

**Alaska Marine Highway System: Vessel and Terminal
Overhaul and Rehabilitation**

**FY2011 Request: \$8,000,000
Reference No: 30624**

AP/AL: Appropriation
Category: Transportation
Location: Statewide
House District: Statewide (HD 1-40)
Estimated Project Dates: 07/01/2010 - 12/31/2011

Project Type: Renewal and Replacement
Contact: Jim Beedle
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Brief Summary and Statement of Need:

The Alaska Marine Highway System requires annual maintenance and overhaul on vessels and at terminals, particularly component or system failures which will impact service in the short term. Additionally, annual overhaul of vessels is necessary to pass United States Coast Guard (USGS) inspections and obtain a Certificate of Inspection necessary to operate.

Funding:	<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>	<u>FY2016</u>	<u>Total</u>
Gen Fund	\$8,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$78,000,000
Total:	\$8,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$14,000,000	\$78,000,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Additional Information / Prior Funding History:

FY2010 - \$6,000,000; FY2009 - \$9,900,000; FY2008 - \$13,444,500; FY2007 - \$6,000,000; FY2006 - \$5,000,000; FY2005 - \$4,063,000; FY2004 - \$4,930,000; FY2003 - \$5,000,000; FY2002 - \$4,239,365; FY2001 - \$4,200,000; FY2000 - \$4,390,600; FY1999 - \$4,000,000. This has been an annual Capital Program.

Project Description/Justification:

This request funds numerous recurring maintenance tasks and improvements to the vessels. The majority of the funds being requested are spent in Alaska shipyards and with Alaska suppliers and vendors.

Vessel Overhaul

Overhaul work consists of inspection, repair, and maintenance that cannot be performed while the vessels are operating. An overhaul period of approximately six weeks is set aside every year during which each ship is in dry-dock and the scheduled work is accomplished. This work is performed in Alaskan shipyards unless it is made part of a Federal Highway Administration project competitively awarded to an out-of-state shipyard. In performing overhaul work, the Alaska Marine Highway System must meet the inspection requirements and standards of safety and seaworthiness of two agencies, the American Bureau of Shipping (ABS) and the United States Coast Guard (USCG). None of this work is discretionary. At the end of the overhaul period, the vessel must pass a demanding USCG inspection to obtain a Certificate of Inspection. This certificate is mandatory to operate for the next year.

In addition to the work required by ABS, USCG, and Det Norkse Veritas (DNV) Ship Classification (a system for safeguarding life, property and the environment at sea), we perform work recommended by equipment manufacturers and work that our port engineers determine to be sound equipment maintenance practices. We have some discretion about the work that is merely prudent. For example, painting the hull is not required, and we could sail with badly deteriorated paint. However, paint protects the hull from deterioration. In the long term, the value of asset protection greatly outweighs the cost of the painting. In the past few years, we have had to focus overhaul funds on required items and have deferred much of the discretionary work. The cost of required work has increased and our Capital Improvement Project (CIP) budget has not always been sufficient.

Overhaul work is costly. Putting a vessel into dry-dock can cost over \$20,000 base cost plus \$1,000 for each day it remains in dry-dock. Dismantling a main propulsion engine solely to permit ABS inspections requires the work of several skilled engineers for several weeks. These are costs we incur to enable inspections to be made and routine maintenance to be done.

In FY11 we expect to accomplish a number of needed upgrades and equipment purchases. A continuing source of increased costs is maintenance of new systems and equipment (primarily safety related) required to be added to the vessels by the International Maritime Organization's Safety of Life at Sea (SOLAS) regulations and similar U.S. Code of Federal Regulations Subchapter "W" provisions. While federal funds provide the systems and equipment, state CIP funds must be used to maintain them once installed. Perhaps the greatest cause of increased overhaul costs is the simplest: as vessels age, the amount and cost of required maintenance increases.

We operate steel and aluminum vessels in a hostile, corrosive salt-water environment. We must protect these expensive ships or suffer rapid deterioration of major structural metal and equipment resulting in expensive replacement costs. Ignoring these maintenance and repair requirements will result in failure to maintain ABS classification and failure to pass USCG Certificate of Inspection examinations. Taking vessels out of classification will result in higher annual insurance rates. Without a USCG Certificate of Inspection we cannot sail our vessels and accomplish our mission of providing safe, reliable public transportation.

In the past we have often established pools of major main engine components that are economical to rebuild. These were used as ready spares to keep our vessels in service when a casualty occurs. More recently this practice has ceased due to a lack of funds.

Passenger Services, Security/Safety, and other AMHS projects:

Needs include:

- Miscellaneous Electronics Replacement - Fleet Electronics Upgrade,
Workstation Replacements, Laptop Replacements, Server Replacements
- Passenger Services – Automated External Defibrillators (AEDs),
Mattress and Linen Replacement
- Security and Safety – CCTV Camera Maintenance & Repair, Fast Rescue Boat Replacement

Terminals and Facilities Maintenance:

Needs include:

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Juneau Maintenance Shop Modification, Outside Storage Buildings,
Potable Waterline Modifications, Haines Parking Lot Repair,
LeConte Berth Modification, Landline Phone Upgrades, Terminal
Replacement Furniture