

## Alaska Marine Highway System

### ALASKA MARINE HIGHWAY OPERATIONS BOARD

GETTING TO WORK ON THE LONG-RANGE PLAN WORKSHOP

APRIL 24, 2023

## Agenda

- **10:15** Introducing Guests
- **10:30** Level of Service (Working Lunch)
- **12:10** AMHS Performance Metrics
- **1:45** Planning Deliverables and Schedule
- **2:30** Wrap Up and Next Steps

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# PROJECT TEAM



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# Level of Service

## Level of Service – Discussion Overview

- What do we mean by Level of Service (LOS) for AMHS?
  - Recap of LOS Discussion from March 17 AMHOB Meeting
  - "Minimum" Level of Service
  - "Target" Level of Service
- Historical Port Call Analysis
- Level of Service Examples from Other Systems
- Community Factors Impacting Level of Service
  - Including Title VI equity review
- Level of Service Snapshots
- Activity Community Characteristics and Who Gets Service Next?



## Level of Service – Recap of 3/17 Discussion

- What do we mean by "Minimum" Level of Service (LOS) for AMHS?
  - How does this impact Long-Range Plan decisions?
- What is meant by "Target" LOS?
  - How Area Plans will help derive/confirm Target Level of Service
  - Use of Comprehensive Long-Range Plan updates to adapt in an iterative way to level of service and multi-modal forecasts and goals created through Area Plan updates (South-East, South-West, Prince William Sound)
  - How does this impact Long-Range Plan decisions?
- How might we consider defining "Minimum" LOS for AMHS
  - Port Calls by Community
- What factors can we use to determine a Minimum Level of Service?
  - Historical service levels
    - 2015-2019 Service Level Data
  - Community access to basic needs



## Level of Service Decision Tree (Example)

• Decision-making aid





## Level of Service – Historical Port Call Analysis

	202 V	23 Summer P Vithout Suppl	ublished Sche emental Servi	2023 Summer Published Schedule With Supplemental Service			
		Port Calls	% Baseline	%2021	Port Calls	% Baseline	%2021
ပု	SGY	145	55%	54%	165	62%	61%
Z	HNS	290	100%	100%	310	100%	100%
	HNH	69	100%	79%	89	100%	100%
_	ТКЕ	33	95%	65%	73	100%	100%
<b>UIP</b>	GUS	53	100%	50%	73	100%	70%
~	ANG	33	89%	75%	53	100%	100%
	PEL	10	100%	50%	30	100%	100%
	SIT	22	18%	27%	62	50%	75%
٩	KAE	19	16%	32%	39	34%	65%
S	PSG	43	18%	30%	63	26%	43%
	WRG	43	18%	30%	63	26%	44%
MET	ANB	218	100%	100%	258	100%	100%
YPR	YPR	0	0%	0%	0	0%	0%
BEL	BEL	22	14%	13%	22	14%	13%

	20 \	23 Summer F Mithout Supp	Published Sche lemental Servi	2023 Summer Published Schedule With Supplemental Service				
		Port Calls	% Baseline	%2021	Port Calls	% Baseline	%2021	
	SDV	52	84%	44%	92	100%	79%	
	ном	121	76%	54%	121	76%	54%	
Y	ORI	64	100%	74%	84	100%	98%	
	OUZ	64	100%	88%	84	100%	100%	
	KOD	76	55%	40%	116	84%	61%	
	CHG	12	37%	39%	32	98%	100%	
	SDP	12	35%	40%	12	35%	40%	
• •	кси	12	35%	41%	12	35%	41%	
Ā	СВҮ	12	35%	41%	12	35%	41%	
	FPS	6	21%	25%	6	21%	25%	
	AKU	12	32%	38%	12	32%	38%	
	UNA	6	16%	19%	6	16%	19%	
	СНВ	9	23%	21%	9	23%	21%	
	WTR	147	100%	65%	147	100%	65%	
∕/ ≥	VDZ	81	100%	66%	81	100%	66%	
Ĺ	TAT	20	100%	77%	20	100%	77%	
	CDV	73	71%	48%	73	71%	48%	
<b>AA</b>	ҮАК	0	0%	0%	0	0%	0%	

\*Baseline value calculated as 75% of average of CY2017-2021 port call levels.

# Level of Service – Historical Port Call Analysis

	PORT CALLS BY OPERATING SCENARIO												
			Ve	ssels in Layup									
C		MAT	MAT, TAZ	MAT, TAZ, Col	mat, taz, Hub	MAT, TAZ, KEN							
N	SGY	196	153	131	22	145							
	HNS	349	306	262	44	290							
	HNH	88	66	66	66	69							
	ТКЕ	33	33	33	33	33							
Ę	GUS	65	43	43	43	53							
~	ANG	61	39	39	39	33							
	PEL	11	11	11	11	10							
	SIT	28	28	6	28	22							
٩	KAE	22	22	22	22	19							
S	PSG	54	54	11	54	43							
	WRG	54	54	11	54	43							
MET	ANB	198	198	198	198	218							
YPR	YPR	11	11	11	11	0							
BEL	BEL	27	27	5	27	22							

#### PORT CALLS BY OPERATING SCENARIO

	Vessels in Layup											
		MAT	MAT, TAZ	mat, taz, Col	mat, taz, Hub	MAT, TAZ, KEN						
	SDV	58	58	58	58	52						
$\mathbf{\nabla}$	ном	137	137	137	137	121						
_	ORI	64	64	64	64	64						
	OUZ	64	64	64	64	64						
	KOD	96	96	96	96	76						
	CHG	12	12	12	12	12						
	SDP	12	12	12	12	12						
ပ	кси	12	12	12	12	12						
Ā	СВҮ	12	12	12	12	12						
	FPS	6	6	6	6	6						
	AKU	12	12	12	12	12						
	UNA	6	6	6	6	6						
	СНВ	10	10	10	10	9						
	WTR	178	178	178	178	147						
Š	VDZ	88	88	88	88	81						
٦.	ТАТ	22	22	22	22	20						
	CDV	65	65	65	65	73						
YAK	ҮАК	15	15	15	15	0						

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## LOS Example: WSF

- WSF has used a LOS standard that calls for a 0 boat-wait for all pedestrians, bicyclists and registered HOV vehicles. Boat waits for general vehicle traffic are route dependent and are between 1 to 2 boat waits.<sup>1</sup>
- WSF Tiers of LOS standards by route and by season that are based on notable percentages of total vehicle capacity over an entire month.<sup>2</sup>
- When a route reaches Tier 1, WSF explores adaptive management strategies to address congestion.<sup>2</sup>
- When a route reaches Tier 2, WSF looks to capital investments to increase capacity.<sup>2</sup>
- The 2040 LRP recommended setting a LOS for passengers with the Tier 1 based on seated capacity of the vessel and the Tier 2 based on the maximum passenger occupancy set by the USCG COI.<sup>2</sup>

<sup>1</sup>Washington State Department of Transportation, "Washington State Ferries Vehicle Level-of-Service: Situation Assessment," 2007. <sup>2</sup>WSDOT, "Washington State Ferries 2040 Long Range Plan," 2019.



## **LOS Example: BC Ferries**

- On an annual basis, BC Ferries commits to the provincial government a level of service defined by number of routes completed between coastal communities<sup>1</sup>
- Minimum hours of operation
- Capacity requirement sufficient LOS to meet the previous years demand
- LOS defined in Coastal Ferry Services Consolidated Contract

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## **LOS Example: Shetland Island Ferries**

- Transport Scotland's Routes & Services Methodology (RSM)
  - Designed to produce a consistent approach to ferry service transport provision across Scotland
    - Identifies the current level of service to an island
    - Establishes a 'model' level of service in terms of number of sailing days, number of connections per day, and the length of the operating day
    - Develops and appraises options to address any gaps between the 'current' and 'model' service provision
- An appraisal based on the Scottish Transport Appraisal Guidance (STAG) and Business Case Guidance
  - Provides a much more detailed analysis based on the local context and circumstances

Reference: Peter Brett Associates LLP, "Shetland Inter-Island Transport Study," 1 September 2016. [Online]. Available: https://www.shetland.gov.uk/downloads/file/3340/bluemull-sound-public-engagement-information-1st-september-2016. [Accessed 11 April 2023].

## **Prince William Sound Overview**



### **Typical Vessels**<sup>1,2</sup>



### **Route Distances**

Cordova – Whitter	97 nautical miles
Whittier – Valdez	78 nautical miles
Valdez – Cordova	74 nautical miles
Cordova – Chenega	97 nautical miles
Chenega – Whittier	67 nautical miles
Whittier – Tatitlek	65 nautical miles
Tatitlek – Cordova	50 nautical miles

<sup>1</sup>Reference: Alaska Marine Highway System, "Vessel Information Table," [Online]. Available: <u>https://dot.alaska.gov/amhs/doc/vess\_info\_table.pdf</u>. [Accessed 16 April 2023]. <sup>2</sup>Kennicott will also serve Prince William Sound, but generally when on Cross Gulf route.



## Prince William Sound Overview, Cont.



### **Community Characteristics - Examples**

Terminal	Population	Grocery	Medical	Road Access	Air Service	Barge Service	Fuel Cost/Gal	Half Gallon of Milk
Cordova	2,609	Yes	Yes	No	Jet	Regular	\$5.10	\$7.29
Whittier	272	Yes	Limited	Yes	No	Regular	-	-
Valdez	3,985	Yes	Yes	Yes	Sm/Med Plane	Regular	\$4.73	\$5.89
Tatitlek	90	No	Limited	No	Small Plane	None	-	-
Chenega	59	No	Limited	No	Small Plane	None	\$7.88	-

### 2017-2021 Port Call Averages

	W	inter	Sur	nmer
Terminal	Average Per Capita		Average	Per Capita
Cordova	119 0.05		137	0.05
Whittier	121	0.44	195	0.72
Valdez	48	0.01	96	0.02
Tatitlek	9 0.17		27	0.52
Chenega	19	19 0.33		0.88

### Minimum Service Levels (TBD)

	Total P	ort Calls	Weekly	Port Calls
Terminal	Winter	Summer	Winter	Summer
Cordova	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Whittier	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Valdez	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Tatitlek	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Chenega	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>

#### Kodiak Island & Aleutian Chain Overview Kodiak Island & Aleutian Chain Overview Typical Vessels<sup>1,2</sup>



	~	
Vessel	Kennicott	Tustumena
Silhouette		t.
Passenger Capacity	450	160
Vehicle Capacity	67 (In SW)	34
Crew size	55	38
Year Built	1998	1964

#### **Route Distances**

Seldovia – Homer 1	7 nautical miles
Homer – Kodiak 1	.36 nautical miles
Homer – Port Lions 1	.34 nautical miles
Ouzinkie – Kodiak 1	4 nautical miles
Kodiak – Chignik 2	49 nautical miles
Chignik – Sand Point 1	.38 nautical miles
Sand Point – King Cove 9	8 nautical miles
King Cove – Cold Bay 2	5 nautical miles
Cold Bay – False Pass 5	8 nautical miles
False Pass – Akutan 5	8 nautical miles
Akutan – Dutch Harbor 4	5 nautical miles

<sup>1</sup>Reference: Alaska Marine Highway System, "Vessel Information Table," [Online]. Available: <u>https://dot.alaska.gov/amhs/doc/vess\_info\_table.pdf</u>. [Accessed 16 April 2023]. <sup>2</sup>Kennicott will also serve Prince William Sound, but generally when on Cross Gulf route.



### Kodiak Island & Aleutian Chain Chain Overview, Cont. 2017-2021 Port Call Averages<sup>2</sup> Minimum Service Levels (TBD)

				rioulak island and				ayes						
				1			Winter	Su	mmer		Total F	Port Calls	Weekly	Port Calls
					Termi	nal Averag	e Per Capita	Average	Per Capita	Terminal	Winter	Summer	Winter	Summer
				1 Alexandre	Home	<b>r</b> 163	0.03	212	0.04	Homer	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
0					Seldo	<b>via</b> 71	0.41	82	0.48	Seldovia	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Constant of the second se				C 39	HOMER Port L	<b>ions</b> 103	0.80	57	0.45	Port Lions	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
2				and the second	Ouzin	<b>kie</b> 92	0.72	52	0.40	Ouzinkie	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
				and the second second	SELDOVIA Kodia	<b>k</b> 136	0.02	183	0.03	Kodiak	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
100				PORT LIONS	Old H	arbor 0	0.00	5	0.02	Old Harbor	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
					Chigni	ik 2	0.03	44	0.61	Chignik	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
DUTCH HARBOR	COLD BAY	C COVE LAND	CHIGNIK		Sand I	Point 2	0.00	46	0.08	Sand Point	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
On Change (		O COVE	0	KO	King C	Cove 2	0.00	45	0.06	King Cove	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
AKUTAN			INT	ULD HARBUR	Cold E	Bay 2	0.03	46	0.91	Cold Bay	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Shared & single for some		28			False	Pass 1	0.00	38	0.10	False Pass	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
The stand of the			21/2/2	Cherry Cherry	Akuta	n 2	0.00	49	0.03	Akutan	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Communi	ty Charac	cteristic	cs - Exa	amples	Dutch	Harbor 2	0.00	51	0.01	Dutch Harbor	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Terminal	Population	Grocery	Medical	Road Access	Air Service	Barge Service	Other Service	e Fuel	Cost/Gal	Half Gallon of Milk	_			
Homer	5,522	Yes	Yes	Yes	Sm/Med Plane	None		(	\$3.90	\$5.29				
Seldovia	199	Yes	Yes	No	Small Plane	None	Daily Pass. Fer	ry s	\$6.39	-				
Port Lions	170	Yes	Limited	No	Small Plane	None		( ,	\$6.10					
Ouzinkie	109	Yes	Limited	No	Small Plane	None		( ,	\$6.44					
Kodiak	5,581	Yes	Yes	No	Jet	Regular		0	5.68	\$5.79				
Old Harbor	216	Yes	Limited	No	Small Plane	None		0	\$5.05					
Chignik	97	Yes	Limited	No	Small Plane	None		0	\$6.98					
Sand Point	578	Yes	Limited	No	Sm/Med Plane	Limited		0	\$5.36	\$7.89				
King Cove	757	Yes	Limited	No	Small Plane	Regular		0	5.78	\$7.89				
Cold Bay	50	Yes	Limited	No	Sm/Med Plane	Limited			-	-				
False Pass	397	Yes	Limited	No	Small Plane	Limited			-	-				
Akutan	1,589	Yes	Limited	No	Small Plane	Limited		( 1	\$5.60	-				
Dutch Harbor	4,254	Yes	Yes	No	Jet	Regular		0	54.73	\$5.89				

<sup>1</sup>Reference: Alaska Marine Highway System, "Vessel Information Table," [Online]. Available: <u>https://dot.alaska.gov/amhs/doc/vess\_info\_table.pdf</u>. [Accessed 16 April 2023].

<sup>2</sup>Kennicott will also serve Prince William Sound, but generally when on Cross Gulf route.

### Northern Inside Passage & North Lynn Canal Overview



### **Typical Vessels**



### **Route Distances**

Skagway – Haines	13 nautical miles
Haines – Juneau	68 nautical miles
Juneau – Skagway	81 nautical miles
Juneau – Hoonah	48 nautical miles
Juneau – Tenakee Springs	63 nautical miles
Juneau – Angoon	78 nautical miles
Gustavus – Hoonah	23 nautical miles
Hoonah – Angoon	63 nautical miles
Angoon – Tenakee Springs	35 nautical miles
Angoon – Sitka	67 nautical miles



## Northern Inside Passage & North Lynn Canal Overview, Cont.



### 2017-2021 Port Call Averages<sup>3</sup>

### Minimum Service Levels (TBD)

	Wi	nter	Summer			Total Port Calls		Weekly Port Calls	
Terminal	Average	Per Capita	Average	Per Capita	Terminal	Winter	Summer	Winter	Summer
Skagway	270	0.22	354	0.29	Skagway	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Haines	329	0.20	360	0.22	Haines	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Gustavus	71	0.11	70	0.11	Gustavus	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Hoonah	162	0.07	65	0.03	Hoonah	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Tenakee	57	0.47	46	0.38	Tenakee	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Angoon	69	0.19	51	0.14	Angoon	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>
Sitka	233	0.03	166	0.02	Sitka	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>

### **Community Characteristics - Examples**

Terminal	Population	Grocery	Medical	Road Access	Air Service	Barge Service	Fuel Cost/Gal	Half Gallon of Milk
Skagway	1,164	Yes	Yes	Yes	Small Plane	Regular	-	\$4.49
Haines	2,080	Yes	Yes	Yes	Small Plane	Regular	-	-
Gustavus	655	Yes	Limited	No	Small Plane Jet (Summer)	None	\$5.79	-
Hoonah	921	Yes	Yes	No	Small Plane	Regular	\$5.60	-
Tenakee	116	Yes	Limited	No	Floatplane	None	-	-
Angoon	357	Yes	Limited	No	Floatplane	None	\$6.43	-
Sitka	8,458	Yes	Yes	No	Jet	Regular		\$4.49

<sup>3</sup>Historical Service Levels by Terminal (Northern Inside Passage & North Lynn Canal)

## **Southern Inside Passage Overview**



### **Typical Vessels**



#### **Route Distances**

Juneau – Pelican	91 nautical miles
Juneau – Sitka	132 nautical miles
Juneau - Kake	114 nautical miles
Juneau – Angoon	78 nautical miles
Juneau – Petersburg	123 nautical miles
Kake – Petersburg	65 nautical miles
Sitka – Petersburg	156 nautical miles
Petersburg – Wrangell	41 nautical miles
Wrangell - Ketchikan	89 nautical miles



## Southern Inside Passage Overview, Cont.



### **Community Characteristics - Examples**

Community Characteristics - LXampies								
Terminal	Population	Grocery	Medical	Road Access	Air Service	Barge Service	Fuel Cost/Gal	Half Gallon of Milk
Pelican	98	No	Limited	No	Floatplane	None	\$7.09	-
Angoon	357	Yes	Limited	No	Floatplane	None	\$6.43	-
Sitka	8,458	Yes	Yes	No	Jet	Regular	-	\$4.49
Kake	543	Yes	Limited	No	Floatplane	Regular	\$7.09	-
Petersburg	3,398	Yes	Yes	No	Jet	Regular	\$5.28	-
Wrangell	2,127	Yes	Yes	No	Jet	Regular	\$5.45	-

<sup>4</sup>Historical Service Levels by Terminal (Southern Inside Passage)

### 2017-2021 Port Call Averages<sup>4</sup>

	W	inter	Summer		
Terminal	Average	Per Capita	Average	Per Capita	
Pelican	7	0.12	14	0.25	
Angoon	69	0.19	51	0.14	
Sitka	233	0.03	166	0.02	
Kake	108	0.22	155	0.31	
Petersburg	305	0.10	318	0.10	
Wrangell	313	0.15	318	0.15	

### Minimum Service Levels (TBD)

	Total P	ort Calls	Weekly Port Calls		
Terminal	Winter	Summer	Winter	Summer	
Pelican	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	
Angoon	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	
Sitka	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	
Kake	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	
Petersburg	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	
Wrangell	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	<mark>#</mark>	

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# **Title VI Summary**

- State programs that receive Federal funds cannot distinguish among individuals on the basis of race, color, or national origin, either directly or indirectly, in the type, quantity, quality or timeliness of program services, aids or benefits that they provide or the manner in which they provide them.
- The prohibition applies to intentional discrimination as well as to procedures, criteria or methods of administration that appear neutral but have a discriminatory effect.<sup>2</sup>
- The number of port calls scheduled for rural communities can't have a disparate impact on communities that are statistically defined as a majority Native Alaskan.
- The process and procedures used to determine port calls to rural communities can't create disparate treatment.

<sup>2</sup>USDHHS (n.d.). Civil Rights Requirements-A. Title VI of the Civil Rights Act of 1964, 42 U.S.C 2000 et seq. Civil Rights for Individuals and Advocates. https://www.hhs.gov/civil-rights/for-individuals/specialtopics/needy-families/civil-rights-requirements/index.html



## **LOS Tabletop Exercise**

Goal: To develop a draft list of community characteristics using AMHOB strategic input.

### **Process:**

- (5 min) Using notes, each board member write as many ideas of "characteristics" that should be considered in considering level of service.
- (3 min) Reduce the list to your top 3 and write on another note.
- Pass the reduced list to the person on your left.
- (3 min) Build and expand upon the list of ideas received.
- Pass the expanded list to the person on your left.
- (3 min) Build and expand upon the list of ideas received.
- (15 min) Collect all lists, identify and group unique ideas on the white board.
- (15 min) Discuss decision tree concept and how it will aid in defining LOS.
- (30 min) Open discussion to select top ideas and develop priorities.

### Deliverable: Draft list of prioritized community characteristics to AMHOB for review.

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# AMHS Performance Metrics

## **Overview of Performance Metrics**

- There is a distinction between planning metrics and operations metrics
  - Operations metrics focus on the day-to-day operations of the system and are used to monitor performance, identify issues, and improve efficiency. They are typically measured over shorter time horizons, such as hours or days, and are used to make real-time decisions and adjustments
  - Planning metrics often focus on strategic goals and objectives, such as improving accessibility, maintaining a level of service, or increasing sustainability. They are typically measured over longer time horizons (such as several years or decades), and are used to track progress towards these goals and to evaluate the effectiveness of different policies and strategies
- AMHS regularly reports on several short and long-term metrics through the Charting the Course Program



## AMHS Goals Identified by AMHOB<sup>1</sup>

### **Fleet Modernization**

- Fleet size and ability
- Alaska class ferries in operation
- Do our boats fit our routes
- IIJA funding for new vessel construction
- 3 new ships in process
- Modern efficient fleet
- 3 replacement vessels
- Balanced sized fleet

### **Sales and Marketing**

- Ridership incentives
- Forecast growth demands based on modernized fleet
- Reasonable fares
- Partner with communities on marketing

### Service Level

- All ships in operation during summer
- Communities served
- Reliable service to all communities served
- Essential (minimum) service
- Service levels
- AMHS route analysis for service of contract
- Service vs. ridership
- Community economic impacts
- Community life, health, safety

### Employee Support and Retention

- Address staffing shortages
- In-state recruitment
- Staff succession plan
- Full staffing in Ketchikan
- Management succession plan

<sup>1</sup>Denali Daniels + Associates, "Alaska Marine Highway Operations Board Facilitated Strategic Planning Session Meeting Recap," 2022.



## **Existing AMHS Metrics**

### Fleet Modernization

### • Suggested by AMHOB in October 2022 visioning workshop





# **Existing AMHS Metrics, Cont.**

 Outstanding Maintenance Requests

F

- Tracked for each vessel
- Categorized by Priorities 1-5
  - 1 = highest priority, 5 = lowest

#### **Outstanding Ship's Maintenance Requests**



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# **Existing AMHS Metrics, Cont.**

### Shipyard Forecasting

F



Shipyard time per Operating Plan



Completed or anticipated shipyard extension beyond the Operating Plan



## **Existing AMHS Metrics, Cont.**

### Crewing Requirements

F

• Graphics updated 3/2/23



KEY	
-	Filled position
8	Unfilled position
	Crew not needed for this operating condition
	Qualified personnel available

#### Fleetwide Staffing Levels

#### 2023 Winter Operating Schedule

The bars represent available crew of minimum crew required for service. Please note, required crew accounts for 2 full crews per vessel plus relief



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## **Potential AMHS Metrics**

- Service Reliability
  - Scheduled vs. actual trips
  - Categorization of reasons for cancellations
- Fleet Standardization
  - Terminal and vessel compatibility
- Capacity Utilization
  - Percentage of passenger capacity and vehicle lane footage used per trip
- Safety

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- Crew and passenger
- Environment

### Percentage of Compatible Terminals by Vessel\*



\*Graphic developed for deliberative purposes. Data not finalized.



# **Case Study Examples – WSF<sup>1</sup>**

Theme	Goals
Sustainability & Resilience	<ol> <li>Green the fleet and reduce WSF's environmental footprint through sustainable practices and environmental stewardship.</li> <li>Plan for emergencies and climate change to sustain reliable service through 2040.</li> </ol>
Manage Growth	<ol> <li>Increase walk-on ridership.</li> <li>Spread out demand.</li> </ol>
Customer Experience	<ol> <li>Provide better trip-planning information.</li> <li>Reduce customer wait times.</li> <li>Enhance multimodal connections and accessibility.</li> </ol>
Reliable Service	<ol> <li>Replace aging vessels and invest in new vessels to maintain reliable service.</li> <li>Preserve and improve terminals to enhance safety and operations.</li> <li>Invest in attracting, retaining, and strengthening the workforce.</li> <li>Implement technology-based solutions that improve system-wide reliability.</li> </ol>



## **WSF Performance Metrics<sup>1</sup>**

- Capital and Maintenance Effectiveness
  - Number of projects completed on time and within budget
  - Vessel and terminal design and engineering costs measured in terms of percentage of total capital program
  - Vessel out-of-service time due to capital projects and maintenance activities.
- Safety Performance
  - Passenger injuries per million passenger miles
  - OSHA recordable crew injuries per 10,000 revenue service hours
- Cost Containment: Budget and expense related measures
  - Operating cost per passenger mile
  - Operating cost per revenue service mile
  - Overtime as a percentage of straight time
  - Gallons of fuel consumed per revenue service mile
- Service Effectiveness
  - Service reliability
  - On-time performance
  - Passenger satisfaction
    - Interaction with ferry employees
    - Cleanliness and comfort of vessels and terminals
    - WSF response to requests for assistance



## **Case Study Examples – BC Ferries<sup>1</sup>**

Theme	Goals
People	<ol> <li>Ensure they have enough people for optimal service delivery and to have the right people in the right place at the right time.</li> <li>Respond to increasing system demand/volume and meet current and forecasted vehicle demand.</li> </ol>
Relations	1. Develop meaningful and relevant relations with Indigenous communities.
Emissions	<ol> <li>Respond to climate change and strive to achieve a 27% reduction in greenhouse gas emissions by 2030.</li> <li>Enhance service integration to forms of transportation with lower emissions.</li> </ol>
Capital Plan	1. Deliver a capital plan that supports growth and addresses the needed capacity on constrained routes yet has the flexibility to reduce capital spend if travel patterns and demand change.



## **BC Ferries Performance Metrics<sup>2</sup>**

- # of round trips delivered to each port vs # required by the contract.
- Vessel capacity vs capacity utilization for each Designated Route.
- Vehicle traffic and passenger traffic.
- On-time performance (percentage of sailings departing or arriving within 10 minutes of the scheduled time) for Designated Routes.
  - Reasons for delays controllable, non-controllable, accumulated.
  - Duration of delays
- Cancelled Round Trips by Route
- Extra Round Trips by Route
- Service quality
  - Customer Experience
    - On-time performance
    - Fleet reliability
    - Percentage of positive comments
  - Customer Complaints
  - Customer satisfaction with Customer Service Center
    - Response Time Average
    - Average Speed of Call Answer
    - First Call Resolution

<sup>2</sup>British Columbia Ferry Services Inc., "Annual Report to the British Columbia Ferries Commissioner Year Ended March 31, 2022," 2022.



## **Performance Metrics Tabletop Exercise**

Goal: To develop a draft list of short- and long-term performance metrics using AMHOB strategic input.

Process:

- (5 min) Using notes, each board member create two lists (one short-term and one-long term) with as many performance metrics that they can think of to measure against.
- (3 min) Reduce each list to your top 3 and write on another note.
- Pass the reduced lists to the person on your left.
- (3 min) Build and expand upon each list of metrics received.
- Pass the expanded lists to the person on your left.
- (3 min) Build and expand upon each list of metrics received.
- (15 min) Collect all lists and put unique metrics for both short-term and long-term on the white board.
- (30 min) Open discussion to select top metrics.

Deliverable: Draft lists of short and long-term performance metrics to AMHOB for review.





# Planning Deliverables and Schedule

## **Short-Range Plan**

January 1<sup>st</sup>, 2023 – December 31<sup>st</sup>, 2023

### 2023 Management Plan

- 2023 Operating Budget
- 2023 Recommended Capital Budget
- AMHOB Membership and Competencies

### 2023 Operating Plan

- Vessels
- Crew
- Schedules

### Next Steps

- Comprehensive Long-Range Plan Development
- Future Short-Range Plan Updates



## **Comprehensive Long-Range Plan**

- Confirming Vision, Goals, Objectives
- Getting to Level of Service
  - Communities Served/Equity Considerations
- Performance Metrics



## **Planned Schedule**

Proposed Date	Plan Document
ASAP	Short-Range Plan
August 1, 2023	Draft Comprehensive Long-Range Plan





# Wrap Up & Next Steps

## **Next Steps**

- Short-Range Plan
- Level of Service Efforts
- Confirming Results of Tabletop Exercise
- Strategic Direction Survey confirming goals and performance metrics
- Confirming Comprehensive Long-Range Plan Content



## Wrap Up, Discussion

# **Thank You**

