

ALASKA STATE LEGISLATURE

LEGISLATIVE BUDGET AND AUDIT COMMITTEE



Division of Legislative Audit

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SUMMARY OF: A Special Report on the Department of Transportation and Public Facilities (DOTPF), Alaska Marine Highway System (AMHS), Vessel Overhaul and Refurbishment Procurement, June 21, 2010.

PURPOSE OF THE REPORT

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we have conducted a performance audit of DOTPF's AMHS procurement practices for state ferry overhaul and refurbishment. Our objectives were:

- To evaluate AMHS' compliance with the applicable state and federal procurement statutes and regulations, which includes, when appropriate, the application of the interport differential.
- To evaluate the current state statutes and regulations to assess whether their application results in fair and unbiased contract awards.
- To evaluate the process of developing ferry maintenance schedules and assess the reasonableness of the process.

REPORT CONCLUSIONS

AMHS is adhering to state and federal procurement laws and regulations when contracting for vessel overhauls and refurbishments. Contracts for annual overhauls and refurbishments between July 2004 and March 2010 were issued in accordance with both state and federal procurement laws and regulations.

The interport differential is applied following regulations. However, the regulations are not current. Alaska regulation 17 AAC 70.430 defines the base port for each AMHS vessel; however, this regulation has not been updated to include the last three vessels added to the system. Where applicable, interport differential costs were applied correctly, and bid specifications were developed without creating bias between competing bidders, however some of the interport differential components have not been updated since 1996.

Current statutes and regulations governing state funded overhauls create a public-policy based bias by mandating the use of in-state shipyards whenever possible.

AMHS has developed a reasonable process of overhaul and refurbishment scheduling which prioritizes the travel demand of their customers while meeting the regulatory requirement of the vessels. This process is complex and includes multiple factors, including a seven month window in which to schedule refurbishments and overhauls.

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

DOTPF's AMHS division director should update the components of the interport differential calculation and assign the responsibility of regularly updating the components to an AMHS staff member.

The interport differential components have not been consistently updated since the inception of the interport differential calculation in 1996. The responsibility for updating the interport differential components has not been assigned to a specific AMHS position.

We recommend that all of the components of the interport differential be updated to ensure that they accurately reflect the costs for work at an out-of-state shipyard. We also recommend that the responsibility of regularly updating the components be assigned to an AMHS position.

Recommendation No. 2

DOTPF's commissioner should update 17 AAC 70.430 to reflect the current fleet.

AMHS regulations are out of date and, therefore, not in compliance with statute. The base port for each AMHS vessel is designated in 17 AAC 70.430. However, 17 AAC 70.430 currently includes a base port designation for the M/V Bartlett which was decommissioned in late 2003. Furthermore, 17 AAC 70.430 does not include a base port designation for M/V Fairweather, M/V Lituya, or M/V Chenega, which were all added to the fleet in 2004 and 2005.

By not designating a base port for these three vessels, DOTPF is not adhering to AS 39.90.049. We recommend that the regulations be updated to reflect the current fleet.

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June 25, 2010

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Title 24 of the Alaska Statutes, the attached report is submitted for your review.

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
ALASKA MARINE HIGHWAY SYSTEM
VESSEL OVERHAUL AND REFURBISHMENT PROCUREMENT

June 21, 2010

Audit Control Number
25-30055-10

We found that the Department of Transportation and Public Facilities (DOTPF) is adhering to state and federal procurement laws and regulations in awarding contracts for Alaska Marine Highway System's (AMHS) vessel overhauls and refurbishments. The interport differential is applied following regulations. DOTPF's overhaul and refurbishment scheduling process is reasonable.

The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Fieldwork procedures utilized in the course of developing the findings and recommendations presented in this report are discussed in the Objectives, Scope, and Methodology.



Pat Davidson, CPA
Legislative Auditor

TABLE OF CONTENTS

	<u>Page</u>
Objectives, Scope, and Methodology	1
Organization and Function	3
Background Information.....	5
Report Conclusions.....	11
Findings and Recommendations.....	13
Agency Responses	
Department of Transportation and Public Facilities	15
Appendices:	
Appendix A - Overhaul Projects	
Summary of Payments to Shipyards	17
Appendix B – Refurbishment and Repair Projects	
Summary of Payments to Shipyards	19
Appendix C – Vessels Out of Service	
Summary of Vessels’ Time Offline	21

OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Title 24 of the Alaska Statutes and a special request by the Legislative Budget and Audit Committee, we have conducted a performance audit of the Department of Transportation and Public Facilities (DOTPF) Alaska Marine Highway System (AMHS) procurement practices for state ferry overhaul and refurbishment.

Objectives

This audit has three objectives relating to AMHS' state ferry maintenance and repair procurement and scheduling practices. The specific objectives are:

- To evaluate AMHS' compliance with the applicable state and federal procurement statutes and regulations, which includes, when appropriate, the application of the interport differential.
- To evaluate the current state statutes and regulations to assess whether their application results in fair and unbiased contract awards.
- To evaluate the process of developing ferry maintenance schedules and assess the reasonableness of the process.

Scope

Our review of AMHS' vessel overhaul and refurbishment procurement practices for the period from July 2004 through March 2010. Applicable state and federal statutes and regulations did not change significantly during this period. The laws governing the maintenance of state marine vessels are found in AS 36.90.049.

Our review of the AMHS vessel maintenance scheduling was for the period from July 2004 through March 2010. Since the majority of the maintenance scheduling process is institutionalized, our assessment was largely based on interviews of AMHS personnel.

Methodology

To meet the various objectives of the audit, our field work included:

- Using the state accounting system, we identified the universe of DOTPF's vessel related refurbishment procurement. Also using the state accounting system, we identified the universe of DOTPF's vessel related overhaul transactions.

- In order to evaluate AMHS' compliance with state and federal procurement requirements, we performed a non-statistical test of 15 of the 67 contracts issued during our scope. We judgmentally selected these contracts, ensuring that each vessel was chosen at least once and each fiscal year in our scope was chosen once. We analyzed AMHS' support for the procurement of annual overhauls and support for the procurement of refurbishments of vessels. Our evaluation also included interviews with the AMHS marine engineering manager, vessel construction managers and port engineers.
- In order to evaluate the interport differential we inspected the State regulations relative to the interport differential and designated base ports. We analyzed the components of the interport differential used by AMHS and DOTPF's internal written procedures for calculating the interport differential. In addition, we evaluated AMHS' analysis of estimate-to-actual of the interport differential for the M/V Kennicott. We inquired with the Federal Highway Administration regional grants manager regarding the approval of interport differential components and the possibility of including lost revenue in the calculation. We interviewed AMHS operating and business managers and AMHS marine engineers regarding the interport differential components and the feasibility of including lost revenue in the calculation.
- In order to evaluate current state statutes and regulations and assess the results of their application we studied the state statutes and regulations relative to marine vessel repair, maintenance and overhauls. We also evaluated the operating agreement for Alaska Ship and Dry-dock and Seward Ship's Dry-dock.
- In order to evaluate the process of developing ferry maintenance schedules and assess the reasonableness of the process, we conducted extensive interviews with AMHS personnel, including the Deputy Commissioner, AMHS operating and business managers, AMHS marine engineering manager and AMHS vessel construction managers. In addition, we analyzed the AMHS scheduling production timeline and the internal business model used for evaluating operating scenarios.

ORGANIZATION AND FUNCTION

The Alaska Marine Highway System (AMHS) was created under AS 19.65 and is organized within the Department of Transportation and Public Facilities (DOTPF). The primary management units at AMHS are general administration, financial administration, reservations, vessel operations, port operations and marketing. The AMHS director reports to the DOTPF commissioner and is responsible for administering AMHS. The AMHS director position is exempt and serves at the pleasure of the governor. As part of the Alaska Highway system, the AMHS receives funding for capital projects from the Federal Highway Administration.

AMHS operates 11 vessels (M/Vs Aurora, Chenga, Columbia, Fairweather, Kennicott, LeConte, Lituya, Malaspina, Matanuska, Taku and Tustumena) on routes that cover over 3,500 miles of Alaska and British Columbia coastline between Bellingham, Washington and Dutch Harbor. Along these routes, AMHS serves 30 Alaska communities plus Bellingham, Washington and Prince Rupert, British Columbia. M/V's Aurora, Chenega and Tustumena operate in South Central and Southwest Alaska (from Seward to Kodiak to the Aleutians) and the M/V Kennicott operates a cross-gulf route (between Whittier and Prince Rupert). The remaining seven of the vessels operate in the inland waterways of Southeast Alaska (from Yakutat to Bellingham, Washington).

AMHS is responsible for maintaining the vessels that provide state ferry service. When vessel overhaul or refurbishment is required, contracting and bid specifications are developed via a joint effort between DOTPF's contracting officer/procurement specialist, AMHS port engineer, AMHS port captain and the AMHS support services manager.

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BACKGROUND INFORMATION

The Department of Transportation and Public Facilities' (DOTPF) Alaska Marine Highway System (AMHS) regularly overhauls and refurbishes the system's vessels. When arranging for state funded overhauls, AMHS follows the provision of state law which waives the standard competitive bidding requirements and requires overhauls for all vessels to be done at an in-state shipyard.¹ Overhauls and refurbishments are generally done between October and April to coincide with low ferry passenger and freight traffic volume.

AMHS operating vessels are overhauled each year.

Each AMHS operating vessel undergoes an annual overhaul. An overhaul includes inspection, repair, and maintenance that cannot be performed while the vessel is in operating status. The overhaul of AMHS vessels is guided by the policies of both the American Bureau of Shipping (ABS) and the United States Coast Guard (USCG). Both entities focus on safety and vessel seaworthiness. The USCG has a more stringent standard of safety and seaworthiness. AMHS is proactive and inspects vessels' underwater body condition every 12 months by placing the vessel in dry dock. Each AMHS vessel and its assigned crew must pass a USCG inspection before a certificate of inspection can be issued and the vessel is allowed to be placed back in operation.

During the overhaul period, other work is done on AMHS vessels to satisfy requirements of equipment manufacturers' warranties and the Federal Communications Commission's (FCC) certifications of vessel communication and safety communication equipment. Work is also required to comply with the requirements of the federal American with Disabilities Act (ADA) and the Occupational Safety and Health Administration (OSHA).

The current overhaul period is approximately six weeks; however, the time span increases as the fleet ages. In the mid-life of the fleet, the overhaul work required could be completed in four weeks. Now, a majority of the vessels are 30 to 40 years old, and it sometimes takes more than six to eight weeks to complete all necessary repairs, maintenance and inspections. Overhauls are typically performed on (1) dry-docking (hulls), (2) engines, (3) decks, and (4) passenger services.

As reflected on the summary schedule on Appendix A, between the almost six years of July 2004 and March 2010, over \$34 million in solely state-funded overhauls were primarily

¹Alaska Statute 36.90.049 specifically requires that a "marine vessel owned by the state shall be maintained and repaired at a shipyard facility located in the state." The statute does permit flexibility in that this requirement does not have to be followed if the "department that operates the vessel determines in writing that there is no shipyard facility located in the state that is equipped or qualified to perform the particular maintenance or repair required." The statute also permits sending the vessel for out-of-state maintenance and repair if the "proposed cost of maintenance or repair work is unreasonable."

performed at in-state shipyards. An out-of-state shipyard may be used when state-funded overhaul work is combined with federally funded refurbishment work in one project. The inclusion of federal funds requires the work to be awarded on a competitive bid basis — which may result in an out-of-state shipyard getting the bid.

Federally funded refurbishments must be awarded using a competitive procurement process.

Federally funded refurbishment contracts are awarded through a competitive sealed bidding process specified in AS 36.30. The use of Alaska bidder preference and other such bidding requirements are prohibited on projects paid for, in part, with federal funds. In recognition of the possible increase in costs to transport a vessel between the nearest available port and the bid-winning shipyard, AMHS is permitted to apply what is termed the *interport differential* when considering competitive bids involving in-state and out-of-state shipyards.

In addition to the required annual overhauls, vessels are subject to refurbishment every three to five years. Vessel refurbishment typically includes system upgrades, modifications, and replacements. Many of these refurbishments are funded through a combination of federal and state funding sources. AMHS combines² the contract for each ferry's annual overhaul with any federally funded project that may also be scheduled for the vessel in the same year. By combining refurbishment and overhaul work, the amount of time a vessel is out-of-service is minimized. Appendix B summarizes federally funded³ projects between July 2004 and March 2010. As the schedule reflects, such projects have totaled almost \$70 million during the almost six-year period.

An interport differential is applied to competitive procurements related to work on vessels.

Interport differential refers to costs involved for the State to transport a state-owned vessel to an out-of-state shipyard for work. Under state law this differential includes costs such as fuel to transport the vessel to the shipyard facility and return; maintenance costs incurred; consumables used; crew wages to prepare the vessel for the shipyard and to return the vessel to revenue status; and travel costs and per diem for non-crew staff and consultants to administer the contract.

The primary purpose for designating the base ports for vessels is to designate a port for the purposes of calculating the interport differential for a given vessel. Accordingly, Ketchikan is used as the base port for purposes of calculating the differential for most ships, while Seward serves as the base port for one of the two AMHS vessels operating west of the Icy Cape longitude.

²Federal regulation, 23 CFR 635.111(c), also allows for the combining of federal aid and state-financed projects as long as the bid schedule quantities and bid prices are kept separately.

³These costs include federal funds and the required state match.

State-funded vessel overhauls are based on negotiated prices; competitive bids are used for federally funded refurbishments.

By mandating state marine vessel use of in-state shipyards for overhaul work, and exempting DOTPF from competitive bidding for contracts related to such work, the legislature clearly wanted to use state assets to promote viable shipyard operations.

In accordance with state law, AMHS awards state funded overhauls on a noncompetitive basis. Depending on the vessel's operating region and the vessel capacity of the shipyard, either the Ketchikan or the Seward shipyards is used.

State vessel overhaul items and specifications are generated from historical data developed from standard overhauls. Pricing and bid schedule work items are annually negotiated with the in-state shipyards. The basic contract for each shipyard provides a detailed description of specifications for the 30-plus items required for annual overhauls and how the work is to be performed. A notice to proceed must be approved by the port engineer before overhaul work can proceed on the applicable vessel.

In contrast, federally funded vessel refurbishments must go through a competitive bidding process.

Federally funded refurbishments are required to have the appropriate architectural and engineering services for the development of the design and specifications. The AMHS selection committee⁴ evaluates the consultant's proposal. Consultant selection is based on qualified, base-selection procedures required under the Brooks Act and AS 36.30.270.

Consultant-developed specifications are used on the federal project bid specifications for the competitive sealed bidding process. AMHS applies an interport differential to bids received from out-of-state shipyards. The differential ostensibly represents the savings involved with using an in-state facility rather than incurring the costs of transporting a vessel out-of-state for the repair project. Contract awards for federally funded refurbishments are made based on the lowest, responsible, responsive bid in accordance with state and federal regulations.

The development of final ferry schedules is a months-long process with many variables.

Each year an operating plan is developed within the financial limitations of the governor's proposed budget. The operating plan is a one page document which provides a basic calendar for each vessel, including overhaul and repair dates, layup⁵ time periods, in-transit dates and general information on the routes to be served by the vessel. Passage of the governor's

⁴The committee may vary depending upon the nature of the contract but is usually composed of a procurement specialist, project resident engineer, vessel construction manager, and marine transportation services manager.

⁵Layup is a cost-saving measure whereby a vessel is docked for a specific period of time.

budget by the legislature is seen by DOTPF as approval of the operating plan and thus an approval of the level of service provided to Alaskan citizens.

Development of the operating plan is driven by the desire to maintain consistent ferry service and the constituent priority of the summer schedule. To achieve this, AMHS schedules all refurbishments and overhauls between October and April and, whenever possible, schedules annual overhauls for the same month every year. Scheduling refurbishments and overhauls during the winter months reduces the likelihood of vessels being unavailable in the summer when revenue is nearly three times that of winter.

When developing the operating plan, AMHS uses a financial model to determine if the costs of the plan are within the proposed budget. This model has the ability to adjust the number of weeks a vessel is in service and produce the net financial effect of the adjustment.

AMHS' vessel maintenance scheduling incorporates state overhauls and federal refurbishments. During the annual state overhauls, each vessel is issued a USCG certificate of inspection, without which the vessel cannot operate. State overhauls are scheduled as close to 12 months apart as possible in order to maximize resources while ensuring that vessel certificates do not expire. Also considered during scheduling of state overhauls is the availability of other vessels to ensure continued service to constituents.

Federal refurbishments generally require vessels to be out-of-service for five to six months. When a federal contract is sent out for bid, the start date of the project is specified. AMHS determines the start date by first staying within the parameters of October through April and then looking at the availability of other AMHS vessels to provide services. AMHS prefers to start the refurbishments as close to October 1st as possible so that any unanticipated problems that extend the time vessels are in dry dock will affect the summer schedule as little as possible. Meeting customer travel demands is a perpetual priority throughout the maintenance scheduling process. To that end, AMHS pays particular attention to community calendar events during the winter months. Vessels routinely change routes to ensure that a vessel is available to provide service to a community. (See Appendix C for a summary of vessels offline from July 2004 through March 2010.)

With approval of the budget, the finalization of schedule patterns can commence sometime in April. AMHS establishes schedule patterns with the goal of maintaining consistent, evenly spaced service and ensuring that each port receives service. AMHS uses an automated scheduling system that includes some - but not all - of the many variables in scheduling. The final proposed patterns are distributed to community panels for feedback.

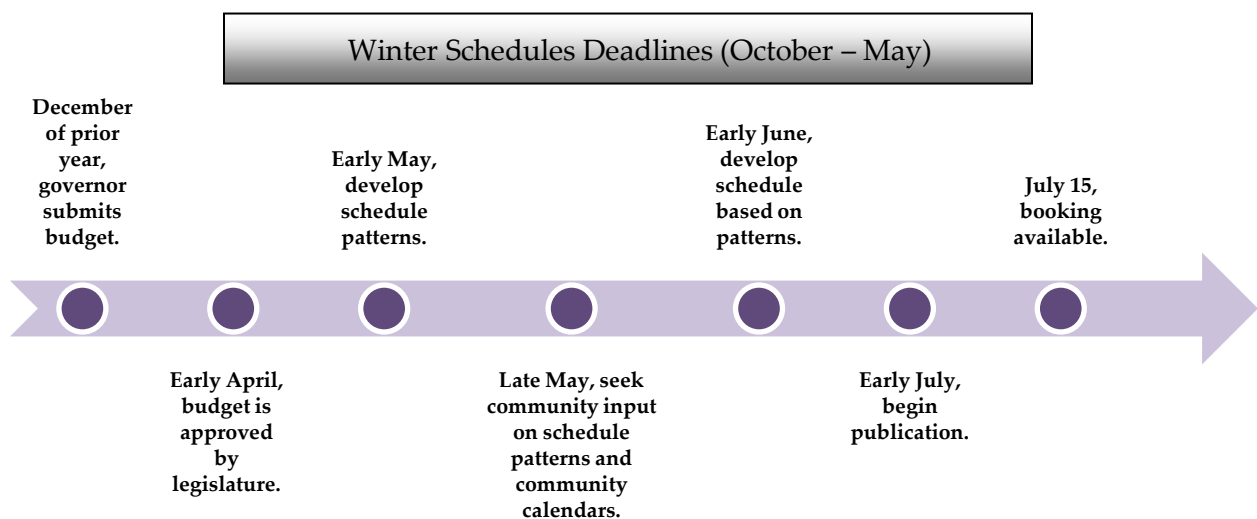
There are a number of challenges to producing detailed schedules. They include:

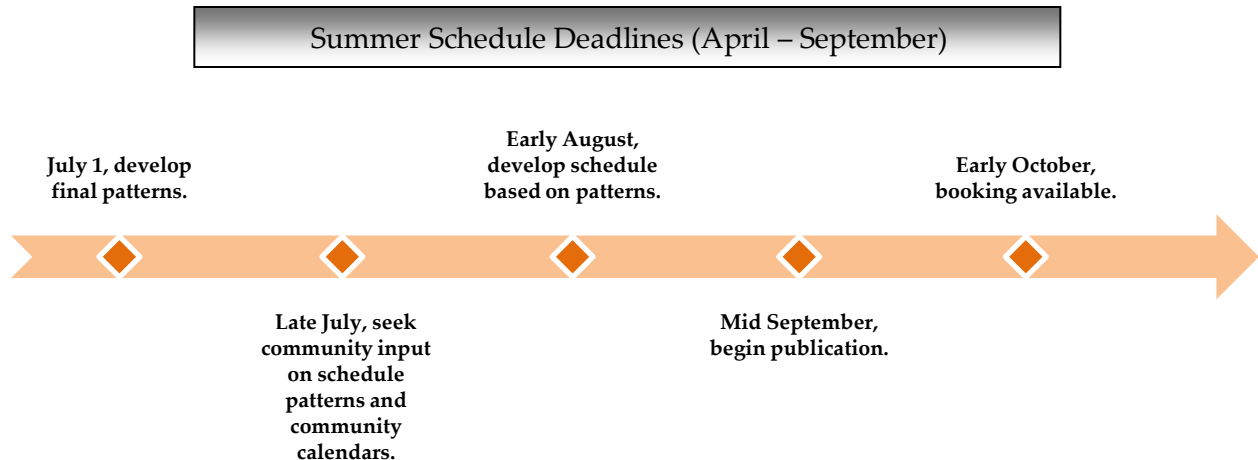
- Eleven vessels.
- A 3,500-mile route.
- Thirty-two ports.
- Currents.

- Tides.
- Availability of fuel, water and stores at various ports.
- Interport connectivity.
- Sufficient in-port time.
- Cost of operations.
- Labor contracts.
- Docking abilities – not every ferry can dock at every dock.
- Vessel sailing restrictions – only two vessels are certified to cross the gulf.
- Crew restrictions – crews are trained for specific routes and require re-training for new routes.
- Vessel restrictions – fast ferries do not have crew quarters and are not able to provide service on longer routes.
- Planned community events such as the Gold Medal Basketball Tournament, the Southeast Alaska State Fair, and the Kodiak Crab Festival.
- Several regulating bodies: the USCG, the ABS, the FCC, the ADA, the Environmental Protection Agency, the Safety of Life at Sea, and OSHA.

Detailed schedule development can begin when schedule patterns are finalized. The schedules are available in print form and bookings are available online shortly after the detailed schedules are developed.

Each annual operating plan requires a winter (October – April) and a summer (May – September) schedule. The development of these schedules is driven by different deadlines.





Operating plans only go through June of each year because of the ending of the fiscal year. However, the vessel schedules available to the public go through the specific season, May through September. When AMHS produces the summer schedule in early October, it is done with the full knowledge that the operating budget for the following fiscal year has yet to be approved by the governor.

After a schedule is set, it is immediately vulnerable to change for a number of reasons:

- Vessels require emergency repairs, especially as the fleet ages, which affect the schedule.
- When undergoing annual overhauls, contractors sometimes find areas in which additional work is required.
- Additional work can delay a vessel's return to service.

AMHS vessels are also subject to regulation changes enacted by various entities. For example, a vessel might be scheduled for an annual overhaul, but a new regulation by one of the governing bodies can require work outside of the scheduled overhaul.

When unforeseen circumstances are going to affect the service levels to a community, AMHS participates in discussions with community panels to develop a mutually satisfactory schedule.

REPORT CONCLUSIONS

The Alaska Marine Highway System (AMHS) is adhering to state and federal procurement laws and regulations when contracting for vessel overhauls and refurbishments. The interport differential is applied following regulations. However, the regulations are not current, and the components of the differential calculation should be updated. Current statutes and regulations governing state funded overhauls create a public-policy based bias by mandating the use of in-state shipyards whenever possible. The Department of Transportation and Public Facilities' (DOTPF) overhaul and refurbishment scheduling process is reasonable.

AMHS overhaul and refurbishment procurements comply with laws and regulations.

Our analysis of 15 overhaul and refurbishment contracts identified no procurement deficiencies. Therefore, contracts for annual overhauls and refurbishments between July 2004 and March 2010 were issued in accordance with both state and federal procurement laws and regulations.

The interport differential is being correctly applied.

Where applicable, interport differential costs were applied correctly, and bid specifications were developed without creating bias between competing bidders. As discussed in Recommendation No.1, some of the interport differential components have not been updated since 1996.

Procurement regulations are not reflective of the current AMHS fleet.

Alaska regulation 17 AAC 70.430 defines the base port for each AMHS vessel; however, this regulation has not been updated to include the last three vessels added to the system. The base port designation is an integral part of the interport differential calculation. The fuel consumption is determined between the base port and the port where work is to be performed. Three vessels in the AMHS fleet do not have a base port designation. Consequently, determining their fuel consumption would be problematic (further discussed in Recommendation No. 2).

Current statutes mandate use of in-state shipyards for state funded overhauls.

Since the construction of major in-state shipyards, the legislature has directed state marine vessels – most prominently, AMHS ferries – to use these facilities for vessel overhaul work.

This directive, set out in state law, was a way to generate sufficient business for these privately operated facilities.

AMHS complies with this mandate by contracting with either the Ketchikan or the Seward shipyard for overhaul services. As a matter of practice, whenever possible, overhauls are performed at the shipyard nearest where the vessels are operating. Vessel size and type is a restriction on where it is overhauled. The Seward facility is limited to overhauling vessels of 350 feet or less and does not have the expertise to work on the fast ferries. The practice of performing overhauls at shipyards near where vessels are operating reduces the chance of extended disruption of ferry schedules due to the additional transportation time created by sending a ferry out-of-region for overhaul. The price for overhaul work items is negotiated between AMHS managers and the shipyard rather than determined through a competitive bidding process. By continually allocating work on this basis and relying on negotiated contracts, the State may not necessarily be getting the best price for vessel overhauls.

DOTPF's process of scheduling overhauls and refurbishments is reasonable.

AMHS has developed a complex process of overhaul and refurbishment scheduling which prioritizes the travel demands of their constituency while meeting the regulatory requirement of the vessels. (See Background Information for more details.)

The time period to complete refurbishment and overhaul services is from October 1st to April 30th – a total of seven months. In this time period, every vessel in the fleet has to undergo all of the overhauls necessary to maintain their United States Coast Guard certifications. Additionally, every year two to three vessels undergo federal refurbishments that require them to be out of service for four to six months.

All overhaul and refurbishments scheduling begins with assessing the length of time necessary to complete the tasks. This is determined by AMHS marine engineers. The marine engineers base the overhaul and refurbishment schedule on the amount of time necessary to complete refurbishment and the availability of similar vessels to maintain ferry service schedules.

Given the complexity of meeting annual vessel regulatory requirements and scheduling required vessel refurbishments and overhauls within a seven month window, the process DOTPF has developed for the scheduling of vessel maintenance is reasonable.

FINDINGS AND RECOMMENDATIONS

Recommendation No. 1

The Department of Transportation and Facilities' (DOTPF) Alaska Marine Highway System (AMHS) division director should update the components of the interport differential calculation and assign the responsibility of regularly updating the components to an AMHS staff member.

The interport differential components have not been consistently updated since the inception of the interport differential calculation in 1996. The responsibility for updating the interport differential components has not been assigned to a specific AMHS position.

AMHS staff conducted an estimate-to-actual analysis of the interport differential for the M/V Kennicott which traveled to Bellingham, Washington in October 2009 for refurbishment. We evaluated the components and assumptions used in the analysis.

Adhering to 17 AAC 70.420, the interport differential includes:

1. Fuel to transport the vessel from its designated base port to the shipyard facility and return.
2. Maintenance costs incurred and consumables used while transporting.
3. Crew wages to prepare and deliver the vessel and to prepare to return to revenue status.
4. Non-wage costs to transport crew to and from the vessel.
5. Travel costs and per diem for non-crew staff and consultants to administer the contract.

Fuel consumption rates have not been consistently updated since each vessel's initial calculation. While one vessel has had changes made to their consumption rates, this is not true of all vessels. Maintenance costs and consumables used for individual vessels have also not been updated since the initial calculation.

The evaluation of travel and per diem costs for non-crew staff showed that the amount included in the interport differential was 51% less than the actual amount. Travel and per diem costs of non-crew staff do not include engineering supervisors, chief engineers, equal employment officers, or civil rights officers.

We recommend that all of the components of the interport differential be updated to ensure that they accurately reflect the costs for work at an out-of-state shipyard. We also recommend that the responsibility of regularly updating the components be assigned to an AMHS position.

Recommendation No. 2

DOTPF's commissioner should update 17 AAC 70.430 to reflect the current fleet.

AMHS regulations are out of date and, therefore, not in compliance with statute. The base port for each AMHS vessel is designated in 17 AAC 70.430. However, 17 AAC 70.430 currently includes a base port designation for the M/V Bartlett which was decommissioned in late 2003. Furthermore, 17 AAC 70.430 does not include a base port designation for M/V Fairweather, M/V Lituya, or M/V Chenega, which were all added to the fleet in 2004 and 2005.

Alaska Statute 39.90.049 (c) states: *~~The commissioner of the department that operates a marine vessel shall designate by regulation the designated base port for each vessel operated by the department.~~*

By not designating a base port for these three vessels, DOTPF is not adhering to AS 39.90.049. We recommend that the regulations be updated to reflect the current fleet.

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES OFFICE OF THE COMMISSIONER

SEAN PARNELL, GOVERNOR

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July 16, 2010

RECEIVED

JUL 19 2010

LEGISLATIVE AUDIT

Ms. Pat Davidson, CPA
Legislative Auditor
Division of Legislative Audit
PO Box 11330
Juneau, AK 99811-3300

Dear Ms. Davidson:

This is in response to your letter of June 25, 2010 with attached Preliminary Report: *A Special Report on the Department of Transportation and Public Facilities, Alaska Marine Highway System, Vessel Overhaul and Refurbishment Procurement, June 21, 2010.*

Overall the Department is pleased with the results of the audit and offers the following comments to the Recommendations included in the preliminary report.

Recommendation No. 1

DOT&PF's AMHS division director should update the components of the interport differential calculations and assign the responsibility of regularly updating the components to an AMHS staff member.

The department agrees with this recommendation. Components of the interport differential get updated annually by an Engineering Department Contracts Manager position. However, the department has not been updating the interport differential to the detail described by auditors previously (pre-2004 administration) and recently (2010 audit). As stated in Recommendation #1, the department will work to update the interport differential. Furthermore, the department will ensure that an AMHS staff member is assigned to the oversight of the interport differential and executes the component updates annually as advised in this recommendation.

Recommendation No. 2

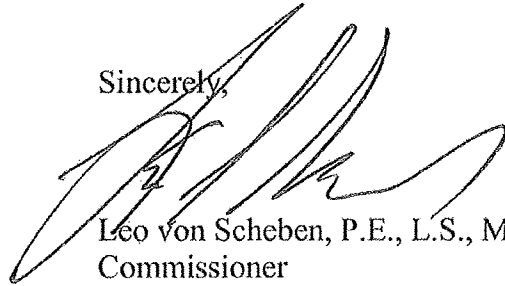
DOT&PF's commissioner should update 17 AAC 70.430 to reflect the current fleet.

The department concurs with this recommendation. Interport differential is being applied correctly, with the exception of base ports that have to be updated with vessels in accordance with 17 AAC 70.430. The Alaska Marine Highway System will work with the Department of Law to update 17 AAC 70.430 by removing non-active vessels and adding new additions to fleet.

Additionally, the department will ensure that the AMHS fleet is in compliance with 17 AAC 70.430 and AS 39.90.049(c).

If you have any questions, please contact Laura Baker, Administrative Services Director, at 465-3911.

Sincerely,

A handwritten signature in black ink, appearing to read 'Leo von Scheben', is written over the word 'Sincerely,'.

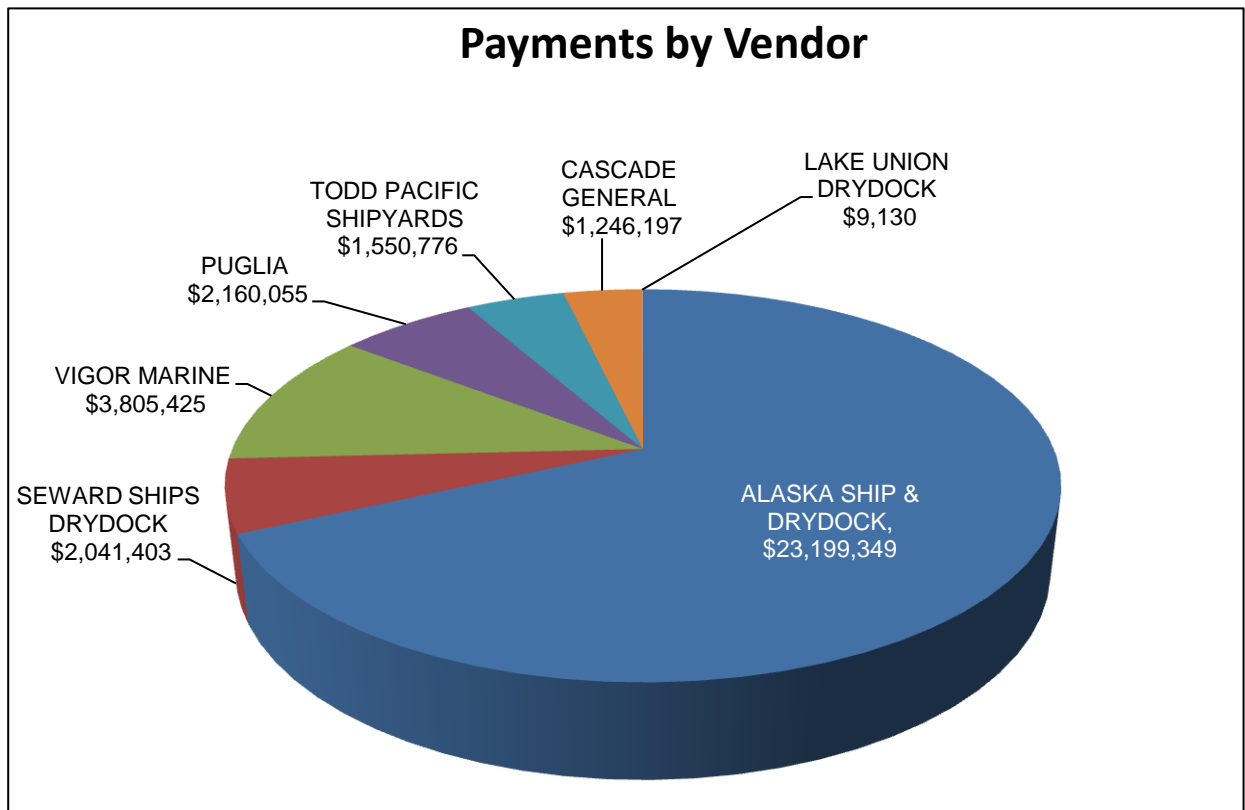
Leo von Scheben, P.E., L.S., M.B.A.
Commissioner

cc: Laura Baker, Director, Division of Administrative Services, DOT&PF
Jim Beedle, Deputy Commissioner of Marine Operations, DOT&PF

Appendix A
 Alaska Marine Highway System
 Overhaul Projects
 Summary of Payments to Shipyards
 Fund Source: General Fund
 July 2004 - March 2010

Payments By Fiscal Year

Fiscal Year	Amount
2005	\$ 3,726,512
2006	4,147,349
2007	6,797,858
2008	7,427,742
2009	7,994,414
2010*	3,918,460
	\$ 34,012,335



*2010 data includes 9 months of activity; other fiscal years include all 12 months.

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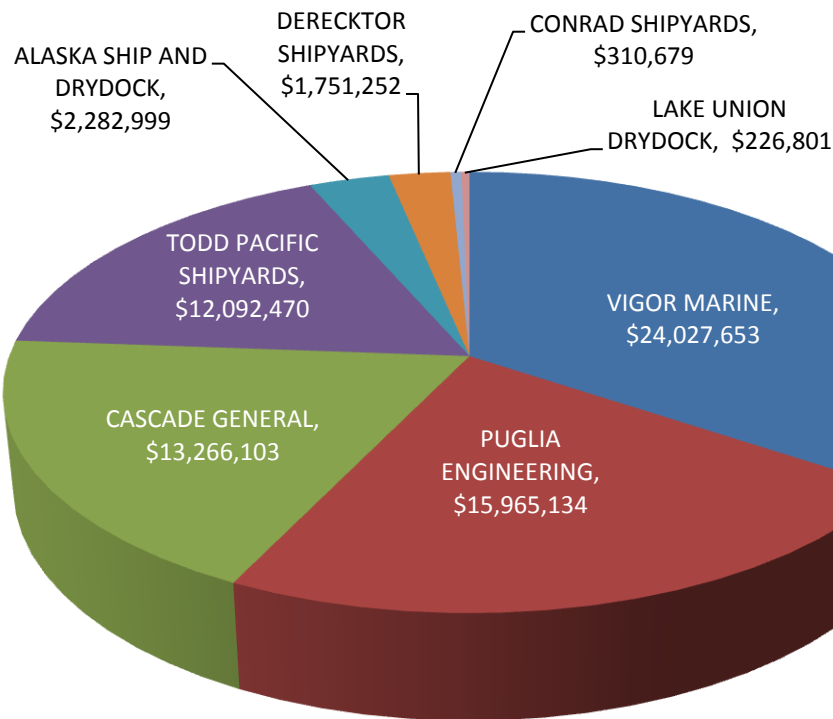
Appendix B

Alaska Marine Highway System
Refurbishment and Repair Projects
Fund Source: Federal Funds
July 2004 - March 2010

Payments By Fiscal Year

Fiscal Year	Amount
2005	\$ 13,892,146
2006	5,923,445
2007	10,661,165
2008	18,961,107
2009	14,119,139
2010	6,366,089
	\$ 69,923,091

Payments by Vendor



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Appendix C
Alaska Marine Highway System
Summary of Vessels' Time Offline
Fund Source: Federal Funds
July 2004 - March 2010

AURORA		Week(s)	% Time	Out of Service Reason
FY 05	Sep. 15-17, 2004;	0.43		Intransit
	Oct. 29 - Apr. 30, 2005	<u>26.29</u>		Layup, Overhaul
Total FY 05		26.71	51%	
FY 06	Apr. 14 - Jun. 1 2006	7.00	13%	Overhaul
FY 07	Apr. 20 - Jun. 7 2007	7.00	13%	Overhaul
FY 08	Aug. 23 - 25, 2007;	0.43		Intransit
	Sep. 28, 2007 - Jun. 4,	<u>35.71</u>		Intransit, Layup, Overhaul, Refurbishment
Total FY 08		36.14	70%	
FY 09	Aug. 23 - 25, 2008;	0.43		Intransit
	Sep. 28 - Oct. 1, 2008;	0.57		Intransit
	Apr. 28 - May 31 2009	<u>4.86</u>		Overhaul
Total FY 09		5.86	11%	
FY 10	Mar. 16 - 31, 2010	2.29	6%	Overhaul
CHENEGA		Week(s)	% Time	Out of Service Reason
FY 05		NA	NA	New vessel in FY06
FY 06	Jul. 1 - Aug. 31, 2005;	8.86		Intransit, Training
	Sep. 8 - Oct. 31, 2005	7.71		Training
	Feb. 2 - Feb. 19, 2006;	2.57		Overhaul
	Apr. 15 - May 2 2006	<u>2.57</u>		Intransit, Training
Total FY 06		21.71	42%	
FY 07	Sep. 12, 2006 - Apr. 19, 2007	31.43	60%	Layup, Overhaul, Warranty
FY 08	Oct. 29 - Nov. 9, 2007;	2.57		Intransit
	Nov. 10 - 15, 2007;	11.86		Layup
	Feb. 8 - Apr. 17, 2008;			Layup, Overhaul
	Apr. 18 - 30, 2008	<u>14.43</u>		Intransit
Total FY 08		14.43	28%	
FY 09	Oct. 1 - 8, 2008;	1.14		Intransit
	Mar. 30 - Apr. 22, 2009;	3.43		Overhaul
	May 1 - 3, 2009	<u>0.43</u>		Intransit
Total FY 09		5.00	10%	

Legend:

Layup - A cost saving measure whereby a vessel is docked for a specific period of time.

Overhaul - State funded and USCG required annual inspections and repairs.

Refurbishment - Federally funded system upgrades, modifications, and replacements.

Appendix C
(Continued)
 Alaska Marine Highway System
 Summary of Vessels' Time Offline
 Fund Source: Federal Funds
 July 2004 - March 2010

COLUMBIA		Week(s)	% Time	Out of Service Reason
FY 05	Sep 16, 2004 - May 14~ 200	34.43	66%	Layup, Overhaul
FY 06	Oct 8-21~ 2005; Mar 1 - Apr 11, 2006	2.00 5.86		Overhaul Overhaul
Total FY 06		7.86	15%	
FY 07	Sep. 25- Dec. 31, 2006	14.00	27%	Overhaul
FY 08	Aug. 13, 2007-May 15, 2008	39.57	76%	Layup, Overhaul, Refurbishment
FY 09	Sep. 10, 2008 -Apr. 21, 2009	32.00	62%	Layup, Overhaul
FY 10	Sep. 16, 2009 - Jun. 8, 2010	28.14	70%	Layup, Overhaul
FAIRWEATHER		Week(s)	% Time	Out of Service Reason
FY 05	Oct. 15 - Nov. 16, 2004; Dec. 17 - 31, 2004; Jan. 22 - Mar. 14, 2005; Apr. 8 - 30, 2005	4.71 2.14 7.43 3.29		Overhaul Repair Overhaul Overhaul
Total FY 05		17.57	34%	
FY 06	Oct. 1 - 31, 2005; Jan. 30 - Jun. 30 2006	4.43 21.71		Overhaul Overhaul
Total FY 06		26.14	50%	
FY 07	Nov. 6 - Dec. 6, 2006	4.43	9%	Overhaul
FY 08	Oct. 1, 2007-Feb. 07, 2008	18.57	36%	Overhaul
FY 09	Oct. 1, 2008 - Jun. 30, 2009	39.00	75%	Layup, Overhaul, Refurbishment
FY 10	Oct. 1 - 28, 2009; Jan. 18 - Apr. 30, 2010	4.00 14.71		Overhaul Layup
Total FY10		18.71	47%	

Legend:

Layup - A cost saving measure whereby a vessel is docked for a specific period of time.

Overhaul - State funded and USCG required annual inspections and repairs.

Refurbishment - Federally funded system upgrades, modifications, and replacements.

Appendix C
(Continued)
 Alaska Marine Highway System
 Summary of Vessels' Time Offline
 Fund Source: Federal Funds
 July 2004 - March 2010

KENNICOTT		Week(s)	% Time	Out of Service Reason
FY 05	Oct 5, 2004 - Mar 14~ 2005	23.00	44%	Layup, Overhaul, Refurbishment
FY 06	Oct 8 - Nov 14~ 2005	5.43	10%	Overhaul
FY 07	Nov 9 - Dec 31, 2006	7.57	15%	Layup, Overhaul
FY 08	Aug 27 - Sep 9 2007; Nov 14, 2007 - Apr 14, 2008; May 1 - 24,	2.00 21.86 <u>3.43</u>		Overhaul Layup, Overhaul Layup
Total FY 08		27.29	52%	
FY 09	Sep 21 - Nov 1, 2008	6.00	12%	Overhaul
FY 10	Oct 1, 2009 - March 13,	23.43	59%	Layup, Overhaul, Refurbishment
LECONTE		Week(s)	% Time	Out of Service Reason
FY 05	Jul 1 - Oct 26, 2004	16.86	32%	Overhaul
FY 06	Oct 15 - Nov 21~ 2005; Dec 8 ~2005 - Jan 3, 2006	5.43 <u>3.86</u>		Overhaul Overhaul
Total FY 06		9.29	18%	
FY 07	Aug 25 - Nov 30, 2006	14.00	27%	Overhaul
FY 08	Aug. 24 - Sep. 27, 2007	5.00	10%	Overhaul
FY 09	Aug. 24 - Sep. 27, 2008	5.00	10%	Overhaul
FY 10	Sep. 1 - Oct. 31, 2009	8.71	22%	Overhaul
LITUYA		Week(s)	% Time	Out of Service Reason
FY 05	Mar. 1 - Jun. 30, 2005	17.43	34%	Overhaul
FY 06	Feb. 21 - 24, 2006	0.57	1%	Overhaul
FY 07	Feb. 20- 23, 2007	0.57	1%	Overhaul
FY 08	Feb. 19 - 24, 2008	0.86	2%	Overhaul
FY 09	Jan. 6 - 14, 2009; Jan. 30 - Mar. 4, 2009	1.29 <u>4.86</u>		Overhaul Overhaul
Total FY 09		6.14	12%	
FY 10	Jan. 8 - Mar. 31, 2010	11.86	30%	Layup, Refurbishment

Legend:

Layup - A cost saving measure whereby a vessel is docked for a specific period of time.

Overhaul - State funded and USCG required annual inspections and repairs.

Refurbishment - Federally funded system upgrades, modifications, and replacements.

Appendix C
(Continued)
 Alaska Marine Highway System
 Summary of Vessels' Time Offline
 Fund Source: Federal Funds
 July 2004 - March 2010

MALASPINA		Week(s)	% Time	Out of Service Reason
FY 05	May 1 - 30~ 2005	4.29	8%	Overhaul
FY 06	Nov 1, 2005 - Apr 17, 2006	24.00	46%	Layup, Overhaul
FY 07	Oct 11, 2006 - Apr 16, 2007	26.86	52%	Layup, Overhaul, Refurbishment
FY 08	Mar 6 - May 10, 2008	9.43	18%	Overhaul
FY 09	Apr 22 - Jun 2, 2009	6.00	12%	Overhaul
FY 10	Mar 31 - May 18, 2010	0.14	0%	Overhaul

MATANUSKA		Week(s)	% Time	Out of Service Reason
FY 05	Jan 8 - 14~ 2005;	1.00		Overhaul
	Apr 15 - May 14~2005	4.29		Overhaul
Total FY 05		5.29	10%	
FY 06	Oct 1~ 2005 -Jan 14, 2006	15.14	29%	Overhaul
FY 07	Oct 9 - Nov 7, 2006	4.29	8%	Overhaul
FY 08	Oct 3, 2007-Jan 06, 2008	13.71	26%	Overhaul, Layup
FY 09	Oct 1, 2008 - Jun 25, 2009	38.29	74%	Layup, Overhaul, Refurbishment
FY 10	Oct 1, 2009-Feb 4, 2010	18.14	45%	Layup, Overhaul

TAKU		Week(s)	% Time	Out of Service Reason
FY 05	Oct. 1, 2004 - Jun. 30, 2005	39.00	75%	Layup, Overhaul, Refurbishment
FY 06	Jul. 1 - Sep. 30, 2005;	13.14		Layup, Overhaul
	Dec. 1 - 7, 2005;	1.00		Overhaul
	Jan. 15 - Feb. 28, 2006	6.43		Overhaul
Total FY 06		20.57	40%	
FY 07	Sep. 25 - 30, 2006;	0.86		Overhaul
	Jan. 1 - Jun. 30, 2007	25.86		Layup, Refurbishment
Total FY 07		26.71	51%	

Legend:

Layup - A cost saving measure whereby a vessel is docked for a specific period of time.

Overhaul - State funded and USCG required annual inspections and repairs.

Refurbishment - Federally funded system upgrades, modifications, and replacements.

Appendix C
(Continued)
 Alaska Marine Highway System
 Summary of Vessels' Time Offline
 Fund Source: Federal Funds
 July 2004 - March 2010

TAKU (Continued)		Week(s)	% Time	Out of Service Reason
FY 08	Jul. 1 - Jul. 17, 2007; Jan. 7 - Mar. 5, 2008	2.43 <u>8.43</u>		Layup, Refurbishment Overhaul
Total FY 08		10.86	21%	
FY 09	Jan. 18 - Feb. 28, 2009	6.00	12%	Overhaul
FY10	Feb. 5 - Mar. 30, 2010	7.71	19%	Overhaul
TUSTUMENA		Week(s)	% Time	Out of Service Reason
FY 05	Oct. 14 - 24, 2004; Mar. 15 - Apr. 7, 2005	1.57 <u>3.43</u>		Overhaul Overhaul
Total FY 05		5.00	10%	
FY 06	Nov. 15, 2005 - Apr. 14, 2006	21.57	41%	Layup, Overhaul, Refurbishment
FY 07	Jan. 10 - Feb. 9, 2007	4.43	9%	Overhaul
FY 08	Oct. 10 - Nov. 17, 2007; Apr. 18 - 27, 2008	5.57 <u>1.43</u>		Overhaul Overhaul
Total FY 08		7.00	13%	
FY 09	Nov. 8, 2008 - Apr. 13, 2009	22.43	43%	Layup, Overhaul, Refurbishment

Legend:

Layup - A cost saving measure whereby a vessel is docked for a specific period of time.

Overhaul – State funded and USCG required annual inspections and repairs.

Refurbishment – Federally funded system upgrades, modifications, and replacements.