

SECTION II

SHORE FACILITIES PROJECTS

(STATE & NON-STATE OWNED)

ACTIVE OR PROGRAMMED PROJECTS

ACTIVE OR PROGRAMMED PROJECTS - AMHS FACILITIES

Project No	Project Title	Need ID	Project Description	Project Cost	Estimated or Actual Obligation Date	Notes
Z681280000	AMHS GST Ferry Terminal Improvements	28789	Install new pile supported lift towers with associated bridge lift system. Expand existing dock to provide new bridge abutment and dedicated harbor access gangway and refurbished gangway landing float	\$6,500,000	FY18	Project under Final Design. Obligation expected August 2018.
Z681450000	Tenakee Ferry Terminal Improvements	18359	Replace existing ferry terminal facility.	\$10,000,000	FY18	Project under Preliminary Design and Environmental Documentation.
Z685310000	Prince Rupert Ferry Terminal Replacement	17141	Replace stern berth ferry terminal facility.	\$13,000,000	TBD	Awaiting resolution of Buy America issues before advertising for construction bids.
Z674660000	Ketchikan Ferry Terminal Improvements	27450	Phase 2: Refurbish mooring float and fender system at Berth 3 and construct new waterline at Berth 1 transfer bridge.	\$3,500,000	Phase 2: FY18	Phase 1 construction complete. Phase 2 remains in preliminary design.
Z696240000	Skagway Ferry Terminal Improvements	13883	Restore existing concrete float and associated vehicle transfer structures as needed.	\$5,500,000	TBD	Project delayed to further coordination of scope with local municipality.
Z701610000	AMHS Waste Water Treatment System Upgrades	28791	Upgrade to waste water treatment facilities at Auke Bay, Sitka, Skagway, and Haines.	\$2,000,000	FY18	Project under Preliminary Design and Environmental Documentation.
SAMHS00084	Auke Bay Ferry Terminal Modifications and Improvements	29709	Replace three (3) side dolphins and make other modifications as needed for fitup of ACF.	\$3,000,000	FY19	Project under Preliminary Design and Environmental Documentation.
SAMHS00088	AMHS Storage Tank Replacement	30529	Remove and replace underground fuel storage tanks with above ground tanks at Auke Bay, Skagway, Cordova, Keichikan, Petersburg, Sitka, Wrangell, and Valdez Ferry Terminals	\$800,000	FY19	Project under Preliminary Design and Environmental Documentation.
Z684640000	AMHS HNS Ferry Terminal End Berth Facility	28669	Design & construct a new end berth at the existing ferry terminal facility for use by the ACF.	\$25,000,000	FY18	Project to be re-scoped and inserted to the STIP. Obligation expected 2020
SFHwy00006	Sand Point City Dock Replacement	29989	Construct new multi-use dock to serve as Sand Point's ferry terminal.	\$11,000,000	FY19	Project under Construction. Completion expected October 2019.
Z700060000	Ward Cove AMHS & NOAA Moorage Facility		Design & construct a mooring facility, with uplands staging & parking, to support AMHS & NOAA vessel needs	\$8,000,000	TBD	Offshore structure removal complete. Design and permitting for offshore dredging and marine/uplands facilities ongoing.

PROJECT NEEDS

PROJECT NEEDS - STATE FACILITIES

Location	Project Title	Need / Description	Estimated Cost	Notes
Auke Bay	Terminal Uplands & Building Improvements	Construct sanitary sewer and shore-tie power connections , and remodel ferry terminal building	\$3,000,000	Project was pulled from scope of SAMHS00084. Program project for design.
Cordova	Mooring structure and utility improvements for ACF vessel.	Investigate mooring structure modifications and sewage disposal issues for new ACF class vessel.	\$3,000,000	No activity. Program project for design.
Cordova	Analyze Wave Forces on Sectional Bridge Support Floats	Estimate wave forces and structural strength of float systems to determine if future modications/strengthening is required.	\$50,000	No activity. Program project for design if warranted.
Cordova	Side Berth Container Van Modifications	Investigate and design improvements to allow safe loading of 40-foot container vans for Aurora if the Aurora stays in service.	\$750,000	No activity. Program project for design.
Valdez	Sewage Disposal for ACF Vessel	Investigate feasibility of sewage disposal for new ACF vessel should the ACF be homported in Valdez.	\$25,000	No activity. Program project for design.
Whittier	ACF Vessel Modifications	Design and construct project to relocate existing fender structure to accommodate ACF. ACF will not fit into this port without modification.	\$500,000	Project design has been initiated. Construction desired to be completed by Spring, 2018.
Yakutat	New Facility or Fender Improvements	Investigate viability of providing transfer bridge or new facility and fendering improvements if existing City Dock is to be continued to be utilized.	\$50,000	Preliminary evaluation and study was initiated but not completed. Comparing existing ferry terminal site with other site in Yakutat Bay.
AMHS Terminals System-Wide	Mooring Dolphin Replacements (Auke Bay East, Haines, Pelican, Skagway, Wrangell, Kake)	Remove & replace older mooring dolphin structures as needed.	\$15,000,000	Prioritize structures/locations by condition & need. Phase construction over multiple years or combine with other capital improvement projects.
AMHS Terminals System-Wide	Cathodic Protection Anodes	Monitor existing & place new cathodic protection anodes at various ferry terminals, system-wide.	\$500,000	Anode replacement work being conducted as part of other projects.
AMHS Terminals System-Wide	Transfer Bridges and Floats Paint Coating Refurbishment (Auke Bay East & West, KTN Berths 1 & 2, Petersburg, Haines, Wrangell, Metlakatla)	Replace/repair protective paint coatings and conduct other structural repairs or refurbishment where required.	\$3,000,000	Prioritize bridges by condition & need. Phase construction over multiple years.
AMHS Terminals System-Wide	Box Girder Transfer Bridge Floor Beam Modifications (Ketchikan, Whittier, Auke Bay)	Investigate and design improvements to correct cracking issues present at the first floor beams of several box girder bridges	\$1,000,000	Prioritize bridges by condition & need. Phase construction over multiple years.
AMHS Terminals System-Wide	Synchrolift System Retrofit (Haines, Valdez, Whittier)	Design improvements to provide secondary breaking system in the event of failure of the primary lift system.	\$2,000,000	Prioritize bridges by condition & need. Phase construction over multiple years.

PROJECT NEEDS - STATE FACILITIES

Location	Project Title	Need / Description	Estimated Cost	Notes
AMHS Terminals System-Wide	Fracture Critical Transfer Bridge Retrofit (Ketchikan, Whittier, Auke Bay, Wrangell, Petersburg, Haines)	Design improvements to provide redundant load path for fracture critical transfer bridges	\$5,000,000	Prioritize bridges by condition & need. Phase construction over multiple years.

PROJECT NEEDS / NON-STATE FACILITIES

Location	Project Title	Need / Description	Estimated Cost	Notes
Chenega / Tatitlek	ACF Improvements	Existing tidal ramp berthing structures will not accommodate new ACF vessel. Investigate dock and vehicle loading ramp improvements to allow berthing and cargo transfer by ACF vessels.	\$12,000,000	Project need, scope and estimated cost uncertain.
Pelican	ACF Improvements	Existing tidal ramp berthing structures will not accommodate new ACF vessel. Investigate dock and vehicle loading ramp improvements to allow berthing and cargo transfer by ACF vessels.	\$8,000,000	Project need and scope uncertain.

SECTION III

VESSEL INFORMATION TABLE

Alaska Marine Highway System

Vessel Information Table

<i>Updated January 2018</i>	Matanuska	Malaspina	Tustumena	Columbia	Leconte	Aurora	Kennicott	Fairweather	Chenega	Lituya
Date Built	1963	1963	1964	1974	1974	1977	1998	2004	2005	2004
Length (feet)	408	408	296	418	235	235	382	235	235	181
Beam (feet)	74	74	59	85	57	57	85	60	60	50
Displacement (long tons)	5,569	5,552	3,067	7,683	2,132	2,132	7,503	787	787	647
Loaded Draft (feet-inches)	16'-11 5/8"	16'-11 3/8"	14'-4 1/2"	17'-6 1/8"	13'-10 7/8"	13'-10 7/8"	17'-6"	8'-6"	8'-6"	10'-6"
International Tonnage: Gross	9,214	7,302	4,529	13,009	3,124	3,124	12,635	3,442	3,420	n/a
(cubic capacity) Net	3,824	2,496	1,451	4,932	987	987	3,790	1,032	1,026	n/a
Domestic Tonnage: Gross	3,029	2,928	2,174	3,946	1,328	1,280	9,978	1280	1333	99
(cubic capacity) Net	1,235	1,494	898	2,683	566	453	7,354	870	827	66
Horsepower @ Service Speed	7,400	8,000	5,100	12,350	4,300	4,300	13,380	15,360	15,360	2,000
Service Speed (knots)	16.5	16.5	13.8	17.3	14.5	14.5	16.75	32	32	11.5
Fuel Use (Gallons/hour) *	234	270	151	397	188	190	354	600	600	55
Crew Capacity	50	50	37	66	24	24	56	10	10	4
Passenger Capacity	499	499	174	499	300	300	499	250	250	149
Staterooms - 4 berth	4	46	8	44	n/a	n/a	48	n/a	n/a	n/a
Staterooms - 3 berth	23	0	0	0	n/a	n/a	0	n/a	n/a	n/a
Staterooms - 2 berth	80	26	17	56	n/a	n/a	56	n/a	n/a	n/a
ADA Staterooms (4 b)	0	0	0	0	n/a	0	3	n/a	n/a	n/a
ADA Staterooms (2 b)	1	1	1	3	n/a	n/a	2	n/a	n/a	n/a
Total Staterooms	108	73	26	103	0	0	109	0	0	0
Total Berths	247	238	68	294	n/a	n/a	320	0	0	0
Vehicle Capacity (lane-ft.)	1,760	1,760	720	2,680	680	680	1,600	720	720	360
(Qty of 20 foot vehicles)	88	88	36	134	34	34	80	36	36	18
Van Capacity - Booking Limit	12	14	10	16	9	9	20	5	5	2

*Gallons per hour fuel consumption figures are averages based on weekly engineering reports, and include fuel usage to generate heat and electricity.