

#### Alaska Department of Transportation & Public Facilities

**AMHS Maintenance Overview** 

AMHS Staff

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Our mission is to *Keep Alaska Moving* through service and infrastructure.

#### **Maintenance Funding Sources**

- Federal -Approximately \$16M annually
- State General Funds Approximately \$13M annually



# Annual State GF Maintenance Appropriation

	Maintenance Appropriation (millions)
FY11	\$ 12.0
FY12	\$ 13.5
FY13	\$ 10.0
FY14	\$ 11.0
FY15	\$ 12.0
FY16	\$ 10.0
FY17	\$ 12.0
FY18	\$ 12.0
FY19	\$ 13.5
FY20	\$ 13.5



### Regulatory

- Coast Guard Certificate of Inspection (COI) requirements focus on
  - Seaworthy condition
  - Life saving
- American Bureau of Shipping focus on
  - Hull and material
  - Machinery status
  - Electrical and electronic systems compliance
- Other regulatory requirements DNV, FDA, EPA, FCC, DOT, AKDEC



#### **Non Regulatory**

Remaining GF is spent on:

- Hull coatings
- Material condition upgrades, interior and exterior of vessel
- Passenger amenities, galley equipment, carpet and flooring,
- Point of sale maintenance & upgrades, computer upgrades
- Locks, signage, medical room provisioning,
- Security cameras
- Mattresses and linen replacement



# Unanticipated Costs in GF Regulatory Work

Frequently called "discovery" includes:

- Bad steel
- Dry-docking inspection failures
  - Fin stabilizers
  - Bow thruster seals
  - Shafts
- Propeller damage
- Boiler issues
- Electrical



### **Federal Maintenance Funding**

#### Annual Ferry Boat funding

- Yearly Projects Less than 1 year
- Annual Fleet Survey
- Dock and Terminals Projects

**Federal Projects** 

- Large Projects Over 1 year
- Programed in the STIP
- Typical projects funded
  - Repower
  - Dead-end corridor upgrades
  - Major steel replacement



#### **Annual Fleet Survey**

Identifies vessel condition and estimated budgets for work that can be accomplished via

- Annual GF maintenance budget usually regulatory in nature
- Large federal STIP projects that can be planned for over time



# **HQ Engineering Staff Responsibilities**

- 6 Engineers at headquarters
- Manage approx. 50 contracts
- Complete regulatory documentation needed to get funding
- Develop and update maintenance plans for each vessel
- Oversee routine operations of 11-12 vessels
- Communicate with vessels regarding annual maintenance needs via Fleet Condition Survey (FCS), Ships Maintenance Request (SMR), regulatory recurring tasks driven by COI, CG, ABS...



#### **Crew Input**

- Vessel crew submits maintenance requests for shipyard work, staff works with crews to effect the requests during overhaul periods.
- A challenge with this effort is the recent loss of shore side engineering staff due to budget cuts, thus less engineering staff shore side to process the maintenance requests and coordinate with vessel crews regards their requests.



### **Future Options for Consideration**

- TIGER Team Concept
- Reliability Cost Maintenance Concept enables more control over maintenance and budgeting

