-Design Study for the Vehicle Reservation System in January. Several of the Panel members have very sophisticated reservation systems and are willing to provide WSF with their detailed insights.

The Panel also believes that some objective customer service standards would help WSF to continue to build the level of customer satisfaction and thereby ensure a strong support base with the Washington State Legislature. The Panel understands that WSF has a Customer Service Audit in process that will give direction on the WSF's customer relationship.

Panel Recommendations

- The Panel recommends that WSF should consider a set cut-off time for loading all vessels.
- The Panel recommends that vehicles be unloaded ahead of bikes.
- The Panel recommends that the "tunnel" be unloaded before the gallery decks and side decks are unloaded.
- The Panel recommends that WSF continues to implement a reservation system for appropriate routes.
- The Panel recommends that WSF evaluate their policies, mission statement and training to assure that the commitment to customer service is communicated to personnel and customers.
- The Panel recommends that WSF develop an improvement program to ensure that all staff members who interact with the public are performing at high standards, as well as a recognition program when that standard is met.

Going Forward

Beyond the six basic areas discussed above, the Panel recommends that the WSF management team develop a network of peers in the industry to compare policies and practices. On-going liaison with other operators such as BC Ferries and organizations such as Interferry or PVA would provide access to fresh ideas, which is vital for success in a time of changing regulations and economic challenges.

The Panel wishes to remind all interested parties that complex systems are not congruent with simple solutions. WSF management is dealing with a very complex system and by all objective measures is doing a good job.

For the complete report, please go to http://www.wsdot.wa.gov/ferries/accountability