

Alaska Marine Highway System - Vessel and Terminal Overhaul and Rehabilitation

FY2013 Request: \$10,000,000
Reference No: 30624

AP/AL: Allocation

Project Type: Renewal and Replacement

Category: Transportation

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Michael A. Neussl

Estimated Project Dates: 07/01/2012 - 06/30/2017

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Appropriation: Asset Management

Brief Summary and Statement of Need:

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

Funding:	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Total
Gen Fund	\$5,455,000	\$10,000,000					\$15,455,000
Total:	\$5,455,000	\$10,000,000	\$0	\$0	\$0	\$0	\$15,455,000

<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:

\$8,000,000 Ch 5 FSSLA 2011 Sec1 pg 99 In 21(RefNum 50745); \$12,000,000 Ch 43 SLA 2010 Sec 1 pg 3 In 19, Sec 7 pg 35 In 27; \$6,702,100 Ch 15 SLA 2009 Sec 1 pg 21 In 17, Sec 10 pg 59 In 3; \$9,900,000 Ch 29 SLA 2008 Sec 13 pg 158 In 17; \$15,388,500 Ch 30 SLA 2007 Sec 1 pg 78 In 14, Sec 20 pg 151 In 3; \$6,000,000 Ch 82 SLA 2006 Sec 1 pg 84 In 4; \$5,000,000 Ch 3 SLA 2005 Sec 1 pg 66 In 7; \$4,063,000 FY2005; \$4,900,300 FY2004; FY2003 - \$5,000,000; FY2002 - \$4,239,365; FY2001 - \$4,200,000; FY2000 - \$4,390,600;

Project Description/Justification:

The FY13 Alaska Marine Highway System (AMHS) Vessel and Terminal Overhaul and Rehabilitation request will fund:

Vessel Overhaul and Rehabilitation Projects-

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

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

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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 (COI). 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), AMHS performs work recommended by equipment manufacturers and work that our Port Engineers determine to be sound equipment maintenance practices. AMHS has some discretion about the work that is merely prudent. For example, painting the hull is not required, and AMHS 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.

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 simply to enable inspections to be made and routine maintenance to be done.

In FY2013 AMHS expects to accomplish a number of needed upgrades and equipment purchases including several major propulsion engine overhauls as well as auxiliary engine overhauls. 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.

AMHS operates steel and aluminum vessels in a hostile, corrosive salt-water environment. AMHS 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.

**Alaska Marine Highway System
FY13 Vessel Annual Overhaul Maintenance and Repair Estimate**

M/V Kennicott	\$750,000
M/V Columbia	\$1,100,000
M/V Matanuska	\$650,000
M/V Tustumena	\$600,000

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M/V LeConte	\$500,000	
M/V Aurora	\$675,000	
M/V Malaspina	\$675,000	
M/V Lituya	\$450,000	
M/V Fairweather	\$600,000	
M/V Taku	\$600,000	
M/V Chenega	\$450,000	
Travel & Per Diem Expenses	\$325,000	
Various Technical Representatives including ABS Surveyors	\$400,000	
Parts and Supplies/Discovery	\$1,050,000	
Estimate Subtotal	\$8,825,000	

Terminal Overhaul and Rehabilitation Projects –

Annual maintenance and rehabilitation projects to issue the safe and timely transfer of passengers and vehicles at the 20 state owned and operated terminals within the system. The following projects were identified during routine facilities inspection.

Alaska Marine Highway System FY13 Terminal Maintenance and Repair Estimate

Hoonah, Kake Hydraulic Replacement	\$40,000
Cordova Sidewalk Replacement	\$75,000
Haines Bathroom Rehab/door Replacement	\$150,000
Ketchikan Door Replacement	\$65,000
Ketchikan Heating Ctrl Upgrade	\$125,000
Ketchikan Berth 3 Fender Repair	\$50,000
Bridge Bearing Repairs	\$100,000
Estimate Subtotal	\$605,000

Other Maintenance and Rehabilitation Projects -

Miscellaneous Electronics Replacement - Fleet Electronics Upgrade, Kennicott CCTV Upgrade, Bridge Navigational Watch Alarm System, Workstation Replacements, Laptop Replacements, Server Replacements, Printer Replacements and Switch Replacements
 Vessel Equipment Replacement – Crew Emergency Escape Breathing Devices (EEBD)
 Terminal - Telephone System Replacements, Snow Removal Equipment, and Terminal Agent Uniforms
 Passenger Services – Automated External Defibrillators (AEDs), Mattress and Linen Replacement (replaced on a cyclic schedule), Carpet Replacement, Vessel Signage, First Aid Room Modifications, Public

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Information Displays, M/V Columbia Public Counter, Remodel M/V Columbia
Chief Purser/Chief Steward Office to be ADA compliant, Uniform
Replacements and Galley Machinery Replacement
Security and Safety – Security Camera Tech Support, Facility Security Drawings
Lock Replacement, and Federal Grant Match

Other Maintenance and Rehabilitation Estimate Subtotal: \$570,000

This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.