



Alaska Department of Transportation & Public Facilities

House Transportation Alaska Marine Highway System (AMHS)

Rob Carpenter, Deputy Commissioner
Katherine Keith, Change Management Director

February 15, 2022

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

DOT&PF Change Management

Initiatives

AMHS: Staying the Course, Toward Reliability

Tools

Strategic Change Canvas; Options Boards; Culture Mapping;
Value-Stream Mapping

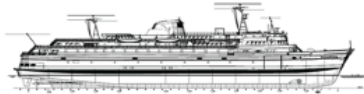
Models



Lean Construction/Lean Change; Kaizen; Kotter's Change
Model; Agile

***DOT&PF is piloting change management principles,
processes, and tools to focus on driving results.***

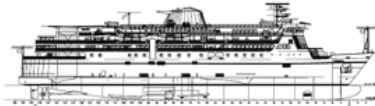
Overview



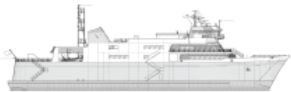
M/V Malaspina
408 feet
Built 1963



M/V Lituya
181 feet
Built 2004



M/V Kennicott
382 feet
Built 1998



M/V Hubbard
280 feet
Built 2019



M/V Aurora
235 feet
Built 1977

AMHOB Kickoff Meeting

Short-term Goals

Short-term Planning

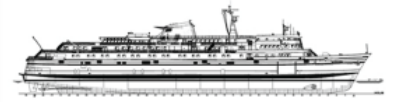
FY23 Proposed Operating Budget

Capital Projects

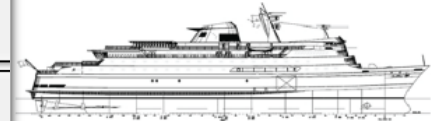
Long-term Planning

Fleet Planning

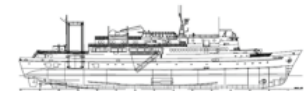
Staffing Shortages



M/V Matanuska
408 feet
Built 1963



M/V Columbia
418 feet
Built 1974



M/V Tustumena
296 feet
Built 1964

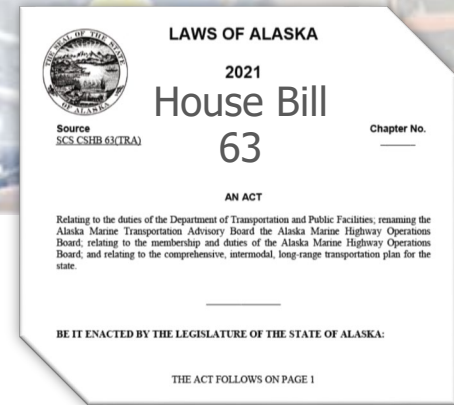


M/V Tazlina
280 feet
Built 2019



M/V LeConte
235 feet
Built 1974

Alaska Marine Highway Operations Board (AMHOB)



Governor Appointments	Alan Austerman and Norm Carson	2 years
Alaska Native Organization Representative	Cynthia Berns	2 years
Union Representative	Captain Keith Hillard	6 years
DOT&PF Deputy Commissioner	Rob Carpenter	
Speaker of the House Appointments	Wanetta Ayers and Shirley Marquardt	4 years
Senate President Appointments	Captain David Arzt and Paul Johnsen	6 years

More Information: <https://dot.alaska.gov/amhob/>



AMHOB Members

Chair, Shirley Marquardt

CURRENT: Executive Director, Southwest Alaska Municipal Conference

PREVIOUS: Executive Director, Alaska Marine Highway System; Executive Director, Boards and Commissions; Mayor, City of Unalaska

Vice-Chair, Wanetta Ayers

CURRENT: Executive Director, Commonwealth North

PREVIOUS: Marine Transportation Advisory Board; Alaska Marine Highway Reshaping Working Group

Chair/Vice-Chair as of 2/11/22 for one year



Photo by Sam Dapceovich: AMHOB Meeting

AMHOB Members



Photo by Sam Dapcevic: AMHOB Meeting

Alan Austerman	Majority leader of the Alaska House of Representatives (served from 1995 to 2001); Alaska State Senator from 2001 to 2003
Cynthia Berns	Vice President of Community and External Affairs for Old Harbor Native Corporation
Deputy Commissioner Rob Carpenter	Deputy Commissioner, DOT&PF; senior fiscal analyst with the Legislative Finance Division
Captain David Arzt	Licensed marine pilot; US Coast Guard Masters license; Marine Exchange of Alaska Board of Directors; Alaska's delegate to the American Pilots Association
Captain Keith Hillard	Captain, Alaska Marine Highway System with 27 years of experience
Paul Johnson	Engineering aboard AMHS vessels in 1974-1979; Senior port engineer 1997-2007
Norm Carson	Marine Transportation Advisory Boards; licensed US Coast Guard Captain

AMHOB Member Priorities

STRATEGY

- *Systemic performance measures

Short-term plan and goals

Long-term plan, vision, and goals

ENGINEERING

- *Long-term fleet planning

Low-emission/electric ferry evaluation

OPERATIONS

- *Staffing shortages

Terminal-vessel-route configuration

BUSINESS

- *Operational and capital funding

Governance options and analysis

**Immediate Top Priorities*



Photo by Sam Dapcevich: AMHOB Meeting

Upcoming Meeting Topics*

Meeting 1: Fleet Planning, Infrastructure Bill, and Budget

Meeting 2: Goals and Performance Measures

Meeting 3: Staffing Challenges

Meeting 4: Comprehensive Long-term Plan



Photo by Sam Dapceвич: AMHOB Meeting

*Subject to
change if
other
priorities
arise

Recurring biweekly virtual meetings



AMHOB Public Participation

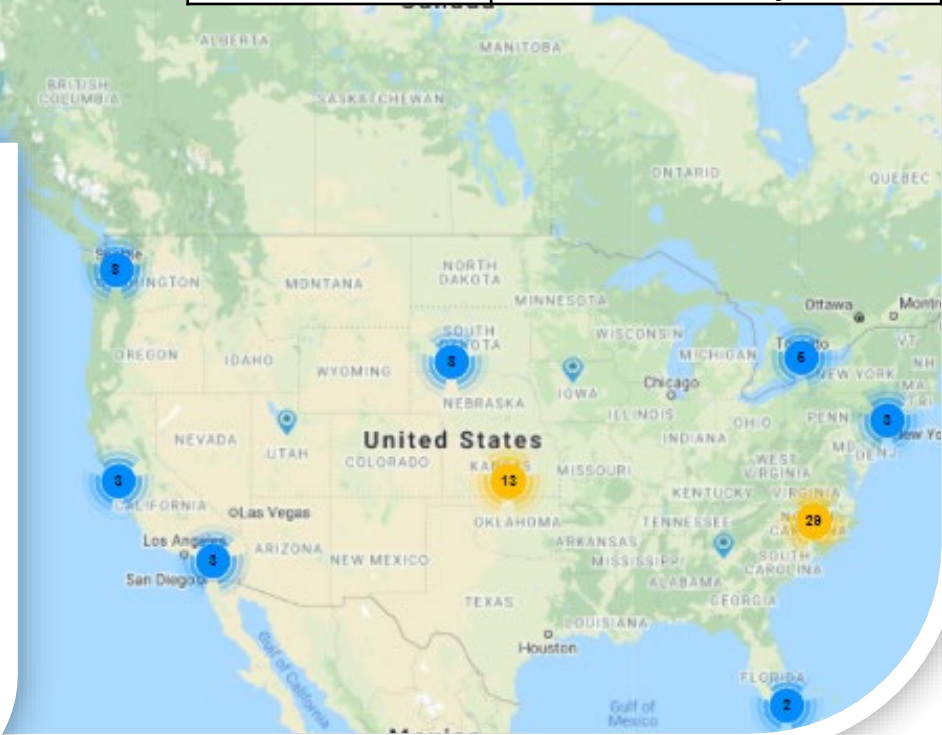
Geographic
distribution of
participants
watching
meeting online
via
publicinput.com

Kick-off Meeting Participation*	
Views	1,002
Call Ins	34
Comments	51
In Person	7

*As of 2/12/22

Kick-off Meeting Participation*	
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*As of 2/12/22



Staying the Course, Toward Reliability

PEOPLE

- AMHOB Met February 11
- Tazlina: Crewed, Sailing February 4

INFRASTRUCTURE

- First Full Year Advance Schedule Published
- Tustumena Replacement Vessel
- Hubbard: Crew Quarters
- Prince Rupert: Working toward May 1

PARTNERSHIPS

- Contingent Private Contract Service
- Low-Emission/Electric Ferry Opportunities

<https://dot.alaska.gov/amhob/>



Current Fleet Status

Currently in Service

Not in Service

Tustumena

Aurora

Whittier, Cordova,
Valdez, Tatitlek and
Chenega Bay in
Prince William
Sound.

Between Ketchikan
and Annette Bay.

Lituya

Bellingham and the
communities of Ketchikan,
Wrangell, Petersburg, Kake,
Sitka, Juneau, Haines and
Skagway.

Matanuska

Northern panhandle communities
including Angoon, Gustavus,
Hoonah, Juneau, Haines, and
Skagway.

Tazlina

Malaspina

Kennicott

Columbia

LeConte

Hubbard

Staying the Course, Toward Reliability

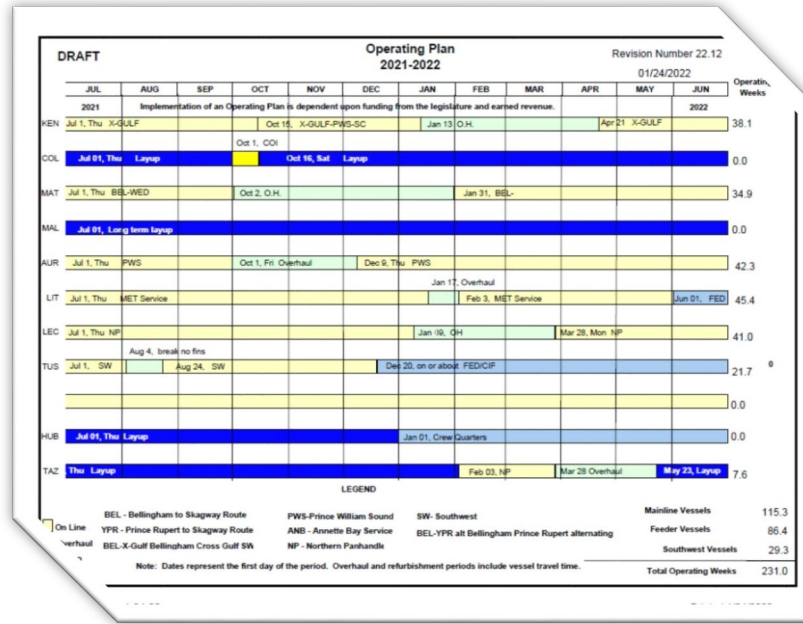
Short-term Goals

Short-term Goals	Target Date in 2022
Recruitment Specialist Onboard	February 18
Operation Schedule FY23*	February 28
Recruitment Targets for Columbia Met	March 1
AMHS Planner Hired	March 15
Tustumena Replacement Vessel (TRV) Request for Proposal (RFP) Advertised	March 18
Complete Union Negotiations	March 31
FY23 Operation and Business Plan	March 31
Sail to Prince Rupert	May 1
M/V Columbia Sails	May 1

**based on Governor's proposed budget*



FY23 Short-term Planning



FY23 Operational and Business Plan (7/1/22-6/30/23)

Operating Budget

Capital Federal Funds

Marine Highway Fund

Capital STIP Projects

Capital General Fund

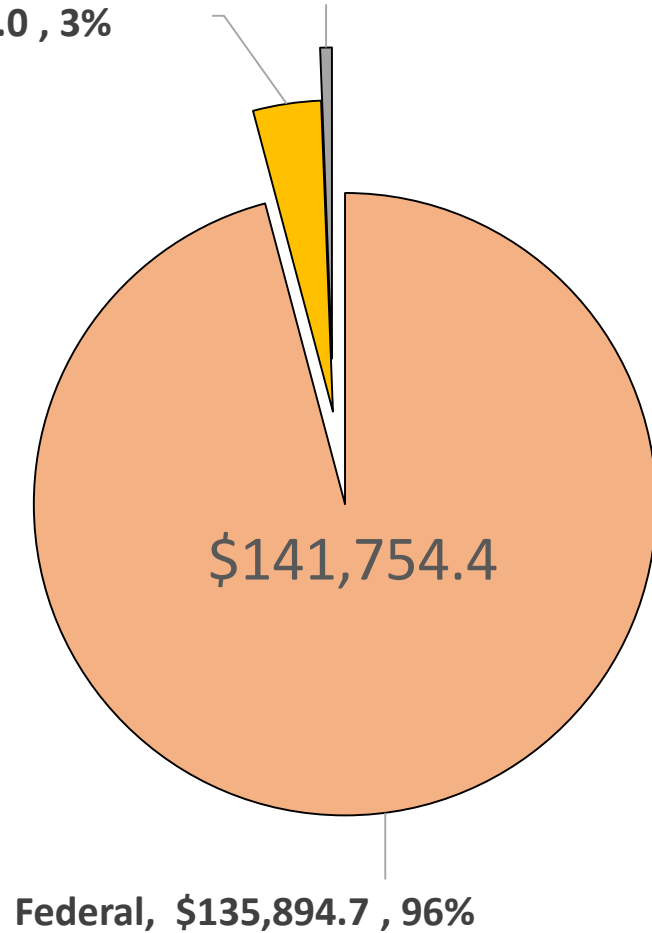
FY23 Governor's Proposed Operating Budget



All ships, all the time.

Designated General Funds
(DGF), \$5,000.0 , 3%

Other, \$859.7 , 1%



\$ in Thousands (1,000)

FY23 Governor's Proposed Operating Budget



	FY2019 Final Authorized	FY2020 Final Authorized	FY2021 Final Authorized	FY2022 Management Plan	FY2023 Governor's Proposed Budget	Δ	Δ%
Planned Weeks of Service	345.9	254.3	286.7	249.5	362.7	113.2	45%
Planned Port Calls	5,914	4,399	4,959	4,166	6,311	2,145	51%
Projected Revenue	\$ 51,697.6	\$ 48,070.2	\$ 51,779.1	\$ 53,365.1	\$ 53,314.8	\$ (50.3)	0%
Projected Fare Box Recovery	36%	48%	47%	43%	37%	(6)	-14%

Fund Source

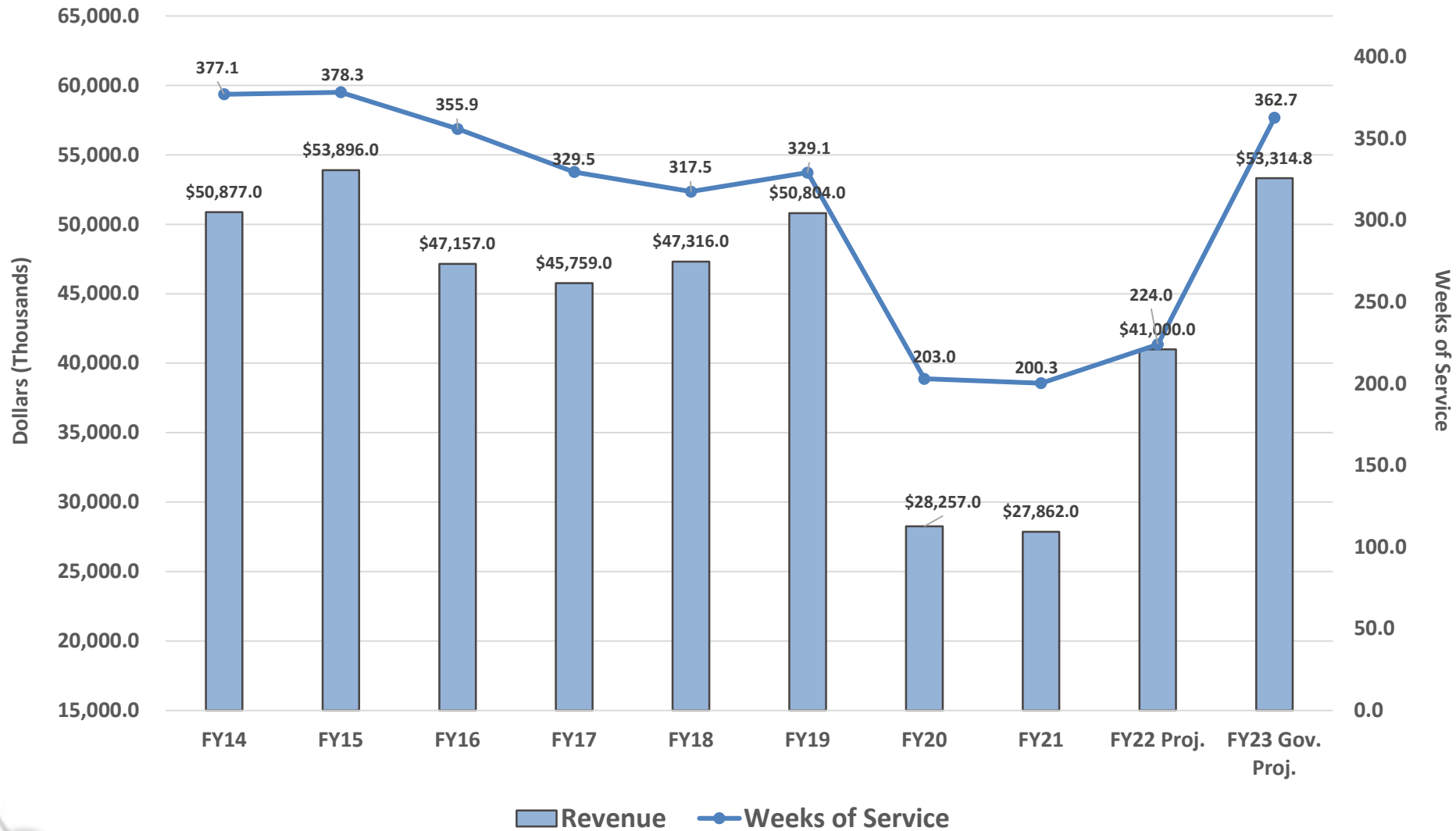
Unrestricted General Funds (UGF)	\$ 86,005.5	\$ 46,002.2	\$ 54,011.0	\$ 63,401.6	\$ -	\$ (63,401.6)	-100%
Designated General Funds (DGF)	\$ 52,070.1	\$ 55,492.6	\$ 53,151.4	\$ 5,425.7	\$ 5,000.0	\$ (425.7)	-8%
Other	\$ 2,167.7	\$ 8,071.3	\$ 2,150.0	\$ 1,308.3	\$ 859.7	\$ (448.6)	-34%
Federal- Relief Funding	\$ -	\$ -	\$ 1,122.4	\$ 112,768.0	\$ -	\$ (112,768.0)	-100%
Federal Funds (Including IJJA/BIL)	\$ -	\$ -	\$ -	\$ -	\$ 135,894.7	\$ 135,894.7	100%

Operating Total	\$ 140,243.3	\$ 109,566.1	\$ 110,434.8	\$ 182,903.6	\$ 141,754.4	\$ (41,149.2)	-22%
		<i>AMHS less Forward Funding</i>		\$ 118,667.5		\$ 23,086.9	19%

\$ in Thousands (1,000)



AMHS Revenue & Weeks of Service FY2014 – FY2023



\$ in Thousands (1,000)



Capital Projects: Vessels*

Hubbard: Vigor Shipyard

- \$15m
- Complete August 19, 2022

Tustumena: Jag Shipyard

- \$9.4m
- Complete July 15, 2022

Lituya

- June-August 2022

Programmed: \$144m
Balance: \$75m



	Programmed	Balance Remaining	% Work Complete
Planning	\$2,723,032	\$2,334,884	14%
Design	\$39,198,166	\$34,060,817	13%
Construction	\$102,561,763	\$38,268,153	63%

* State and federally funded projects as of 1/15/22

Capital Projects: Shoreside*

- Auke Bay Ferry Terminal
- Ketchikan Terminal
- Prince Rupert
- System-wide Terminal Improvements

Programmed: \$40.1m
Balance: \$17.6m



Photo by Katherine Keith: Auke Bay Terminal

	Programmed	Balance Remaining	% Work Complete
Planning	\$300,000	\$109,332	64%
Design	\$16,175,471	\$16,001,922	1%
Construction	\$23,653,670	\$1,531,433	94%

**State and federally funded projects as of 1/15/22*

AMHS Surface Transportation Improvement Program (STIP) Projects

2020-2023 STIP Amendment 3

	FY23	After 2023
Fleet Condition Survey Update	\$500	\$1,000
Ferry Refurbishment	\$16,875	\$33,750
Design Construct Lease Purchase Ferryboats and Terminals	\$800	\$1,600
Tustumena Replacement Vessel	\$0	\$238,144

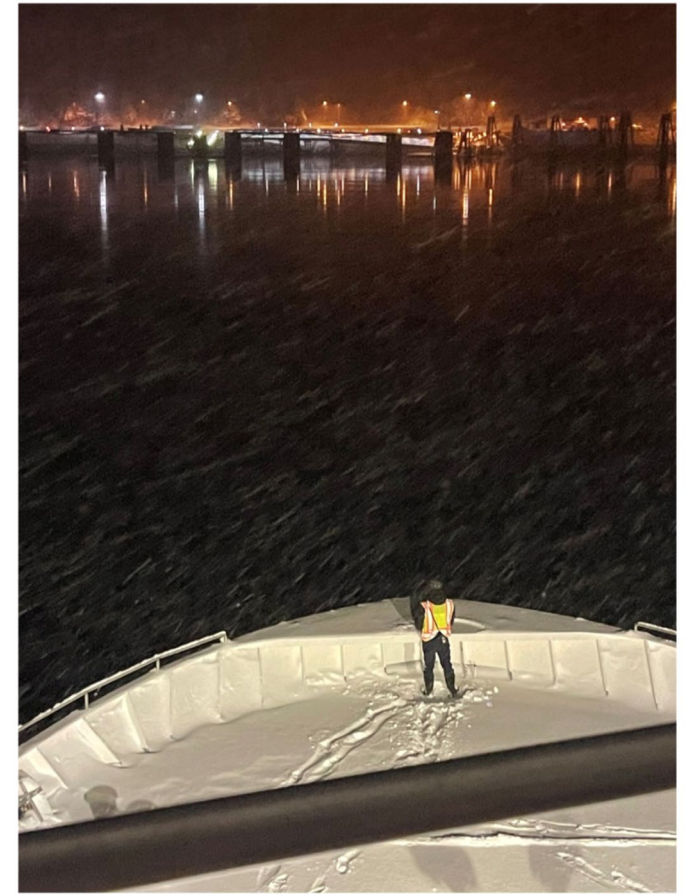


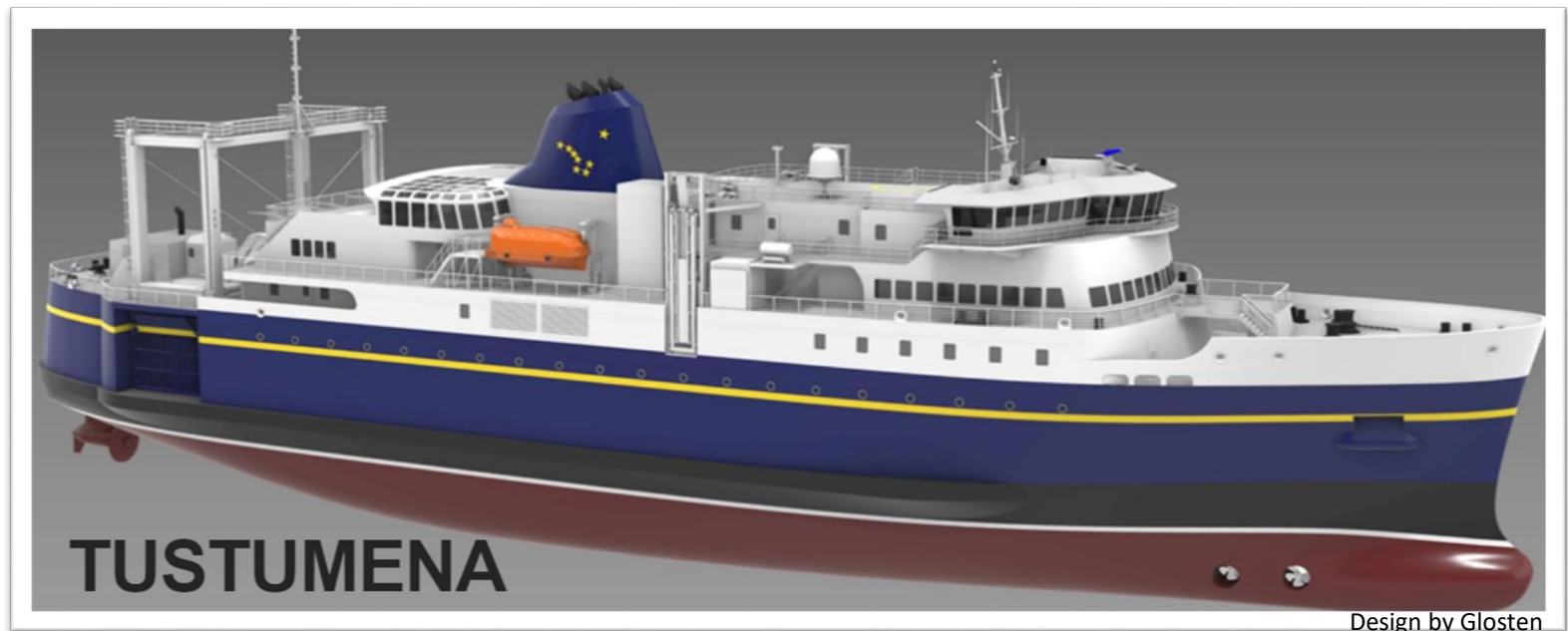
Photo by Katherine Keith: Auke Bay Terminal



\$ in Thousands (1,000)

Tustumena Replacement Vessel (TRV) Construction

- Public notice released January 15, 2022
- Design by Glosten
- Construction Manager/General Contractor (CMGC) Request for Proposal (RFP) be released mid-March 2022
- Public comments occurred in 2014; Review underway again soon



Design by Glosten

Long-term Planning

Planning for Success

20-year Fleet Optimization Plan

FY24 Operational Options Analysis

20-year Business and Operations Plan

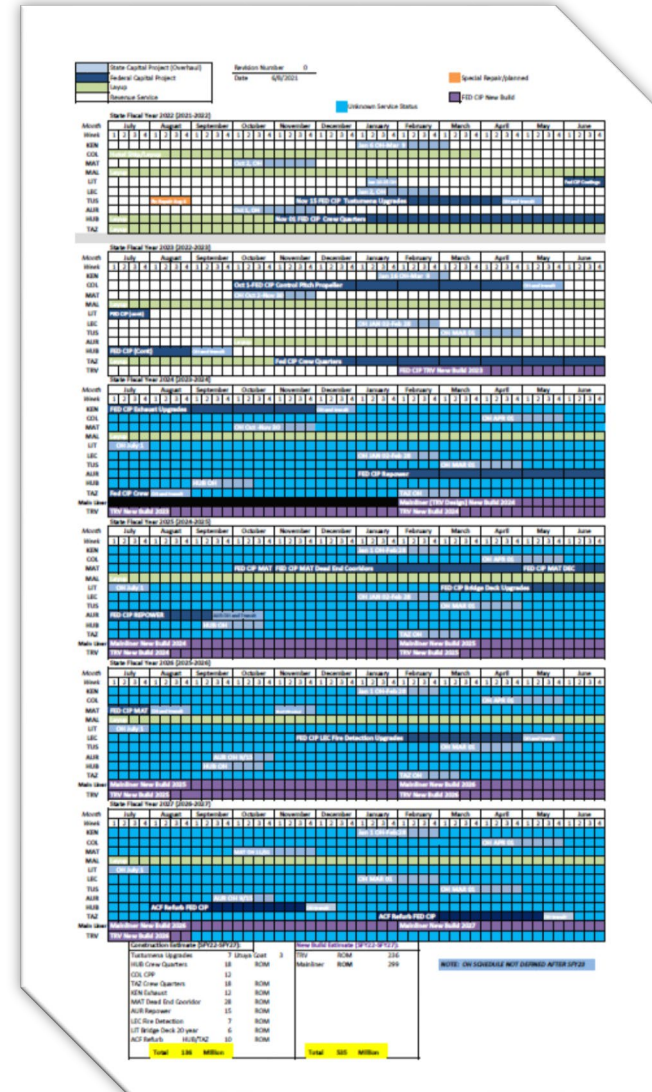


Photo by Katherine Keith: Tazlina

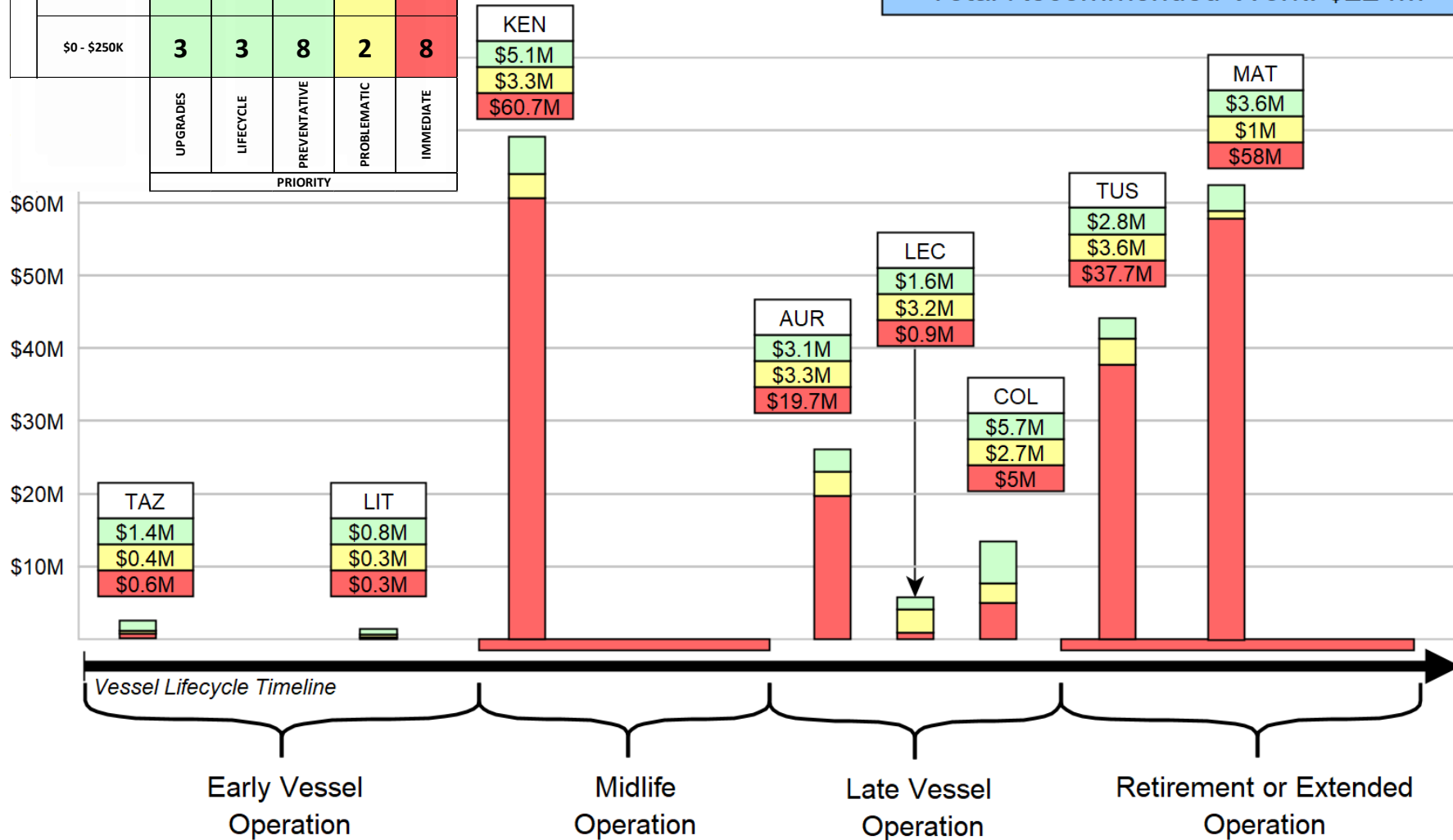


Maintenance Planning

Total Recommended Work: \$224M

Rough Order of Magnitude (ROM) Estimates

M/V Matanuska						
COST	\$1M+		3	1		1
	\$750K - \$1M					1
	\$500K - \$750K		1		1	1
	\$250K - \$500K		3	1		1
	\$0 - \$250K	3	3	8	2	8
		UPGRADES	LIFECYCLE	PREVENTATIVE	PROBLEMATIC	IMMEDIATE
		PRIORITY				



AUR: Aurora
MAT: Matanuska

LEC: Leconte
LIT: Lituya

COL: Columbia
KEN: Kennicott

TUS: Tustumena
TAZ: Tazlina

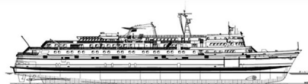
Infrastructure Bill (IIJA-BIL)

- **\$250 million over five years** for an electric or low-emitting ferry pilot program, with at least one pilot conducted in the state with the most Marine Highway System miles.
- A proposed 1.9% increase to Ferry Boat and Terminal Formula, ~\$15M per year.
- **\$1 billion over five years** for funding to states to provide essential ferry service in rural communities.

How are we preparing?

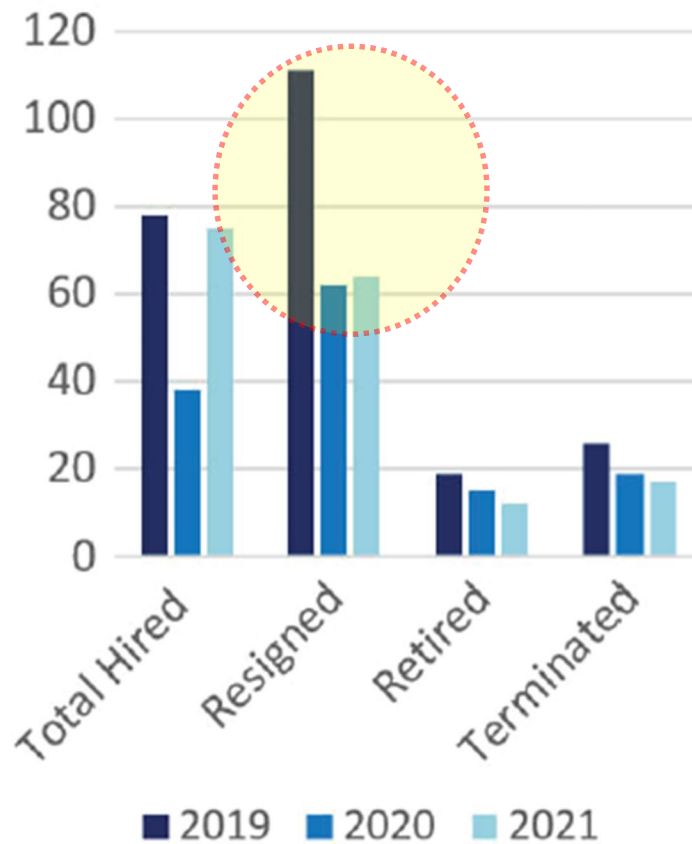
Low-Emission Ferry Partnerships

Scenario forecasting based on the 20-year Optimization Plan

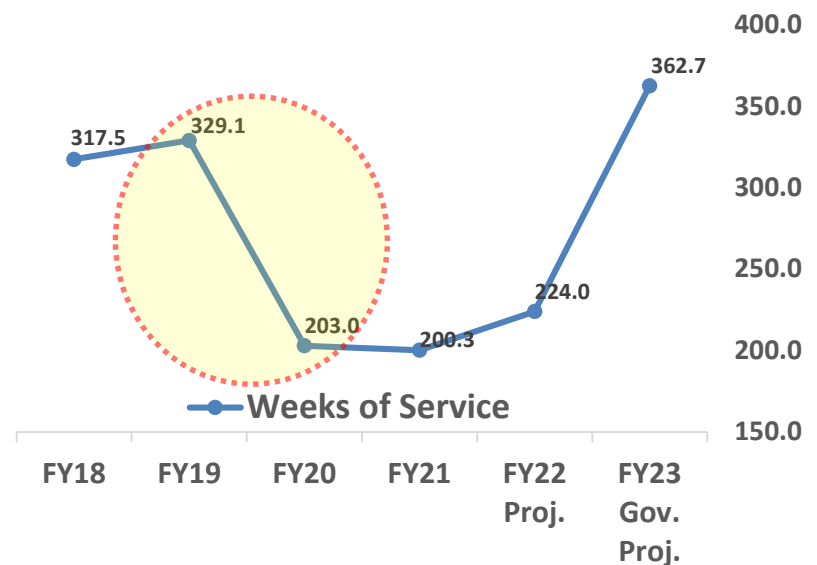


AMHS Staffing Shortages




HIRED vs SEPARATED
2019-2021



Position	% Vacant (# of vacancies)
Entry-level Steward	71% (255)
Wiper	75% (6)
3rd Engineers	63% (12)
2nd Cook	61% (14)
Oilers	55% (21)
3rd Mates	41% (21)
2nd Steward	60% (6)
Chief Pursers	41% (8)
Jr Engineer	35% (6)
Chief Engineers	31% (8)



AMHS Staffing Shortages

Fleet Configuration	Minimum Number of New Hires Needed
Main fleet (AUR, MAT, LEC, LIT, KEN, TUS, TAZ)	49 
Main fleet, Columbia, no Tazlina	125 
Main fleet, Columbia, and Tazlina	166 



Staffing goals for eight ferries over the summer of 2022 are:
IBU-634 (current 315) / MMP-112 (current 81) / MEBA-80 (current 55).
Staffing goals for the summer season will not be met at current recruitment rates.

*If staffing goals are not met by March 1,
the Columbia will not be available for operations on May 1.*

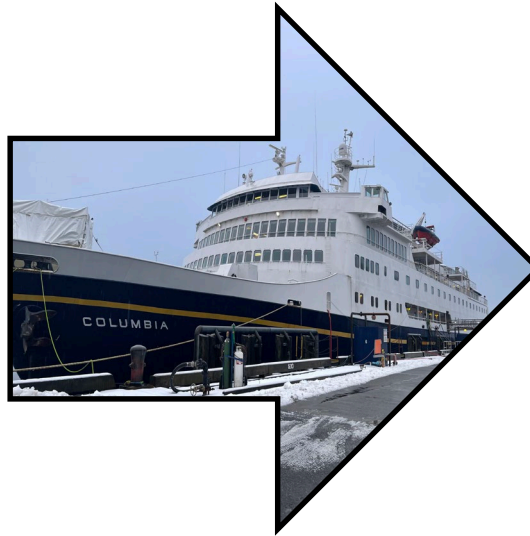
IBU: Inlandboatmen's Union of the Pacific
MMP: International Organization of Masters, Mates, & Pilots
MEBA: Marine Engineers' Beneficial Association

AUR: Aurora
MAT: Matanuska
LEC: Leconte
LIT: Lituya
COL: Columbia
KEN: Kennicott
TUS: Tustumena
TAZ: Tazlina

AMHS Change Management

Challenges

- Aging Vessels
- Recruitment and Retention
- System Reliability
- Covid-19
- Lack of Public Confidence



Opportunities

- Modernize the Fleet
- Improve Morale
- Increase Partnerships for Workforce Development
- Redefine Service Levels Based on Current Need.
- Transparent Communication & Increased Engagement
- Teaming for Success

Engage!

For More Information:

<https://dot.alaska.gov/amhob/>

<https://dot.alaska.gov/amhs/>

To Engage:

<https://publicinput.com/amhobpublic>



Photos by K. Keith: JNU ramp; Gustavus; Columbia Bar, Tazlina

Questions?

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Development Manager

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Photo by Sarah Roark: *Sunset in Ketchikan, M/V LeConte tied to the dock.*

