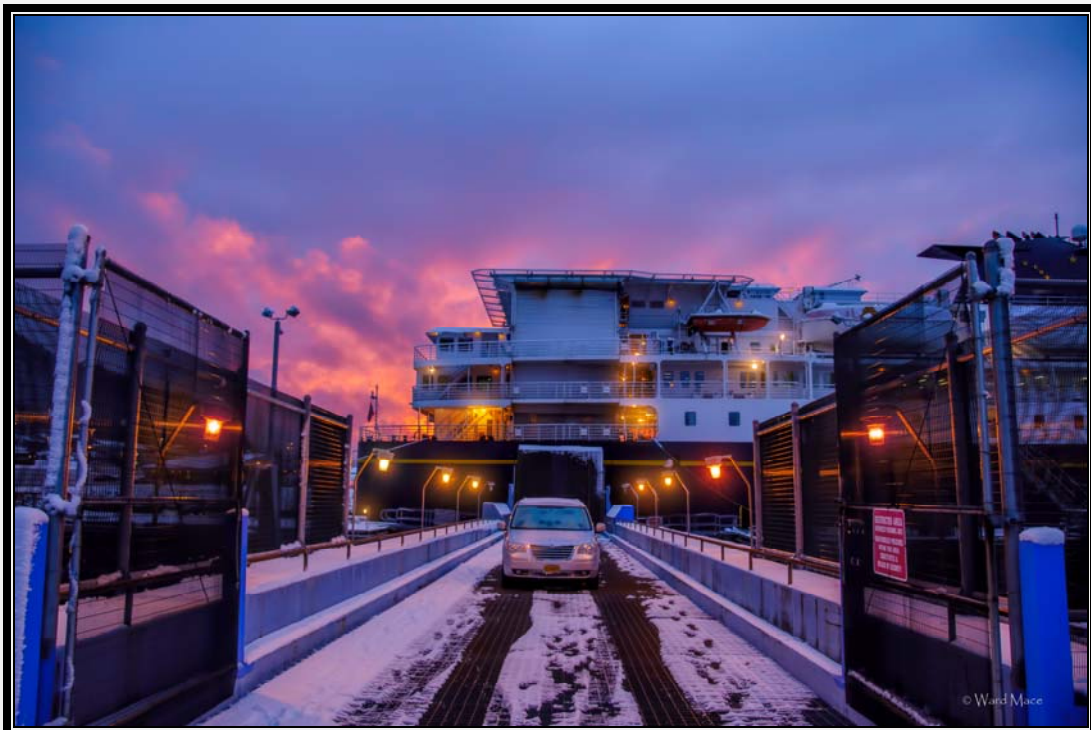


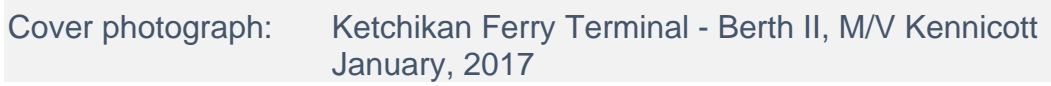


STATE OF ALASKA  
Department of Transportation  
and Public Facilities

2018  
Alaska Marine Highway System  
**SHORE FACILITIES CONDITION  
SURVEY REPORT**



Prepared by  
Southcoast Region  
Marine Engineering Section



Cover photograph: Ketchikan Ferry Terminal - Berth II, M/V Kennicott  
January, 2017

**2018 Shore Condition Survey Report  
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## INTRODUCTION

This report documents the condition of the ferry terminals and marine facilities used by the Alaska Marine Highway System (AMHS) in all of its ports of call. The primary purpose of this survey is to provide an overview of the present condition of the terminals to ensure the safety of the structures, aid planners in programming for future development, assist maintenance personnel with upkeep, and alert AMHS managers of operational constraints.

AMHS vessels currently visit thirty-seven coastal communities (43 port facilities). The ownership and configuration of the facilities vary widely; they include state and foreign owned ferry terminals, city owned freight wharves, and privately owned fish processing docks. The above water components of each facility are inspected biennially (SE on odd years, SC & SW on even years) and underwater inspections are performed on a five-year cycle. Table 1 below lists the facilities, their owners, and the dates of the most recent inspections.

Route	Facility Location	ON/OFF SYSTEM	Bridge #	Owner	Inspection Date			
					Condition Survey	Underwater Inspection	FC Bridge Inspection	
Southeast AK	1	Angoon	ON	181	State	Jul-17	Aug-16	-
	2	Auke Bay East	ON	1474	State	Aug-17	Aug-16	Aug-18
	3	Auke Bay West	ON	191	State	Aug-17	Aug-16	Aug-18
	4	Auke Bay Stern	ON	803	State	Aug-17	Aug-16	Aug-18
	5	Bellingham	-	-	Port Authority	Sep-17	-	-
	6	Clark Bay (Hollis)	ON	182	State (IFA)	Jul-17	-	-
	7	Coffman Cove	ON	193	City of Coffman Cove (IFA)	Jul-17	Aug-16	Aug-18
	8	Gustavus	ON	1417	State	Jun-17	Aug-16	-
	9	Haines	ON	804	State	Aug-17	Aug-16	Aug-18
	10	Hoonah	ON	179	State	Aug-17	Aug-16	-
	11	Kake	ON	177	State	Jun-17	Aug-16	-
	12	Ketchikan Berth 1	ON	800	State	Jul-17	Aug-16	Aug-18
	13	Ketchikan Berth 2	ON	1823	State	Jul-17	Aug-16	Aug-18
	14	Ketchikan Berth 3	ON	190	State	Jul-17	Aug-16	Aug-18
	15	Metlakatla (Port Chester)	ON	178	State	Jul-17	Aug-16	Aug-16
	16	Metlakatla (Annette Bay)	ON	194	State	Jul-17	Jul-18	-
	17	Pelican	ON	1426	City of Pelican	Oct-17	Aug-18	-
	18	Petersburg	ON	802	State	Jun-17	Aug-16	Aug-18
	19	(Petersburg) South Mitkof	ON	192	State (IFA)	Jun-17	Aug-16	Aug-18
	20	Prince Rupert	-	-	Port Authority	Oct-17	-	-
	21	Sitka	ON	806	State	Aug-17	Aug-16	Aug-18
	22	Skagway	ON	805	State/City of Skagway	Aug-17	Aug-16	Aug-18
	23	Tenakee	ON	1451	State	Jun-17	Aug-16	Aug-18
	24	Wrangell	ON	801	State	Jun-17	Aug-16	Aug-18
	25	Yakutat	OFF	2094	City of Yakutat	Sep-17	Aug-16	Sep-12
Southcentral AK	25	Chenega	ON	184	NPR Housing Authority	Aug-18	Aug-18	Aug-18
	26	Cordova	ON	180	State	Aug-18	Aug-16	Aug-18
	27	Homer	OFF	1415	City of Homer	Aug-18	Sep-18	Sep-12
	28	Seldovia	ON	1423	City of Seldovia	Aug-18	Sep-18	Sep-12
	29	Tatitlek/Ellamar	ON	183	NPR Housing Authority	Aug-18	Aug-16	Aug-18
	30	Valdez	ON	1429	State	Aug-18	Aug-17	Aug-18
	31	Whittier	OFF	1424	State	Aug-18	Aug-18	Aug-18
Southwest AK	32	Akutan	ON	1946	City of Akutan	Sep-18	Jul-14	Sep-12
	33	Chignik	-	-	City of Chignik	Sep-18	-	-
	34	Cold Bay	ON	1755	City of Cold Bay	Sep-18	Aug-18	Aug-18
	35	False Pass	ON	1945	City of False Pass	Sep-18	Aug-18	Aug-18
	36	King Cove	-	-	City of King Cove	Sep-18	Jul-14	-
	37	Kodiak City Dock (Pier 1)	OFF	1425	City of Kodiak	Aug-18	Jul-14	Sep-12
	38	Kodiak Pier 2	ON	2095	City of Kodiak	Aug-18	Jul-14	Sep-12
	39	Old Harbor Dock	OFF	186	City of Old Harbor	Aug-18	Aug-18	Aug-18
	40	Ouzinkie City Dock	-	-	City of Ouzinkie	Aug-18	-	-
	41	Port Lions	-	-	City of Port Lions	Aug-18	Jul-14	-
	42	Sand Point	ON	1756	City of Sand Point	Sep-18	Jul-14	Sep-12
	43	Unalaska (Dutch Harbor)	ON	1824	City of Unalaska	Sep-18	Jul-14	-

**Table 1 - Ferry Terminal Inspection Dates**

## CONDITION RATINGS

Inspectors rate the condition of each facility component as new, good, fair, poor or failed. The ratings reflect the component in-place condition as compared to its as-built condition.

<u>Condition Rating</u>	<u>Description</u>
NEW	No problems.
GOOD	Some minor problems.
FAIR	All primary structural elements are sound but may have minor section loss, cracking, spalling, or corrosion.
POOR	Loss of section, advanced deterioration, spalling that has affected primary structural components. Local failures are possible. Unless closely monitored the facility will have to be closed until corrective action is taken.
FAILED	Out of service, beyond corrective action.

Three major categories of work are presented in the Inspection Summary in an attempt to assist prioritization of the effort necessary at the terminals.

<u>Category</u>	<u>Definition</u>
SAFETY	End of useful life replacements, which if not done will lead to terminal closure, structural collapse or failure, possibly during use by the public.
REHABILITATION	Useful life extensions on existing facilities (or replacement of marginally functional items), which if not done will lead to structural damage or loss of useful life.
UPGRADE	Enhancements to the operational characteristics of existing facilities, which if not done, will limit the systems ability to adequately serve the public.

## TERMINOLOGY

Terminology used for the major components of a typical facility are:

**All-Tide** – A facility with floating fenders/mooring floats for home-port and/or overnight layup of vessels.

**Approach** - A structure that provides access for vehicles and passengers to the transfer bridge or dock, usually an embankment or pile supported structure with open steel grid, concrete deck or a timber deck.

**Buildings** - These are the terminal, generator, purser and warehouse structures located at facilities.

**Catwalk** - A walkway, with fixed ends, that provides access to mooring dolphins for shoreside personnel tying up the vessel.

**Dock** - A structure that provides a landing pier for vessels to moor and transfer vehicles and passengers. Usually a steel pile supported structure with a concrete deck or all timber structure.

**Fender** - Protective structure attached to the face of the dolphin, dock or mooring float. May be a row of timber piles, a steel pile supported timber structure, or a steel panel with high-density plastic facing.

**Gangway** - A catwalk in which one end moves vertically with tidal fluctuations.

**Mooring Dolphins** - Steel or timber structures used to attach mooring lines for the vessel.

**Mooring Float** - Steel framed structure with working deck, float support and fender panels used for berthing and mooring of vessels in lay-up or home port capacities as part of an all-tide facility.

**Staging Area** - Area where vehicles are assembled prior to boarding the vessel. May include short and long term vehicle parking.

**Transfer Bridge** - Transfer structure used to convey vehicles and passengers between the shore and vessel.

**Transfer Bridge Support Structure** - A steel or concrete floating pontoon or pile supported lift structure supporting the seaward end of the transfer bridge.

**Utilities** - Electrical power, water, telephone, TV cable and sewer services for the terminal facility and in some cases the vessels.

## DOCUMENT ORGANIZATION

This document is divided into four sections.

**Section I** contains the condition report for each AMHS terminal. Information collected during site visits, underwater and fracture critical inspections, and drawn from terminal project histories and maintenance records is distilled into a tabular report. Following the report is an "Action Required" list of items identified in the inspection requiring action by the facility owner or AMHS.

**Section II** contains a prioritization of capital improvements required at AMHS facilities based on rankings by SE Region Marine Engineering.

**Section III** contains a list of capital improvements required at all AMHS facilities, listed by individual terminal.

**Section IV** lists the characteristics of the eleven AMHS vessels.

This report was prepared by reviewing historical records of the AMHS, interviewing vessel personnel, maintenance crews, and terminal operators. This report is a compilation of the findings of the bridge, underwater and above water inspection programs.

## COMMENTS AND FEEDBACK

This document is updated annually using information from the most recent condition surveys. Questions and comments are appreciated and welcomed. All comments and questions should be mailed, faxed, e-mailed, or phoned to the following address:

State of Alaska  
Department of Transportation & Public Facilities  
Statewide Design & Engineering Services  
6860 Glacier Highway  
Juneau, Alaska 99801-7999  
Attn: Joel Osburn, Shore Facilities Inspection Manager  
Phone: (907) 465-4409  
Fax: (907) 465-4414  
E-mail: [joel.osburn@alaska.gov](mailto:joel.osburn@alaska.gov)

## REQUEST FOR HARD COPY

The "2018 Shore Facilities Condition Survey Report" is distributed in an electronic format and can be downloaded from the following URL: [http://dot.alaska.gov/project\\_info/AMHS\\_Shore\\_Fac\\_Report.shtml](http://dot.alaska.gov/project_info/AMHS_Shore_Fac_Report.shtml) .

If a hard copy of individual sections or of the entire report is desired, send your request with an address to the contact above. The materials will be mailed to you.







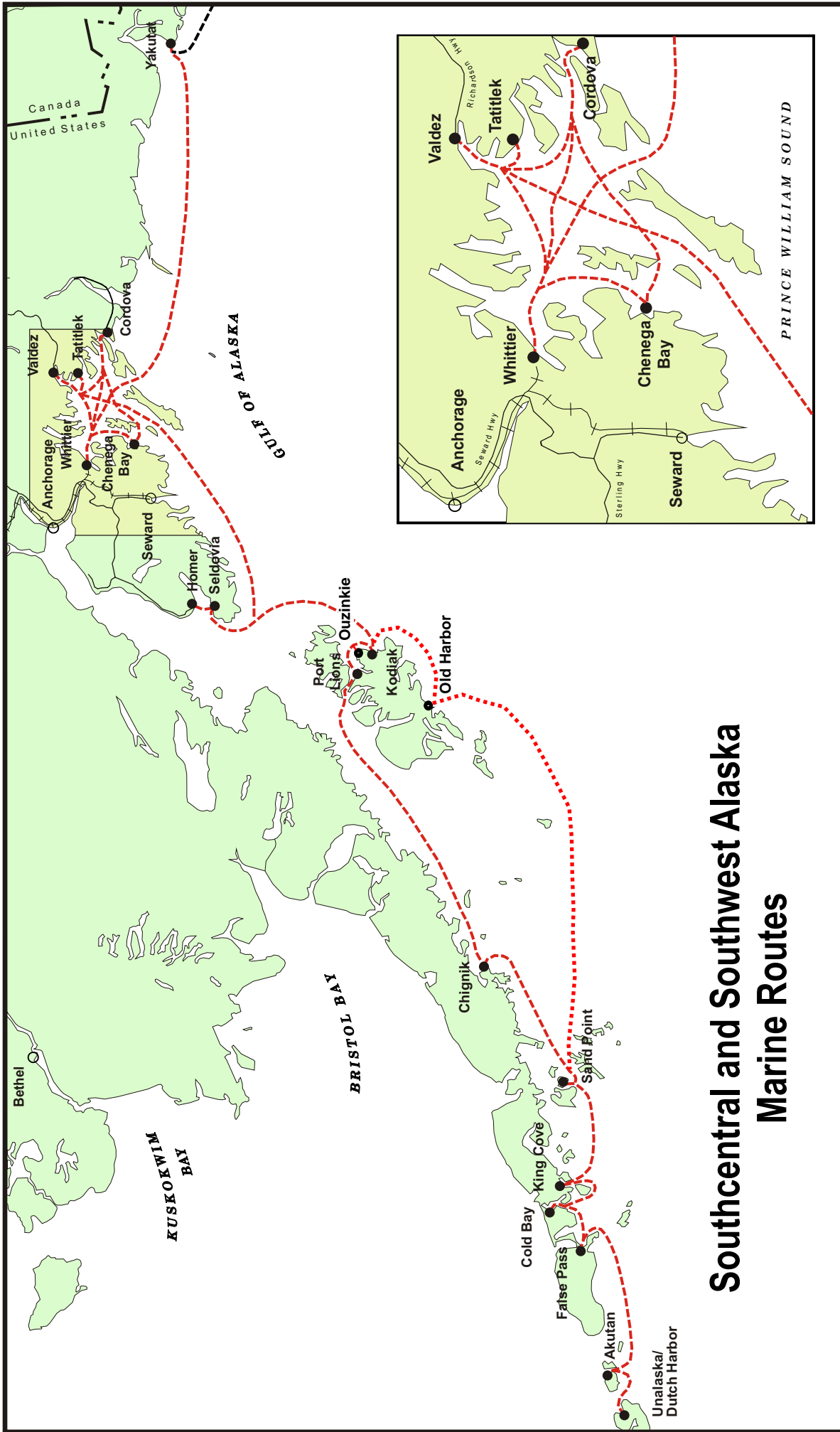
**LEGEND**

- AMHS or IFA PORT ●
- AMHS MARINE ROUTE - - - - -
- IFA MARINE ROUTE - - - - -
- RAILROADS + + + + +
- ROADS — — — — —

Alaska

Area Shown

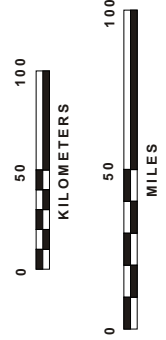
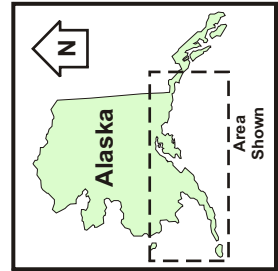
ALASKA DOT&PF  
GIS MAPPING SECTION



## Southcentral and Southwest Alaska Marine Routes

**LEGEND**

- AMHS PORT
- MARINE ROUTE
- |-| RAILROADS
- ROADS





## **SECTION I**

### **FACILITIES CONDITION REPORTS**