

Alaska Marine Highway Reshaping Work Group

Report to the Governor



“RED SKY AT MORNING”

October 2, 2020

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Introduction

The Alaska Marine Highway System (AMHS) exists to provide ferry transportation to certain Alaska coastal communities. The ferry system provides access to other communities, to larger road systems, including the interstate highway system, and benefits the economic, physical, social, and cultural quality of peoples' lives along with the overall quality of life in the communities it serves.

For a variety of reasons, and despite best efforts by system employees and the mariners who operate the vessels, today the system operates an aging ferry fleet that is costly to maintain and operate, poorly matched to ferry route needs, with limited flexibility to adjust to changing circumstances. Equipment breakdowns, costly labor agreements, cumbersome procurement processes, and a recent surprise strike, all highlight underlying systemic issues that pose sustainability risks to the system.

Governor Mike Dunleavy chartered this workgroup through Administrative Order 313 to provide recommendations to reshape the AMHS that, if adopted, better position the Alaska Marine Highway System to provide essential ferry services to Alaska coastal communities in the future while reducing the state General Fund (GF) support required to sustain ferry operations.

Like other transportation modes, AMHS operations today are impacted by the COVID 19 virus pandemic which imposes new operating challenges for system employees, costs on the ferry system, and reduced ridership and tariff recovery. This challenge is being managed at a higher level by the State. We assume COVID 19 impacts will gradually diminish over the next several years and we do not directly address COVID 19 related ferry impacts in this report.

As further preface, some recent public debate about the ferry system focuses intently on the dollar level of state GF ferry support and whether that number (\$54 million for FY2021) should be higher or lower. We believe such a focus can overlook an underlying issue and opportunity, i.e. whether the operation of the ferry system could transition to a more efficient model of organization and operation, one more capable of delivering reliable marine transportation services in ways that minimize demands on state coffers. We believe there is room to do so if the will to make changes exists. To quote Philip Spaulding of Nickum and Spaulding Naval Architects and Engineers writing then Governor Sheffield in 1982 about ways to fix ferry system problems emerging then, "the Alaska Marine Highway is big business and should be run as a business with managerial efforts directed toward reducing operational deficits and serving Alaskans."

Over the years previous reports have suggested many system improvements. Virtually none have been implemented. And some problems that plague the system today are not new, they evolved over time and could have been avoided or mitigated if lessons from the past were learned and applied.

Given the current operating situation of the AMHS and Alaska's very challenging fiscal situation you will see several underlying themes emerge in this report:

- The value and importance of the system to remote coastal communities and the State as a whole, and the skill and dedication of the people who manage and operate the system
- Improving system reliability
- Reducing system costs and raising system revenue
- Stabilizing system budgets
- Strengthening system governance
- Improving short and long-term strategy and planning, including fleet employment, operation, and service models

Implementing changes to accomplish these goals will not be easy but we believe necessary and achievable. With that in mind, we conclude the introduction with a bit of history.

The AMHS we know today has origins that predate Alaska Statehood. In 1949 Alaskan pioneers Steve Homer, Ray Gelotte, and Gustav Gelotte formed Chilkoot Motor-Ship Lines using a former Navy landing craft, and began operating a ferry between Tee Harbor, Juneau, Haines, and Skagway. When Chilkoot Motor-Ship was threatened with bankruptcy in 1951 the Alaska Territorial Government purchased the business and continued its operation.

When Alaska became a State in 1959 the first Alaska legislature approved the Alaska Ferry Transportation Act, and voters approved bonds to commission four new ferries and docks in Southeast and on the Kenai Peninsula. In 1963 the AMHS was formally established as the Division of Marine Transportation.

During ensuing years, the AMHS grew. Ferry service was expanded to more and more communities with connections made south to Prince Rupert British Columbia and Bellingham Washington, and west to Akutan and Unalaska, extending the system over 3,500 miles to many remote and small Alaskan communities across some of the most challenging weather and seas on the planet. Today the system reaches 35 communities.

Up to the 1970's, given prevailing high airline fares, access to the national highway system, connections to other Alaska communities, and the lure and fun of traveling Alaska's amazing waters, overall ferry passenger ridership and vehicle traffic grew. Tariff recovery nearly covered operating costs. Small businesses in coastal communities leveraged the ferry system to support their ventures and communities took advantage of the cultural and educational opportunities ferry connections offered. All in all, a history that contributed to the economic growth of Alaska, the growth of businesses, and the quality of life of its citizens.

However, external factors changed. Airline fares declined, and air service expanded in frequency and reliability. Alaska cruise ship travel dramatically expanded and fewer people drove Canadian highways to reach their Alaskan adventure. Ferry use and accompanying tariff recovery on the AMHS began to decline, even as its aging ships demanded more maintenance and repair. Increased state funding made up the difference and the system continued growing, with new communities added up until 2012.

Today, farebox recovery falls well short of operating cost and the AMHS operates cost negative on every route. In recent years, farebox recovery dropped from about 50% of operating cost to about 33%. And notwithstanding federal transportation funding support for capital work, state GF funds became increasingly critical to support ferry operations at the level the system was running. As Alaska's overall state fiscal situation worsened, a state GF marine highway support level that was tolerable or ignored ten years ago is no longer overlooked or accepted.

We believe the state got to this position in part because major asset, personnel, procurement and service decisions for a large marine operating system were made without a long-term system view or strategy that fully incorporated the implications and full costs of those decisions. State ferry vessel designs, local port infrastructure and applicable regulatory requirements were not always well integrated into long-term fleet or service plans, such that some vessels and routes are incompatible with system route needs and available budget. For example, in 1968 the MV Wickersham was purchased to add mainline service. It was sold after only a few years because its failure to comply with Jones Act regulations limited the ports it could service.

Just recently two new Alaska class dayboat ferries were delivered with hull doors that did not match the ports they were intended to serve. And the routes they were intended to sail as dayboats required transit times that proved too long for regulatory compliance with crew rest requirements. *Déjà vu*.

In 2014, the importance of building an ocean capable “replacement” vessel for the MV Tustumena became a focus for the state following a major service interruption in 2013. The long-term fleet plan for this new ship, already in design, and the future system as a whole is not clear. For example, if this \$220 million plus vessel is not SOLAS (Safety of Life at Sea) compliant (just like the largest current mainline ferry, Columbia) it will likely not be able to carry passengers to or from Canada. That may be ok, or not. Whether it is prudent requires rigorous cost benefit analysis informed by a clear vision of how it will fit long term system demand, operational strategy and plans. This is a 30-year plus service life asset. Critical decisions about any new vessel should be made with a long term system fleet strategy in mind.

Change is hard, but for the AMHS to succeed over the long-term, changes are needed and long overdue.

Work Group Methodology

Alaska Governor Mike Dunleavy established the Alaska Marine Highway Reshaping Work Group in January 2020 to make recommendations concerning future finances and service levels of the AMHS. The work group was specifically directed to consider analysis and data in a January 15, 2020 Alaska Marine Highway Economic Reshaping Report, and other available information relevant to AMHS finance and service levels. The Governor's charge to the workgroup is below.

Purpose

“The Work Group shall make recommendations on the future finances and service levels of the Alaska Marine Highway System (AMHS).”

Duties

“The Work Group will consider the analysis and data in the Alaska Marine Highway System Economic Reshaping Report (January 15, 2020), current and past service levels, travel demand, cost of service, regional economic importance, labor contracts, current and potential service providers, and other available information. The Work Group will define the future needs and purpose of the AMHS, with the goal to ensure residents have access to essential transportation services among Alaskan coastal communities.”

“Recommendations from the Work Group may include ports of call; levels of service; tariffs; contracting options; fleet size, type, maintenance, and replacement; governance and labor contract requirements.”

In line with Governor Dunleavy's direction, we reviewed the draft report of January 2020 prepared by Northern Economics (NE), its analysis of options for reshaping the system, and potential financial impacts of those options. Our recommendations incorporate some, but not all, the options identified in the Northern Economics Report. The complete report is available at http://dot.alaska.gov/project_info/. Throughout this report we refer to it simply as NE.

We also considered prior Southeast Conference reports and recommendations and had access to earlier materials prepared by the Department of Transportation and Public Facilities (DOT&PF) and Nickum and Spaulding Associates. We heard directly from experts who helped draft the NE and Southeast Conference reports, as well as from current ferry system management, union representatives, and employees. We received input from tribal representatives, coastal communities, residents, and the Alaska Municipal League, including specific information on the economic impacts of the AMHS to communities served and the state. We solicited input, even if perhaps redundant to comments provided to other studies and legislative hearings, from communities, tribal interests, and members of the Marine Transportation Advisory Board (MTAB). We heard directly from commercial marine operators who might be able to offer AMHS services, other marine operators with a perspective on marine operations in the state, and Alaska shipyards who build and repair the ferries. We invited and received extensive public and community comment in writing and during virtual live hearings.

Throughout the course of our meetings we discussed materials presented, comments received, and the relevance of the information gathered to the task we had. Along with the experience and perspectives of workgroup members, all this helped shape the recommendations we ultimately developed.

Presentation materials from our meetings and recordings of our discussions can be accessed at <http://dot.alaska.gov/comm/amh-reshaping-workgroup/agenda-minutes.shtml>.

Workgroup discussions were candid and robust. We valued the high level of public interest in our meetings, and the comments and suggestions submitted. We clearly heard and truly appreciate the importance of the Alaska Marine Highway System to Alaskans. AMHS ferries helped businesses establish and grow, improved lives in communities in coastal Alaska, and connect those communities to each other and broader transportation systems. AMHS offers enduring value to our state. Today it is severely challenged by its operational structure, the age and condition of its vessels, and the state funding it requires to operate. Our hope is the recommendations we offer to reshape the AMHS will help to sustain it far into the future.

AMHS Organization and System Overview, Strategy

AMHS Organization and System Overview

The AMHS operates an extensive 3,500-mile route with a fleet of 12 vessels that are designed to carry passengers and vehicles ranging in size from motorcycles to large freight containers. Our ferries operate year-round to provide essential transportation to over 35 coastal communities, most of which are not accessible by road. (please see Northern Economics Draft Reshaping the Alaska Marine Highways - Appendix B for community profiles dot.alaska.gov/project_info/ or visit the AMHS website Our Communities <http://dot.alaska.gov/amhs/communities.shtml> for more information on each community served by AMHS).

Mainline vessels are the largest ships and typically take more than one day to travel between start and end ports that provide road access. Dayboats connect smaller communities with each other or with the mainline vessel routes and shuttle ferries are a sub-class of the dayboat ferries.

AMHS operates as a line agency in the DOT&PF. A General Manager directs day-to-day operations and a Deputy Commissioner serves as a liaison with the legislature, the public, and other transportation modes within the department.

The International Organization of Masters, Mates and Pilots (MMP), Marine Engineer's Beneficial Association (MEBA) and Inland Boatmen's Union (IBU) make up the three unions that represent employees who work on the ferries. Combined they employ approximately 670 people, with about two-thirds being members of the IBU.

AMHS in total, employs a total of 750 personnel. System headquarters are in Ketchikan.

Its FY2020 authorized operating budget of \$99.6 million, consisted of estimated fare box receipts of \$48.1 million, GF of \$46 million, and other funds of \$5.5 million.

Other federal funds, typically about \$16 million per year, are for major capital asset projects or major repairs.

For additional information please see Appendix A – System Overview.

Strategy

The workgroup could identify no documented system strategy or long-term plan (LTP) establishing principal long-term system objectives, planning assumptions, timing of major milestones, and new initiatives, (e.g. financial goals, (revenue and spend), financial planning assumptions, community service objectives, fleet model (vessel types, operating configuration, route service model), reliability goals, commercial service goals, customer demand changes, pricing model, service and operating decision criteria, maintenance model, communications strategy, etc.) that would be considered essential strategic and operational guidance for a private enterprise of comparable size and complexity.

Which is not to say that the AMHS does none of these things, it does. But to the work group, decision processes over many years seemed ad hoc and reactive, resulting in some poor outcomes.

We believe a simple, clear LTP would help the organization and its employees maintain focus on key long-term system goals, monitor progress toward them, anticipate emerging challenges, improve decisions and achieve fundamental objectives.

Accordingly, we have included a notional LTP with some accompanying (limited) budget discussion. If a LTP concept is adopted, it would need refinement and further shaping by AMHS and DOT&PF to be practical and useful as a management and communications tool.

Regarding strategy, there are numerous approaches to organize and operate under. Many large organizations employ four fundamental strategy perspectives:

How customers see the business:

- Service Level
- Service Excellence
- Reliability
- Affordability
- Environment/Safety

How stakeholders see the business:

- System Long-Term Financial Health (revenue/expense)
- Operating Efficiency
- Prioritized Investments
- Ability to Anticipate/Adapt to Changes in Business Environment

How management operates the business (business processes)

- Clear Decision Processes /Clear Technical Authority
- Strong Capital Asset Planning
- Strong Asset Protection (includes maintenance)
- Safety/Regulatory Compliance Assurance

Learning Growth/High Performance Organization:

- Transaction Information (metrics)
- Employee Skills/Personnel/Talent Management
- Organization Culture (operational excellence, efficient, innovative, technology leveraging, risk-based decisions, delegated authority)
- Learning Organization, Improve Every Day

These perspectives typically inform long-term strategy and helped us organize thinking about the recommendations we propose.

Findings and Recommendations

Strengthen System Governance

Findings:

- AMHS is structured and governed as a marine ferry service agency in the DOT&PF. It delivers marine transportation services to Southeast (SE), Southwest (SW), and South Central coastal communities to accomplish Alaska public policy goals. It is financed by federal and state public funding, along with customer fare revenue for the transport services it provides. Farebox revenues do not currently cover system operating costs and an annual state GF funding contribution is needed to sustain system operations.
- AMHS policy direction, communities serviced, vessel construction, and annual budget is set via the legal governing authorities, policy and budget decisions of the Governor, the DOT&PF Commissioner, and the Legislature.
- AMHS policy, fleet vessel composition, business practices and funding have experienced frequent shifts over time due to changing decisions of different Governors, Commissioners, the Alaska legislature, and other state government and policy directions.
- These shifting directions hinder effective long-term AMHS operational and business planning, complicate ferry scheduling, increase system costs due to rework, regretted spending; effort that sometimes results in vessel assets misaligned with operating conditions, shore infrastructure, service requirements and customer demand.
- Modifying system governance has been a recommendation of prior studies dating back to 1982. Shifting the AMHS governance from a state transportation department agency to a ferry commission established by the Governor, to one or more port authorities, or to one or more independent public corporations have been proposed. In 2018 a multi-year initiative led by the Southeast Conference recommended preference for an AMHS governance shift to a public corporation similar in structure to the Alaska Railroad.
- There are comparative advantages and disadvantages between the current model and a state corporation model. These are extensively discussed in the Southeast Conference report and the more recent Northern Economics report.
- Principal rationales for change include removing AMHS from state political processes, enhancing governance marine and business expertise, and clearer decision accountabilities similar to what a corporate board of director's model would typically provide.
- Other ferry systems operate successfully as a state agency like Alaska does now or as private or public corporations.
- The continuing need for state GF budget support and constituent impacts of the AMHS service level changes in coastal communities and across the state mean state political processes will necessarily be implicated and still be engaged and challenging, a corporation model will not eliminate this.

- There are fundamental differences between the AMHS community transportation connection role, its financing, and fundamentally commercial business accountabilities of the Alaska Railroad.
- The DOT&PF agency model better enables intermodal transportation integration than a corporate model (a fundamental public transportation policy objective given Alaska's geography and sparse infrastructure)
- The current AMHS situation argues for prompt corrective actions which can be undertaken more readily and promptly by the department and the administration than establishing and implementing a new state corporation which can take more years.

Recommendations:

- On balance the workgroup believes a shift to a state corporation model at this time is not desirable and is not recommended.
- The work group instead recommends keeping the current department agency model and implementing certain changes (discussed separately) to strengthen the current governance.
- Creation and a shift to a public corporation may become more desirable and feasible at some point in the future if state budget issues are better resolved or current challenges persist after workgroup recommended changes are implemented. It can be kept on the radar and better refined over time as a future option for long-term AMHS strategy.

Strengthen Governance Support

Findings:

- A continuing challenge for the AMHS has been frequent change in policy directions coupled with insufficient appreciation of the long-term implications of such changes, lack of clarity about long-term planning objectives such as fleet design, vessel employment strategy, and marine operations and marine business expertise above AMHS such as a capable board of directors typically provides a business.
- A Marine Transportation Advisory Board exists by statute (AS 19.65.110) with 12 members appointed by the Governor to advise the Commissioner about AMHS issues. It is formed of capable individuals but not structured to effectively challenge and help the AMHS with the large marine business and marine operation planning and execution issues it confronts. Recent agendas suggest it generally keeps community stakeholders informed about AMHS activities and budgets and provides general feedback about AMHS service from community perspectives. The majority of board members link to ferry geographic service areas. Public transparency and engagement is laudable and necessary, but it is not all the Commissioner and AMHS could benefit from.
- More well-grounded outside advice focused on business and financial practices, ferry system fleet planning and maintenance, pricing and service models, and capital asset investment, much as a board of directors provides a corporation, would benefit AMHS.

Recommendations:

- By administrative order the Governor establish and appoint a new nine member AMHS “operations” board, with members having the skills and experience a Ferry Commission or Marine Business Board of Directors would bring to bear (e.g. board level ability to assess and suggest marine business and procurement practices that enhance revenue and reduce cost, marine personnel management, commercial service options, ship maintenance, construction and repair plans and activities, fleet strategy, reliability and other service objectives and metrics, regulatory compliance, risk management, and so on). Union, public, tribal, and stakeholder representation is desirable, via fewer individuals, perhaps representing larger groups of stakeholders (e.g. Alaska Municipal League).
- A notional structure, purpose, and skill for such a board would include three members with business experience, preferably one or more in the marine business field, three members with strong marine operating, maintenance and vessel construction experience, two public members, one of which would represent Alaska Native interests, a union representative, and another person with experience in organization transformation. By tasking the board to advise on specific business management, operation, and financial issues such as pricing strategy, commercial opportunities, etc. Board of Director type recommendations could be achieved.
- Although authority remains with the Governor and DOT&PF Commissioner, ability to influence fundamental decisions would come from the quality and credibility of its members and recommendations.

To avoid meeting proliferation and additional unreasonable time demands on the AMHS and DOT&PF, the board established by AS 19.65.110 should be abolished or merged into the AMHS operations board construct.

- The Board would report to the Commissioner of Transportation and Public Facilities or as directed by the Commissioner.

Improve System Reliability

Findings:

- Lack of ferry service reliability was a key concern of every group we interacted with. Some commentators offered they were willing to accept less frequent ferry service if it was more predictable and more reliable.
- The current fleet is aged and subject to challenging Alaska marine operating conditions. Despite the best efforts of ships crews and AMHS staff, ferry system reliability is not, in fact, as reliable, as it should or could be.
- Some reliability improvement will occur as a result of cost reduction measures that reduce vessel operations. These measures are addressed elsewhere.
- Elevating focus on maintenance issues, strengthening maintenance planning processes, clarifying technical authorities, strengthening inspection and survey protocols, improving

communications with the people on the deck plates and shipyards, applying suitable metrics, and redirecting or otherwise obtaining additional maintenance resources are all actions that would lead to improved reliability.

Recommendations:

- Undertake a sustained, focused effort to elevate, assess, and overhaul maintenance planning in the organization and apply best marine industry practice. Consider revising and simplifying processes and procedures to clarify technical decision authorities, regularize ship level engagement and communications, leverage key data, use consistent metrics that identify vessel and condition trends (e.g. vessel maintenance reliability goals, unscheduled repair, yard or dockside days, vessel metal corrosion rates, logistics gaps, etc.).
- Identify and apply additional resources for front end surveys, inspections, planning and preventive maintenance actions. Revise job accountabilities as needed, streamline responsibilities.

Stabilize Budget Planning

Findings:

- The timing of Alaska budget submissions and approvals for AMHS is an annual process timed to the July to July state government fiscal year. Agency budget decisions for the next fiscal year are often not final until late spring if, then.
- The AMHS business model requires passenger and vehicle tariff revenue to pay part of its system operating expense to reduce the need for GF state operating subsidy.
- The opportunity to capture much of that revenue is seasonally dependent with more ferry travel occurring in the summer. The ability to schedule ferry travel well in advance is important to the Alaskan businesses, communities, tourists, seasonal workers, and relocating military family movers who wish to use Alaska ferries.
- As a consequence of budget cycle timing, the AMHS is unable to confidently forward plan and schedule summer ferry sailings more than a few months in advance. This hinders marketing and sale of bookings, misses revenue capture opportunity, and imposes greater administrative burdens and cost to manage late changes and refund payments if trips are cancelled due to budget issues.

Recommendations:

- The preferable solution is for the Governor and Legislature to forward fund two or more years of AMHS operation by depositing additional GF operating funds in the Alaska Marine Highway System Fund established by AS19.65.60 for that purpose so that the AMHS can better plan operations, maintenance, and vessel schedules, publicize and conduct a more predictable future operating schedule.

- Whether or not forward funding can be achieved, the Administration and Legislature should agree on a realistic 3-5 year rolling GF budget plan (in effect budget planning assumptions) for AMHS that the agency can use to create vessel operating plans and schedules 12-18 months forward.
- Phased, systematic cost savings estimates, and farebox revenue growth anticipated from implementing recommendations in this report should be built into these plans to help drive implementation accountability.
- While not strictly binding, and circumstances that require plan changes may well arise, (as COVID 19 impacts illustrate), the existence of a responsible agreed to budget plan should reduce the need for changes.
- A similar multi-year stable planning assumption should be established for STIP funding the Department expects to provide AMHS to help stabilize capital maintenance planning.

Reduce System Costs

Findings:

- Options to reduce the AMHS system costs are numerous. The Northern Economics Report, which the reshaping work group carefully reviewed, identified many.
- Studies and reports by the Southeast Conference also identified options. AMHS leadership, outside experts, ferry employees, union representatives, commercial marine vendors, community representatives, tribal representatives, and shipyards we spoke with offered thoughts, as did MTAB members and the public in written and verbal comments we received.
- Sifting through this information makes clear there are limited paths to achieve major cost reduction and keep the system functional. They are actions involving vessels, labor, service levels, and service providers.
- Moreover, because cost saving options interact across multiple vessel schedules, vessel operating parameters, vessel operational condition, revenue generation, the limited ability of many vessels to flex routes, and impact vessel employees, selecting options that best maximize savings while minimizing impacts to Alaskans has inherent complexity.
- We understand the cost saving actions we recommend that involve vessel and schedule operating changes still need detailed planning by AMHS to successfully implement. As one workgroup member observed we have moved the focus from the 30,000 foot level down to 5,000 feet, and a bit more remains to successfully land them. We understand some actions we recommend have been adopted already by the AMHS because of management initiatives, budget constraints, COVID 19 impacts and maintenance issues. Certain recommendations clearly require negotiation with maritime operating unions which is addressed separately. The success of those negotiations will affect the need for additional fleet and service changes.
- Recommendations that eliminate service to any community should ideally be phased so communities and potential alternate service providers can adjust. We assume in the

interim DOT&PF would help affected communities arrange alternative commercial or local authority arrangements.

- Several cost reduction recommendations are tied to leveraging road infrastructure; these are addressed separately.

General approaches that achieve system cost reduction but continue AMHS ferry services in the long term include:

- Eliminating ferry vessels
- Downsizing the ferry fleet (operating fewer vessels overall and use smaller vessels tailored to route demands)
- Reduce vessel operating days.
- Change vessel operating parameters to increase system flexibility, lower operating cost
- Lower personnel costs (e.g. crewing adjustments/ reduction of overtime)
- Outsource to commercial providers where feasible
- Reduce service frequency, eliminate service to some communities
- Partner with community groups, local and tribal authorities for them to take over local ferry operations

The Northern Economic Report (NE pg. 88) identifies changes to communities served, operating schedule, vessels, route changes, and personnel cost reductions a private operator might undertake in search of a profitable business model.

The report observes AMHS has taken some steps similar to these since January 2019 to increase revenues and reduce costs and state GF funding need. More changes are needed in the future.

Labor costs in 2018 were 66% of vessel operating cost, and alone exceeded overall system revenue by more than \$12.5 million. (NE pg. 7) Achieving substantial personnel cost savings should be an early implementation priority. Its success may avoid or force other fleet or service changes in the next several years. As issues surrounding personnel costs are complex, affected by regulation and governed by union bargaining agreements with the state, we addressed the issue in a separate recommendation to give the issue prompt attention and negotiation to address.

We also suggest the broad outline of a long-term strategic plan (LTP) with near and long-term budget and operational goals. The system is unlikely to meet such goals without substantial changes such as the ones we recommend. If financial, maintenance, or failure of recommended cost reduction efforts dictate additional major system changes (just as COVID 19 impacts are now doing), AMHS may need to remove a mainline ferry and another ferry vessel from service. The decision process should factor in vessel condition, operating cost, revenue impacts of removal, and resulting impacts to community ferry service. AMHS should develop such analysis, if they have not already done so, to be able to adjust promptly while preserving long term system sustainability should the need arise.

Recommendations:

- Aggressively reduce vessel capacity and adjust service frequency on a seasonal basis to achieve route cost reduction; where service is provided use the most efficient vessel available or apply the most efficient configuration to the vessel.

Operate mainline vessels (Columbia, Matanuska and Kennicott) with full crews and passenger capacity only in summer/shoulder months or if increased demand develops. All other times operate the ones in service with 50% capacity and reduced crews.
- Reduce mainline winter service to Bellingham and Prince Rupert (perhaps to twice a month (Matanuska or Kennicott), Columbia in winter layup and maintenance. Service to Prince Rupert is now effectively eliminated, long-term plans should consider reduced service levels. If vessel repair conditions or budget levels dictate, potential elimination of this route is possible. Not all AMHS vessels can serve Canadian ports because of SOLAS requirements.
- Use dayboat vessels or larger vessels with dayboat configuration wherever feasible (NE pg. 12,14 or 24) with the lowest dayboat hour configuration needed to serve the route, make route adjustments including reducing or eliminating port stops that enable this approach or other alternative transportation options that are available.
- Schedule non-mainline vessels with 2on/2off schedules on SE feeder routes; reduce on board crewing during dock periods. This needs further AMHS analysis.
- Reduce or privatize crews when vessels are not in revenue operations.
- Solicit commercial or other providers (local tribes or communities, for example) to provide service to Ouzinkie, Port Lions, Old Harbor, Seldovia, Tatitlek, Chanega Bay, Pelican, Tenakee Springs and other locations where dayboat ferry service is difficult for AMHS to provide efficiently. Business or community interests may make it appealing to offer service. In assessing offers consider a small state subsidy if lower than the cost of the state ferry service it replaces. The Inter-Island Ferry Authority (IFA) model could provide a workable template. If offered, assess whether providing service with separate passenger and vehicle transport (barge) meets essential community needs. In some cases it may.
- It is understood that serving very small communities with the ferry system model will never be cost efficient. It is also understood and appreciated that affordable transportation options are important to them. Ideally, if the overall Alaska Marine Highway System could be made revenue/cost positive, it could absorb losses on these runs.
- Reduce service to SW communities to two trips a year, spring and fall. AMHS should initiate work to identify alternate service providers that can provide reasonable service alternatives for service to these communities in the future. A small subsidy to commercial providers may be appealing on this route as well.

- If unable to promptly sell for use, sell for scrap or give away the Fairweather, Chenega, and Malaspina. There is no future intent to return any of these vessels to service. Moorage at Cove Point is costing over \$2 million a year. Any funds received from a sale should be provided to AMHS.

Renegotiation of Marine Union Labor Agreements

Findings:

- As personnel costs make up almost 70% of vessel operating costs, significant system operational savings cannot be achieved without substantially lowering personnel costs.
- Although challenging for both parties, achieving cost savings, by agreement is preferable to other authorized actions that impair system operation.
- Many existing contract provisions are no doubt reasonable and fair. The ferry system requires a skilled workforce. Certain positions require government licenses that demand extensive training and experience. Fair compensation and benefits must be provided to attract and retain such personnel. Time on and time off schedules must accommodate operational requirements and reasonable employee work life balance. Government regulations require a minimum number of trained personnel aboard vessels to operate safely and impose work restrictions such as limits on working hours to prevent excessive fatigue.
- Some existing labor contract provisions (not imposed by regulation) limit the ability to run the ferry fleet with more operational flexibility and lower cost. The ability to match vessel operation and crewing mode (such as running as dayboats or with reduced passenger capacity) to match seasonality and demand would reduce costs. Similarly reducing dockside crew requirements for vessels off revenue service or privatizing security services would reduce costs. The Kennicott, Columbia, Matanuska, Tustumena, Aurora, Hubbard and LeConte are all candidate vessels for more crewing flexibility depending on the specific operations model AMHS pursues. Priority should be given to changes that provide the most flexibility, achieve the most cost savings, and consider impacts on working conditions of vessel crews.
- Marine contract provisions are to a degree necessarily complex and different from other state bargaining agreements as the at sea personnel world is a fundamentally unique work environment. Nonetheless, management requires significant effort and attendant cost to manage these agreements and in one bargaining unit numerous grievances. Simplifying and clarifying the marine contacts where feasible is desirable.
- The Commissioner of DOT&PF has specific authority to negotiate marine contracts. (AS 23.40.040 states: “The Commissioner of Transportation and Public Facilities or an authorized representative... may negotiate and enter into collective bargaining agreements concerning wages, hours, working conditions, and other employment benefits with the employees of the division of marine transportation engaged in operating the state ferry system as masters or members of the crews of vessels or their bargaining agent.”)

Recommendations:

- The Commissioner of DOT&PF with his staff and AMHS leadership identify potential vessel operation changes that optimally match vessel capacity, routing and scheduling to seasonal and demand requirements, increase system flexibility and lower system labor cost.
- Negotiate with the maritime unions for labor contract changes that enable such changes, and other potential changes that reduce cost and improve system flexibility.
- This effort should be undertaken, and changes implemented promptly, as results achieved directly impact on system vessel operations and service levels.
- The NE report contains suggestions and cost savings potential for a number of such changes if agreements can be achieved.

Increase System Revenue

Findings:

- Customer revenue for the service provided (fare box) is a key component of the Alaska ferry system financial model. To the extent operating costs exceed revenue, state GF subsidy is needed to keep the ferries running.
- The revenue/cost relationship is an efficiency ratio. For a business revenue exceeding cost yields gross profit margin; cost exceeding revenue yields bankruptcy.
- Today the ferry efficiency ratio is very poor, no ferry route is net revenue positive; systemwide farebox recovery is about 1/3 of operating cost. In years past, ferry system revenue more closely approached costs; in recent years the opposite has been true. As the state GF subsidy has been reduced, service reductions due to funding challenges became necessary.
- The AMHS overall business strategy includes raising system customer revenue as well as reducing costs.
- Increases to customer price would achieve overall system revenue gain. Over time system revenue gain and accompanying reduction in GF funding need would help stabilize system service levels. Tariffs that routinely adjust to inflation would also stabilize revenue recovery.
- An optimal price modeling strategy should be keyed to seasonal and route demand, and factor in affordability considerations of Alaska residents.
- The NE report has extensive discussion of this issue (NE pg. 100-107) that considers demand and pricing elasticity. Passenger fare elasticity moves differently than that for vehicles, and demand varies by route and season. A more optimal pricing strategy would increase system revenue by increasing fares on most routes. On a few routes increasing

fares would have no revenue impacts, and on a few routes, lowering fares could increase demand and increase revenue.

Recommendations:

- Implement fare increases using the modeling approach recommended in the Northern Economics Report.
- Apply dynamic pricing (like airlines do) on mainline routes. Budget stabilization that extends schedule predictability could improve the ability to successfully do this.
- Routinely make future adjustments based on results of changes made, vehicle and passenger demand, and inflation.

Leverage Road Infrastructure

Findings:

- The Northern Economic Report recommends taking advantage of existing and potential land-based (road/trail) infrastructure to reduce ferry route transit times and operating costs (NE pg. 110-117). The workgroup received a presentation specific to one of them, a ferry terminal at Cascade point north of Juneau.
- The workgroup found several of the NE options too remote in implementation timing to build into ferry system planning at this time. The workgroup approached options solely from potential benefits to the AMHS system. There may be considerations associated with all of them that are clearly beyond the scope of our charter and ability to assess. We leave that to others.
- Our recommendations follow in the order presented in the NE report.

Recommendations:

- Cascade Point
 - We recommend inserting the ferry terminal at Cascade Point into the AMHS ferry operational and capital planning as a base for dedicated ferry runs in Lynn Canal. One member disagreed with this recommendation. The member's comments are provided in the additional comments section of this report.
 - A ferry terminal at Cascade Point would reduce Juneau-Haines and Juneau-Skagway one way sailing by about 30 miles and 2.1 hours. This enables use of a 12-hour dayboat to service the route, reducing ferry operating cost, and enhancing route revenue if the route includes service between Skagway and Haines. Mainline ferries serving Juneau would still use the Auke Bay terminal. The NE report estimates moving dayboat operations to Cascade Point would reduce the GF operating subsidy by \$750,000 to \$ 866,000 annually. It would avoid the need to modify the new Alaska Class Ferries to add crew quarters at a capital cost of

about \$12.5 million per vessel, plus ongoing annual vessel crewing and crew support costs.

- Warm Springs Bay
 - We do not recommend including a Warm Springs Bay Road and Ferry Terminal in AMHS ferry planning at this time. Although construction would reduce ferry system operating cost, project timing is uncertain and not far enough along to implement into ferry operational planning constructs at this time.
- Kake to Petersburg Road and Shuttle Ferry
 - For the reasons noted above we do not recommend incorporating this project into AMHS ferry system planning at this time.
- Tenakee to Hoonah Road
 - We recommend inclusion of Tenakee Springs to Hoonah overland access in AMHS ferry system planning.
 - Service to Tenakee Springs today requires use of a 24-hour vessel on the route and traffic is passenger not vehicles. Eliminating AMHS ferry service saves 2.1 route hours. This would enable a 14 hour dayboat with reduced cost to serve the remainder of the route. This opportunity, plus potential commercial availability could require AMHS to reduce or eliminate Tenakee service in any event. Overland access to Hoonah would still provide a direct connection to AMHS. Eliminating AMHS stops at Tenakee is estimated by NE (NE pg. 116-117) to save about \$ 417,000 annually.
- Terminating Cross Gulf Service at Whittier
 - We recommend terminating cross gulf service at Whittier rather than Kodiak. Passengers continuing to Kodiak would travel by road from Whittier to Homer and the reverse from Kodiak to Whittier. The run between Whittier and Kodiak, which includes a stop at Homer, is redundant as direct ferry service from Homer to Kodiak remains. This change could have the effect of eliminating ferry service to Chenega Bay and reducing it to Seldovia and Port Lions. Northern Economics estimates a net annual state GF reduction of \$3.6 million annually. This change should be phased in (i.e. the route historically included 24 runs), several should be continued for at least a year to allow potential development of other service arrangements for these communities which DOT&PF should assist with. Local commercial arrangements with a small state subsidy may be appropriate here as well.

Implementation

Despite the best efforts of personnel who manage and operate the AMHS, it is not performing as well as desired. System reliability, system cost, schedule predictability, fleet construction, operation, and labor relations need improvement.

This situation did not arise suddenly, it developed over many years as the customer environment shifted, governing policy direction changed multiple times, the state fiscal situation became more challenging, while capital assets aged requiring more extensive maintenance and repairs. The ferry system did not readily evolve to address these changed circumstances. Fundamental system changes are now needed to assure AMHS sustainability.

This reshaping workgroup report makes multiple recommendations for changes we believe will improve the system and set AMHS on a more durable and successful path.

Many studies and reports over the years have recommended adjustments to AMHS; few have been implemented. Consequently, this report includes an implementation plan and actions we believe could successfully implement the operating, program policy and organization changes the report recommends (plus any others the DOT&PF Commissioner might establish).

Fundamental implementation actions that we believe desirable include:

- (1) AMHS create and adopt a LTP that addresses strategic objectives and major actions/timing to achieve and can track progress toward these goals (e.g. cost reduction and revenue goals, with milestones, long-term GF funding needs, system operating and community service goals, changes to fleet structure and employment, commercial service goals etc.);
- (2) Strengthening system governance, and;
- (3) Creating a dedicated implementation/transition team.

The first two implementation actions are addressed elsewhere in the report; a transition team is addressed here.

To successfully implement organization policy changes and actions at the broad level that we recommend will take dedicated resources in the near term. Successfully changing organizational processes while the organization itself, its leadership and personnel must continue to operate the system is challenging.

We recommend establishment of a dedicated, temporary, three-person transition team, with the team lead a direct report to the Deputy Commissioner. The team could consist of detailed employees, temporary hires, or both. We estimate a two-year window of work, after which the team would phase out with responsibilities absorbed in the AMHS organization and the Department.

The team's scope of work would be shaping specific, detailed actions needed to accomplish the recommendations we propose, and any other that the Commissioner establishes, track them to

execution and support the Commissioner, Deputy Commissioner and Director of AMHS as they direct and implement changes.

The team authority should have the ability to reach/work across AMHS and the Department, other state organizations and externally as needed for key expertise/implementation/reality checks, (e.g. vessel scheduling, labor relations, procurement, personnel, compliance, communications, community partnerships, etc.).

Core team member key skills should include management of organizational change (lead), ferry experience with marine engineering/maintenance or operational background (team member), and finance, ideally with cost analysis, procurement and budget experience (team member), as well as administrative support (part time).

Individuals selected should have strong interpersonal skills, as well as technical skill to influence the organization to own, and promptly implement changes successfully.

AMHS Long-Term Plan, Notional Budget Goals

A sustainable AMHS ferry system requires a long-term budget plan with achievable goals. The goals here are general, not firm, and not specifically recommended by the workgroup. They are notional to illustrate general concepts of approach, i.e. high-level budget objectives with a phased timeline plan to get there. Over time they could move AMHS toward a better revenue/cost farebox ratio. This lowers state GF requirements. Over the very long-term (20 + years) they could get much closer to a match (the system was near there before) but fleet changes, ferry travel demand growth and/or large additional service reductions would have to happen for this to occur. We have no way to reliably estimate future ferry travel impacts of COVID 19. Or to predict if other non-GF funding sources (e.g. local, tribal, or federal) might become available in the future. The notional goals here assume implementation of most of our recommendations in a prompt phased manner which will take several years. Over the very long-term system revised strategic goal accomplishment could provide reliable and safe ferry transportation with predictable schedules for Alaskan coastal communities while minimizing demand for state GF funding (reduce operating costs, build revenue).

In fiscal year 2014, the AMHS budget serving 35 communities, was approximately 27% of DOT&PF's operating budget. Maintenance and operation of state-owned roads (5,600 + miles of roads/highways) and the 237 state owned and operated airports was 25% of the department's operating budget in that same fiscal year (FY2014). The cost of operating the ferry system has resulted in significant administration and legislative budget attention with the result that AMHS GF operating subsidy was lowered by 50% from fiscal year 2014's \$108.9 million to FY2021's \$54 million. AMHS necessarily managed these in a reactive manner.

A notional budget goal for the system over the next several years could help achieve continuing additional general fund reductions in a phased, systematic manner. The reduction objective can be framed in terms of closing the gap between farebox revenue and overall system operating cost, in effect an efficiency ratio, and setting that as the goal. Done well, with most work group recommendations implemented, could lower GF fund needs by \$18-22 million over 3-4 years. In years past (1970's) the system operated at a much better efficiency level. Unfortunately, the customer demand environment supporting that ratio has changed, communities served have expanded, and necessary fleet match and operating flexibility today does not exist.

Further lowering the GF, while sustaining a durable AMHS, can be accomplished over a longer time horizon. It would take replacement of vessels with more efficient, generally smaller and more flexible assets. Also, more changes that align agreed service levels and fleet model, leveraging more commercial services, integrating local ferry initiatives and other transportation infrastructure as it develops and bringing new technology to bear. It is a longer process but outyear budget objectives, system program objectives and milestones for the long-term can help drive it.

An analysis of how AMHS spends its funding is necessary to develop such systematic general fund reductions over time. AMHS operating funding is spent:

- 68% on personnel services
- 2% on travel

- 9% on services/contracts
- 15% on fuel
- 4% on commodities
- 2% on DOT allocated costs HR, information services, administrative support etc.

While it will be necessary for AMHS to reduce all costs, (and improve revenue) it will take significant reductions to system personnel costs, changes to vessel operating models, modifications/reductions in service to communities, more use of commercial providers, and increases in fares (revenue) to reach a target goal that could reduce \$18-22 million in GF in 3-4 years without very substantial service cuts. Our recommendations address changes in these areas.

Draft Implementation Time Line

Nov - 20	<ul style="list-style-type: none"> • Establish short term (2-3 year) implementation team reporting to Deputy Commissioner with authority to develop and implement reshaping implementation actions
Nov - 20 – Dec - 20	<ul style="list-style-type: none"> • Assess union contracts for changes that increase operating flexibility or reduce spend • Work with governor's office on tasks/goals/responsibilities for a Reformed Marine Transportation (Operations) Board (RMTB) • Give away or scrap sell Fairweather, Chenega and Malaspina with goal that whoever takes them takes possession by Jan. 1, 2021.
Dec - 20	<ul style="list-style-type: none"> • Specific contract change goals identified, bargaining schedule to discuss/negotiate with unions established • Draft new RMTB charter for executive order with specific advice responsibilities for fiduciary oversight, efficiency improvements, commercial options, service levels to community, criteria for asset replacement, fleet operating plan, review of system LTP, and others deemed helpful
Jan - 21	<ul style="list-style-type: none"> • Begin labor negotiations • Develop spring summer schedule based on governor's proposed budget. Some negotiation assumptions will need to be a part of this calculation
Feb - 21	<ul style="list-style-type: none"> • RMTB meets -develops priority of issues to address in next 2 years Continue labor negotiations • Identify any issues needing legislative action, develop communication plan and propose changes.

	<ul style="list-style-type: none"> • Develop RFP criteria for assessing privatizing certain system services.
Mar - 21	<ul style="list-style-type: none"> • RMTB reviews and makes recommendations on proposed fare/tariff changes for the summer schedule and any other priority tasks assigned. • Continue labor negotiations Begin soliciting outsourcing interest • Begin overhaul of maintenance planning processes
Apr - 21	<ul style="list-style-type: none"> • Labor Negotiations complete. • Issue RFPs for commercial service, privatized on board services etc.
May - 21	<ul style="list-style-type: none"> • Develop plan and criteria for reducing and eliminating service should labor negotiations not be successful • Work with vessel crews to insure a comprehensive, prioritized maintenance list.
Jun - 21	<ul style="list-style-type: none"> • Based on recommendation of RMTB complete long-term timeline for reducing least one old mainline and one old additional vessel. Review RFPs and assess if more privatizing could still result in acceptable service levels with system cost savings.
Nov - 21	<ul style="list-style-type: none"> • Implement new maintenance processes, guidance and metrics
Jan - 22	<ul style="list-style-type: none"> • Work with RMTB to review criteria for fleet design, long-term vessel replacement/asset management,
Apr - 22	<ul style="list-style-type: none"> • RMTB complete review of long-term asset replacement and fleet design and operating strategy

Note: Actual timeline dates will depend on the date a course of action is initiated.

Additional Member Comments

From Member Ben Goldrich;

Cascade Point would be a terminal Roughly 35 miles north of Juneau built specifically for the ACF's so that they can operate as dayboats from Juneau to Skagway and Haines. There are multiple other options for serving Skagway and Haines that don't include a new expensive terminal. The Cascade Point recommendation comes without careful cost considerations and it is absent a long-term plan. With all the unknown costs of Cascade Point, it seems premature to make this recommendation with many unanswered questions including why there seems to be so much pressure from DOT to complete this project prior to a plan or an explanation about how this project will improve the lives of the travelling public.

Though Cascade Point would shorten the ACF run distance, it now means the travelling public has to get to the end of the road including users who walk on. There has been no regular bus service to the current terminal 13 miles out of town. It seems unlikely that a private carrier could make a profit on this run with an unknown schedule and no future plans.

A partial list of unknown costs and potential issues include the following:

- Road maintenance
- Distance from town
- No service for pedestrians
- Unimproved road in places
- Snow removal
- Increased staffing
- Commute for employee's
- Security
- Staffing costs

Absent a LTP it is hard to understand the rush to include Cascade Point.

Thank you

From Member Representative Louise Stutes:

Concerning the statement, “Tariff recovery came close to covering operating costs.” (pg. 6, paragraph 5).

There is no substantiation for this statement and from everything I’ve been able to ascertain, it is not accurate. I dissent.

Concerning the statement “In 2014, the importance of building an ocean capable “replacement” vessel for the MV Tustumena became a focus for the state following a major service interruption in 2013. The long-term fleet plan for this new ship, already in design, and the future system as a whole is not clear. For example, if this \$220 million plus vessel is not SOLAS (Safety of Life at Sea) compliant (just like the largest current mainline ferry, Columbia) it will likely not be able to carry passengers to or from Canada. That may be ok, or not. Whether it is prudent requires rigorous cost benefit analysis informed by a clear vision of how it will fit long-term system demand, operational strategy and plans. This is a 30-year plus service life asset. Critical decisions about any new vessel should be made with a long term system fleet strategy in mind (pg. 7 paragraph 4).

Concerning replacement of the M/V Tustumena, There is no reason why the replacement M/V Tustumena would not be SOLAS compliant. Page 6 of this report identifies one of the duties of the work group as looking at changes to the fleet, including vessel replacement. The state and federal match for the replacement M/V Tustumena is in place in an existing appropriation, there is a dire need to replace the current vessel, and it should be built without further delay; no ands, ifs, or buts.

Regarding the proposed new nine member AMHS operations board.

I would like to see regional representation from the communities served by AMHS built into the nine-member board, leaving the other qualifications intact. Also, the recommendation states, “Although authority remains with the Governor and Commissioner, ability to influence fundamental decisions would come from the quality and credibility of its members and recommendations.” This hardly provides assurances of change. If governance is to remain under DOT, the AMHS operations board needs to have the teeth to ensure that its recommendations are followed (pg. 15, 3rd bullet).

Concerning the recommendation, “to reduce vessel operating days” (pg. 18, 3rd bullet).

I believe AMHS sailing weeks have already been reduced to the breaking point for the communities I represent. I do not support this as a blanket statement and believe we can avoid this option through other means of cost savings and/or budget negotiations. Further, once long-term changes to the system are made and budget issues are resolved, operating days should go back up.

Concerning the recommendation to, “Aggressively reduce service and vessel capacity seasonally;” (pg. 19, 1st bullet).

I do not agree with that recommendation.

Concerning the recommendation to, “Solicit commercial or other providers (local tribes or communities, for example) to provide service to Ouzinkie, Port Lions, Old Harbor, Seldovia, Tatitlek, Chanega Bay, Pelican, Tenakee Springs and other locations where dayboat ferry service is difficult for AMHS to provide efficiently. Business or community interests may make it appealing to offer service. In assessing offers consider a small state subsidy if lower than the cost of the state ferry service it replaces. The IFA model could provide a workable template. If offered, assess whether providing service with separate passenger and vehicle transport (barge) meets essential community needs. In some cases it may.” (pg. 19, 6th bullet).

The state subsidy does not need to be small. If the state subsidy will be lower than the current subsidy, that should suffice. If commercial or other providers cannot be solicited, AMHS still has an obligation to serve these communities in some fashion; further state subsidy will likely always be required for these routes.

Concerning the statement, “It is understood that serving very small communities with the ferry system model will never be cost efficient, and also understood and appreciated that affordable transportation options are important to them. Ideally if the overall Alaska Marine Highway System could be made revenue/cost positive it could absorb losses on these runs” (pg. 19, 7th bullet).

Although I would welcome AMHS’s transformation to revenue/cost positive system, that isn’t realistic, it shouldn’t be the primary goal, and these communities should be served regardless.

Concerning the recommendation “Reduce service to SW communities to two trips a year, spring and fall. AMHS should initiate work to identify alternate service providers that can provide reasonable service alternatives for service to these communities in the future. A small subsidy to commercial providers may be appealing on this route as well.” (pg. 19, 8th bullet).

I positively disagree with this option. Two runs per year would not be enough to sustain the communities in SW Alaska. Further, looking at population only does not account for fisheries and fish processing activities, which occur heavily along the chain.”

Concerning the section on “leverage road infrastructure” (pg. 22 and 23).

I do not believe it is appropriate to endorse specific projects in this report. I support the idea of leveraging existing road infrastructure where appropriate, but endorsing specific projects that may or not be built and are politically charged does not feel appropriate, is premature, and is well beyond the expertise and scope of this work group.

From Member Lee Ryan:

Reduce System Cost – Recommendations (pg. 19, 8th bullet).

“Reduce service to SW communities to two trips per year.”

I agree with the need to reduce service to reduce costs to some extent, however I disagree with the statement of only 2x per year.

The Aleutian chain has vast opportunity for increased service, connectivity and revenue if considering coordination with aviation and airport infrastructure during peak fishing seasons, especially connecting reliable airline access at Cold Bay due to runway and instrument infrastructure to connect via maritime to Unalaska and Akutan, where airport access and instrument flight infrastructure isn't as reliable due to inclement weather.

This point should also reflect the notion to continue design and acquisition of a replacement vessel (SOLAS capable) for the Tustumena to ensure long-term reliable service.

From Member Tony Johansen:

Under the “Reduce Costs” topic of “Findings and Recommendations”, I support the elimination of all AMHS service to Southwest Alaska. This run services seven communities. Three of those communities have less than 100 residents. Three have less than 1,000 residents. And one has 4,600 residents. Each of these communities has a commercial dock and an airport to meet their transportation needs, better infrastructure than most Alaskan communities. At the present time, DOT&PF is considering the construction of a new ferry to service the transportation needs of these communities as well. The construction of this vessel is estimated to cost about \$250,000,000, a quarter of a billion dollars to serve 7,595 people twice a year. This does not pass the red face test.

Beyond the initial capital cost, a vessel of this size will have a large crew and will be a burden to the operating budget of the AMHS. For the 40+ weeks that it is not in SW Alaska, it will be serving the other AMHS communities with its outsized capacity at an inflated cost. Our charge is to find concrete ways to reduce the operating costs of the AMHS. The elimination of service to SW Alaska will accomplish this while at the same time saving \$250,000,000 in capital expenditures that can be used to address the transportation needs of hundreds of thousands of Alaskans.

References

Administrative Order No. 313

<https://gov.alaska.gov/admin-orders/administrative-order-no-313/>

DRAFT AMHS Economic Reshaping Report

http://dot.alaska.gov/project_info/

Southeast Conference Reports

- AMHS Reform Initiative Overview
http://www.amhsreform.com/sites/amhsreform.com/files/AMHS%20Reform%20Phase%205%20McDowell%20Scope.pdf?sm_au=iVV55RLs35PZMDHHjk7tvK06K81Qp
- Phase One Final Report
http://www.amhsreform.com/sites/amhsreform.com/files/AMHS%20Reform%20Final%20Report.pdf?sm_au=iVV55RLs35PZMDHHjk7tvK06K81Qp
- Phase Two Final Report
http://www.amhsreform.com/sites/amhsreform.com/files/AMHS%20Reform%20Phase%202%20Report%20Rev-%20%28wAppendices2%29.pdf?sm_au=iVV55RLs35PZMDHHjk7tvK06K81Qp
- Next Steps
http://www.amhsreform.com/sites/amhsreform.com/files/AMHS%20Reform%20Phase%205%20McDowell%20Scope.pdf?sm_au=iVV55RLs35PZMDHHjk7tvK06K81Qp

Alaska Marine Highway Reshaping Work Group Webpage

- Agenda
- Minutes/Audio Recordings
- Presentations

<http://dot.alaska.gov/comm/amh-reshaping-workgroup/>

Nickum & Spaulding Associates, Inc Naval Architects – Marine Engineers: October 19, 1982

Report to Governor Bill Sheffield

<http://www.amhsreform.com/sites/default/files/mtab/Spaulding%201982%20Report.pdf>

Marine Union Contracts Links

- Inland Boatmen's Union representing the Unlicensed Marine Unit
<http://doa.alaska.gov/dop/fileadmin/LaborRelations/pdf/contracts/IBU2019-2022.pdf>
- International Organization of Masters, Mates, and Pilots (currently in effect)
<http://doa.alaska.gov/dop/fileadmin/LaborRelations/pdf/contracts/MMP2014-2017.pdf>
- Marine Engineer's Beneficial Association (currently in effect)
<http://doa.alaska.gov/dop/fileadmin/LaborRelations/pdf/contracts/MEBA2014-2017.pdf>

- Letters of Agreements that have been entered into after signing of the current collective bargaining agreement and that modify some term of the master agreement:
<http://doa.alaska.gov/dop/LaborRelations/ContractLettersOfAgreement/>
- All of the State Collective Bargaining Agreements, which also house past agreements:
<http://doa.alaska.gov/dop/laborrelations/unioncontracts/>

Public Input

<http://dot.alaska.gov/comm/amh-reshaping-workgroup/index.shtml#Resources>

Appendix A - System Overview

The AMHS operates an extensive 3,500-mile route with a fleet of 12 vessels that are designed to carry passengers and vehicles ranging in size from motorcycles to large freight containers. Our ferries operate year-round to provide essential transportation to over 35 coastal communities, many not accessible by road (please see Northern Economics Draft Reshaping the Alaska Marine Highways - Appendix B for community profiles dot.alaska.gov/project_info/ or visit the AMHS website Our Communities <http://dot.alaska.gov/amhs/communities.shtml> for more information on each community served by AMHS).

Mainline vessels are the largest ships and typically take more than one day to travel between start and end ports, that provide road access. Dayboats connect smaller communities with each other or with the mainline vessel routes and shuttle ferries are a sub-class of the dayboat ferries.

AMHS operates as a line agency in the ADOTPF. A General Manager directs day-to-day operations and a Deputy Commissioner serves as a liaison with the legislature, the public, and other transportation modes within the department.

The International Organization of Masters, Mates and Pilots (MMP), Marine Engineer's Beneficial Association (MEBA) and Inland Boatmen's Union (IBU) make up the three unions that represent employees who work on the ferries. Combined they employ approximately 670 people, with about two-thirds being members of the IBU.

AMHS in total, employs a total of 750 personnel. System headquarters are in Ketchikan.

Its FY2020 authorized operating budget of \$99.6 million, consisted of estimated fare box receipts of \$48.1 million, Alaska State General Funds of \$46 million, and other funds of \$5.5 million.

Other federal funds, typically about \$16 million per year, are for major capital asset projects or major repairs.

AMHS Vessel Specifications and Capacity

Vessel Name	Vessel Class	Normal Crew Complement	Service Speed (knots)	Fuel Use (gallons/hr)	Passengers	Car Deck (lane feet)	Staterooms
<i>Aurora</i>	Dayboat	24	14.5	190	250	660	N/A
<i>Chenega</i>	Shuttle	10	32.0	600	210	620	N/A
<i>Columbia</i>	Mainline	63	17.3	397	499	2,660	104
<i>Fairweather</i>	Shuttle	10	32.0	600	210	620	N/A
<i>Hubbard</i>	Dayboat	14	16.5	250	290	850	N/A
<i>Kennicott</i>	Mainline	55	16.75	354	450	1,560	109
<i>LeConte</i>	Day-boat	24	14.5	188	225	660	N/A
<i>Lituya</i>	Shuttle	5	11.5	55	125	300	N/A
<i>Malaspina</i>	Mainline	47	16.5	270	450	1,675	72
<i>Matanuska</i>	Mainline	48	16.5	234	450	1,675	106
<i>Tazlina</i>	Dayboat	14	16.5	250	290	850	N/A
<i>Tustumena</i>	Mainline	38	13.3	151	160	680	24

Note: The *Hubbard* is not actually listed in the data source, but it has same design as the *Tazlina* and therefore it is assumed it has the same capacity. The *Chenega* and *Fairweather* are no longer part of the AMHS fleet, but because they are referred to in this report they have been included in the table. Source: AMHS (2019d).

Port Accessibility in Mainline, Lynn Canal, Metlakatla, and Southeast Feeder Route Groups

Facility (CODE)	Route Group	Vessel							
		Aurora	Columbia	Kennicott	LeConte	Lituya	Malaspina	Matanuska	Tazlina & Hubbard
Angoon (ANG)	SE Feeder	X		X	X*			X*	
Auke Bay (JNU)	Lynn Canal, Mainline, SE Feeder	X	X	X	X	X*	X	X	X*
Auke Bay GITGOV (JNU)									X
Bellingham (BEL)	Mainline	X	X	X	X	X*	X	X	X*
Gustavus (GUS)	SE Feeder	X	X*	X [†]	X	X*	X*	X	X*
Haines (HNS)	Lynn Canal	X	X	X	X	X*	X	X	X*
Hoonah (HNH)	SE Feeder	X			X	X*	X	X	X*
Kake (KAE)	Mainline	X			X	X*	X	X	X*
Ketchikan Berth 1-Main (KTN)	Mainline	X	X	X	X	X	X	X	X*
Ketchikan Berth 2-South (KTN)	Mainline	X	X	X	X	X	X	X	X [‡]
Ketchikan Berth 3-Stern (KTN)	Mainline	X			X	X			
Metlakatla (ANB)	Metlakatla	X			X	X			
Pelican (PEL)	SE Feeder	X			X	X*			
Petersburg (PSG)	Mainline	X	X	X	X	X*	X	X	X*
Prince Rupert (YPR)	Mainline	X		X	X	X*	X	X	X*
Sitka (SIT)	Mainline	X	X	X	X	X*	X	X	X*
Skagway (SGY)	Lynn Canal	X	X	X	X	X*	X	X	X*
Tenakee Springs (TKE)	SE Feeder	X			X				
Wrangell (WRG)	Mainline	X	X	X	X	X*	X	X	X*
Hollis (HOL)	IFA	X			X	X			X*

Notes:

X indicates the vessel is compatible with this terminal.

* It is likely that the vessel is compatible with this terminal, but it has not been fully tested.

[†] Kennicott in Gustavus: Kennicott can only access the terminal in fair weather when there is no current due to poor line leads.

[‡] Tustumena at Ketchikan Berth 2: The vehicle elevator & ramp does not match up with shore side transfer bridges and therefore Berth 2 can provide passenger access only.

Source: Reproduced from AMHS (2017).

Port Accessibility in Southwest, Homer-Kodiak, and Prince William Sound Route Groups

Facility (CODE)	Route Group	Vessel							
		Aurora	Columbia	Kennicott	LeConte	Lituya	Malaspina	Matanuska	Tazlina & Hubbard
Akutan City Pier (AKU)	SW								X [†]
Akutan Trident Pier (AKU)	SW								X [†]
Chignik (CHG)	SW			X					X
Chenega Bay (CHB)	Cross-Gulf	X		X	X*				X
Cold Bay (CBY)	SW			X					X
Cordova Terminal (CDV)	PWS	X	X*	X	X	X*	X*	X*	X*
Cordova Ocean Dock (CDV)	PWS				X				X
Dutch Harbor Berth 3 (UNA)	SW			X					X
Dutch Harbor, U.S. Coast Guard Piers 1&2 (UNA)	SW			X					X
False Pass (FPS)	SW								X
Homer Pioneer Dock (HOM)	Homer-Kodiak			X					X
King Cove (KCV)	SW			X					X
Kodiak Terminal (KOD)	Homer-Kodiak								X
Kodiak City Dock (KOD)	Homer-Kodiak			X					X
Old Harbor (OLD)	SW			X					X
Ouzinkie (OUZ)	Homer-Kodiak			X [‡]					X
Port Lions (ORI)	Homer-Kodiak			X					X
Sandpoint (SDP)	SW			X					X
Seldovia (SDV)	Homer-Kodiak			X					X
Tatitlek (TAT)	PWS	X		X	X*				X
Valdez Terminal (VDZ)	PWS	X	X*	X	X	X*	X*	X*	X*
Valdez City Dock (VDZ)	PWS				X*				X
Valdez Container Pier (VDZ)	PWS				X*				X
Whittier Cruise Ship Pier (WTR)	PWS								X
Whittier (WTR)	PWS	X	X*	X	X	X*	X*	X*	X [§]
Yakutat (YAK)	Cross-Gulf			X					X

Notes:

X indicates the vessel is compatible with this terminal.

* It is likely that the vessel is compatible with this terminal, but it has not been fully tested.

† *Tustumena* in Akutan: There are vehicle weight restrictions.

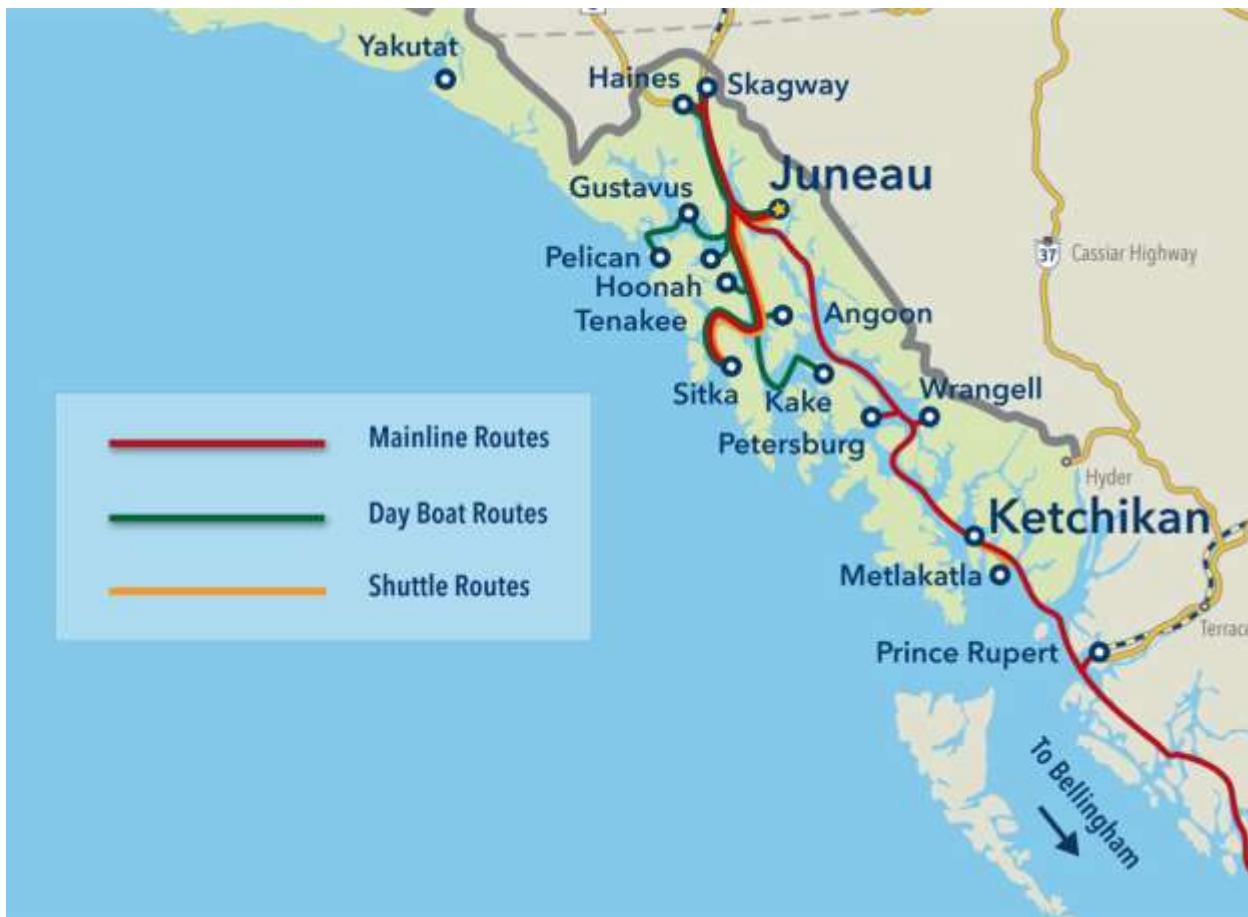
‡ *Kennicott* in Ouzinkie: *Kennicott* can only access the terminal during fair weather conditions, but only because of its poor fit (i.e. the *Kennicott* is too long to negotiate the turn-around at Ouzinkie during adverse conditions).

§ *Tustumena* in Whittier: The *Tustumena* does have a stern door for access to the terminal. In fair weather the vessel can use the Cruise Ship Dock with special Yokohama fenders in place.

Source: Reproduced from AMHS (2017).

Southeast Alaska Routes

The Southeast region includes communities from Bellingham, WA and Prince Rupert, BC, through the Inside Passage, to Yakutat. Most communities in Southeast Alaska receive year-round service with mainline vessels serving larger communities and dayboats connecting to smaller communities. During the summer months, the MV Kennicott connects the regions of Southeast and South Central with sailings across the Gulf of Alaska.



Sample Running Times

Bellingham to Ketchikan: 38 hrs.	Haines to Skagway: 1 hr.
Ketchikan to Wrangell: 6 hrs.	Juneau to Sitka: 9 hrs. 30 mins.
Wrangell to Petersburg: 3 hrs. 30 mins.	Prince Rupert to Ketchikan: 7 hrs.
Petersburg to Juneau: 8 hrs.	Juneau to Hoonah: 3 hrs. 30 mins.
Juneau to Haines: 4 hrs. 30 mins.	Ketchikan to Metlakatla: 45 mins.

Across the Gulf of Alaska Routes

The South Central region includes communities in Prince William Sound and the Kenai Peninsula. These routes provide connections by road to Valdez, Whittier, and Homer and ferry service is provided year-round to most communities in this region. During the summer months, the MV Kennicott connects the regions of South Central and Southeast with sailings across the Gulf of Alaska and the MV Tustumena connects South Central with Southwest with sailings to Kodiak Island and out the Aleutian Chain.



Sample Running Times

Bellingham to Ketchikan: 38 hrs.	Whittier to Chenega Bay: 4 hrs. 30 mins.
Ketchikan to Juneau: 20 hrs.	Chenega Bay to Kodiak: 14 hrs.
Juneau to Yakutat: 17 hrs.	Kodiak to Homer: 9 hrs.
Yakutat to Whittier: 22 hrs.	

South Central and Southwest Routes

The Southwest region includes communities from the Kodiak Island Archipelago, along the Alaska Peninsula, and out the Aleutian Chain to Dutch Harbor. Service is provided year-round to the communities of Kodiak, Ouzinkie, and Port Lions; however, weather restrictions preclude ferry service in the winter to other communities of this region.



Sample Running Times

Homer to Kodiak: 9 hrs.	False Pass to Akutan: 10 hrs. 30 mins.
Kodiak to Chignik: 18 hrs. 45 mins.	Akutan to Dutch Harbor: 3 hrs. 30 mins.
Chignik to Sand Point: 9 hrs. 25 mins.	Homer to Seldovia: 1 hrs. 30 mins.
Sand Point to King Cove: 6 hrs. 45 mins.	Whittier to Valdez: 5 hrs. 45 mins.
King Cove to Cold Bay: 2 hrs.	Whittier to Cordova: 6 hrs. 45 mins.
Cold Bay to False Pass: 4 hrs. 25 mins.	