

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

**FY2007 Request: \$13,444,500
Reference No: AMD 30624**

AP/AL: Appropriation

Project Type: Renewal and Replacement

Category: Transportation

Location: Statewide

Contact: John Torgerson

House District: Statewide (HD 1-40)

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Estimated Project Dates: 06/30/2007 - 12/31/2008

Brief Summary and Statement of Need:

This is a new FY2008 Capital Budget Request. Annual maintenance and overhaul on vessels and at terminals, particularly component or system failures which will impact service in the short term. This project contributes to the Department's Mission by reducing injuries, fatalities and property damage and by improving the mobility of people and goods.

Funding:	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>	<u>Total</u>
Gen Fund	\$13,444,500						\$13,444,500
Total:	\$13,444,500	\$0	\$0	\$0	\$0	\$0	\$13,444,500

<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 checked="" 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:

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:

The FY 08 *Alaska Marine Highway System Overhaul and Rehabilitation* request will fund:

The required annual overhaul of each of the Eleven vessels in the fleet:	\$8,185,500
Ongoing maintenance of the System's eighteen State-owned shore facilities:	\$2,839,000
Passenger Services, Security/Safety and other AMHS projects:	\$2,420,000
Total FY08 Request:	\$13,444,500

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 - \$8,185,500

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

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

In FY08 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 American Bureau of Shipping (ABS) classification and failure to pass USCG Certification of Inspection (COI) examinations. Taking vessels out of classification will result in higher annual insurance rates. Without a COI 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
FY08 Vessel Annual Overhaul Maintenance & Repair Items**

M/V Kennicott	\$731,500
M/V Columbia	\$1,019,000
M/V Matanuska	\$845,000
M/V Tustumena	\$806,000
M/V LeConte	\$682,000
M/V Aurora	\$792,000
M/V Malaspina	\$689,000
M/V Lituya	\$174,000
M/V Fairweather	\$441,000
M/V Taku	\$432,000
M/V Chenega	\$249,000
Travel & Per Diem Expenses	\$375,000
Various Technical Representatives including ABS Surveyors	\$450,000
Parts and Supplies	\$500,000
FY08 Vessel Annual Overhaul Maintenance Total Request:	\$8,185,500

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Shore Facilities - \$ 2,839,000

The demand for shore facilities maintenance dollars has increased in the past few years. We have added a new terminal building in Homer, added a new stern berth in Auke Bay for the M/V Fairweather, and rebuilt the Petersburg terminal building. Each of these improvements adds more complex heating, ventilation, alarm and emergency power, and electric systems and equipment to be maintained.

Shoreside Maintenance Annual Required Work

Angoon	\$75,000
Auke Bay	\$170,000
Haines	\$215,000
Hollis	\$147,000
Hoonah	\$112,000
Kake	\$130,000
Ketchikan	\$455,000
Petersburg	\$250,000
Sitka	\$285,000
Skagway	\$185,000
Tenakee	\$50,000
Wrangell	\$50,000
Metlakatla	\$140,000
Cordova	\$135,000
Valdez	\$25,000
Whittier	\$135,000
Clark Bay	\$115,000
Pelican	\$175,000
Shoreside Facilities Total:	\$2,839,000

Other Maintenance Budget Items

Electronics replacement on the Aurora Terminal and Facilities -	\$150,000
Computer/furniture/carpeting	\$ 75,000
Passenger Services – mattresses, chairs, window blinds, carpeting, refrigeration, galley equipment	\$425,000
Security and Safety – miscellaneous equipment, shipboard ISM	\$100,000
Twik cards – new ID cards	\$300,000
Fire fighting tanks	\$650,000
511 Tracking System	\$220,000
Ketchikan warehouse	\$500,000
Other Maintenance Budget:	\$ 2,420,000