

AGENDA ITEMS 9-11: CASCADE POINT AND TAZLINA MODIFICATIONS**Meeting:** July 1st, 2022**MEMORANDUM**

TO: AMHOB Members
FROM: Katherine Keith, Change Management Director
SUBJECT: Cascade Point and Tazlina Modifications
REVIEWED BY: DOT&PF/AMHS Capital Planning Team

Recommendation

DOT&PF/AMHS recommends including modifications to M/V Tazlina and a ferry terminal at Cascade Point in the next statewide transportation improvement program (STIP) amendment.

Background

The State of Alaska is reinvesting into modernizing our aging ferries and port-side facilities. While DOT&PF/AMHS strives to serve its communities through safe, reliable ships, qualified staff, and contracted service, opportunities exist for improvement. The AMHS Modernization Plan includes deploying modern, efficient, and digital technologies.

The North Lynn Canal Ferry Service is a critical transportation connection between the contiguous National Highway System and Alaska's third-largest city and capital. It also serves as a multimodal connection for Haines and Skagway to access medical services and an international airport in Juneau. Historically, the North Lynn Canal route is DOT&PF/AMHS's second-largest volume, behind the Bellingham/Juneau run. With limited resources, traffic forecasting and value stream analysis can help identify where we are not meeting our demand. North Lynn Canal has high levels of unconstrained traffic. The current operational configuration limits the mobility of residents, but solutions exist to increase service and offer myriad benefits to a wide range of stakeholders.

Discussion

The Alaska DOT&PF proposes to operate the Alaska Class Ferries (ACF) out of a new ferry terminal at Cascade Point, MP 42 of the Glacier Highway. Compared to the current facility in Auke Bay, a facility at Cascade Point will allow the public to travel faster to Haines and Skagway and benefit from a reduced fare. In a report from October 2020, the AMHS Reshaping Work Group estimated that a ferry terminal at Cascade Point would reduce Juneau-Haines and Juneau-Skagway one-way sailing by about 30 miles and 2.1 hours; current models by DOT&PF/AMHS indicate a one-way time savings of 1.5 hours (Table 1). Cost savings could be realized by the state or by passengers with fare reductions. With fare reductions of 25%, the public will save \$1,250,000 in fares.

The relationship between service schedules, traffic, and revenue is complex. Until more advanced forecasting is in place, DOT&PF/AMHS has completed preliminary data-driven scenario-based modeling to determine the benefits and costs of a Cascade Point Ferry Terminal and the appropriate modern vessel configuration needed to increase service levels to North Lynn Canal. According to traffic forecasts

completed for the Juneau Access EIS, the total unconstrained traffic demand for North Lynn Canal vastly exceeds capacity. The current operational configuration limits the mobility of residents, while the proposed schedule increases the potential for myriad benefits. A shorter route, enabled by constructing a terminal at Cascade Point, is a critical first step towards improving travel in North Lynn Canal. This project has been under consideration for over fifteen years as part of the Juneau Access Improvements Project

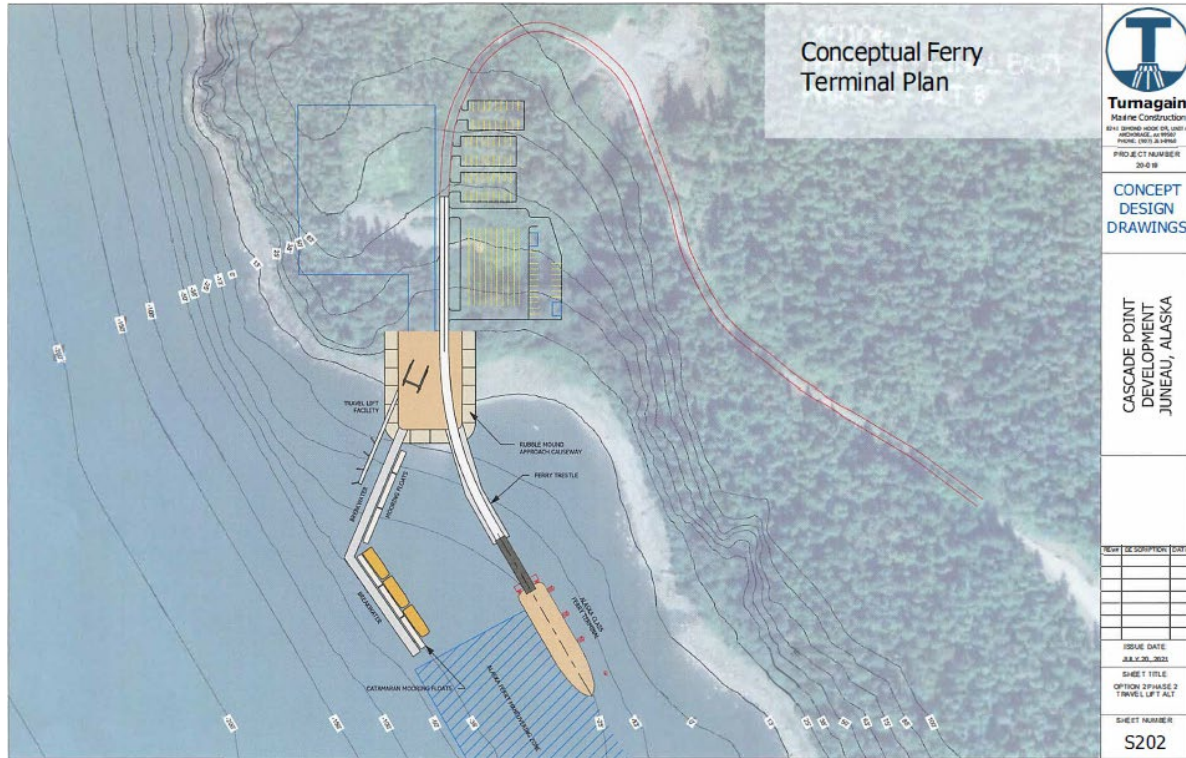
North Lynn Canal will primarily be serviced by an ACF, the Tazlina. After evaluating the impacts of Cascade Point operations, it was found that operating the Tazlina with crew quarters costs approximately the same as without crew quarters. Crew quarters also provide system-wide flexibility and resiliency during the winter season. For system-wide flexibility and resiliency, modifications are needed on Tazlina. In addition to the installation of crew quarters to remove the USCG work/rest crewing restrictions and an onboard vessel waste system, Tazlina's modern switchgear requires sensors to support data-driven operations. Remotely available high-resolution data enables engineers to analyze performance and make real-time recommendations to captains on pilotage and loading practices to realize up to 20% fuel savings..

Cascade Point Ferry Terminal (Current Estimate \$36M, spread out over multiple years in lease payments). Preliminary modeling¹ indicates that there is a positive economic benefit as well as passenger time savings when Cascade Point is the homeport in comparison to Auke Bay. Benefits include improved access to Lynn Canal that increases in the movement of goods and people, resulting in better connections among the economies of Juneau, Haines, Skagway, and Whitehorse. These benefits increase significantly as we modernize the AMHS fleet using proven technology, funded through discretionary grants², to construct an electric ferry to shuttle passengers between Haines and Skagway.

DOT&PF/AMHS proposes to construct a new terminal at Cascade Point, Bemers Bay, Alaska. The conceptual site plan shows a single-end loading ferry berth and Cascade Creek Bridge is 50' long which will lead to a staging and parking area. Associated upland access will include vehicle staging, parking, and other features. This would be an unmanned day-use terminal, with facilities such as a generator shed and pit-style restrooms including ancillary support infrastructure such as a 10,000-gallon sewage holding tank, 5,000-gallon fuel storage tank, electrical generation, and potable water. The sewage holding tank is critical; otherwise, a minimum of one day per week is needed to dump waste in Auke Bay, resulting in loss of service and revenue. Other options for water and fuel exist in Skagway, but it takes many hours, restricting routing options. The concept plan includes accommodations for other marine uses (Kensington Mine boat shuttle) by Goldbelt.

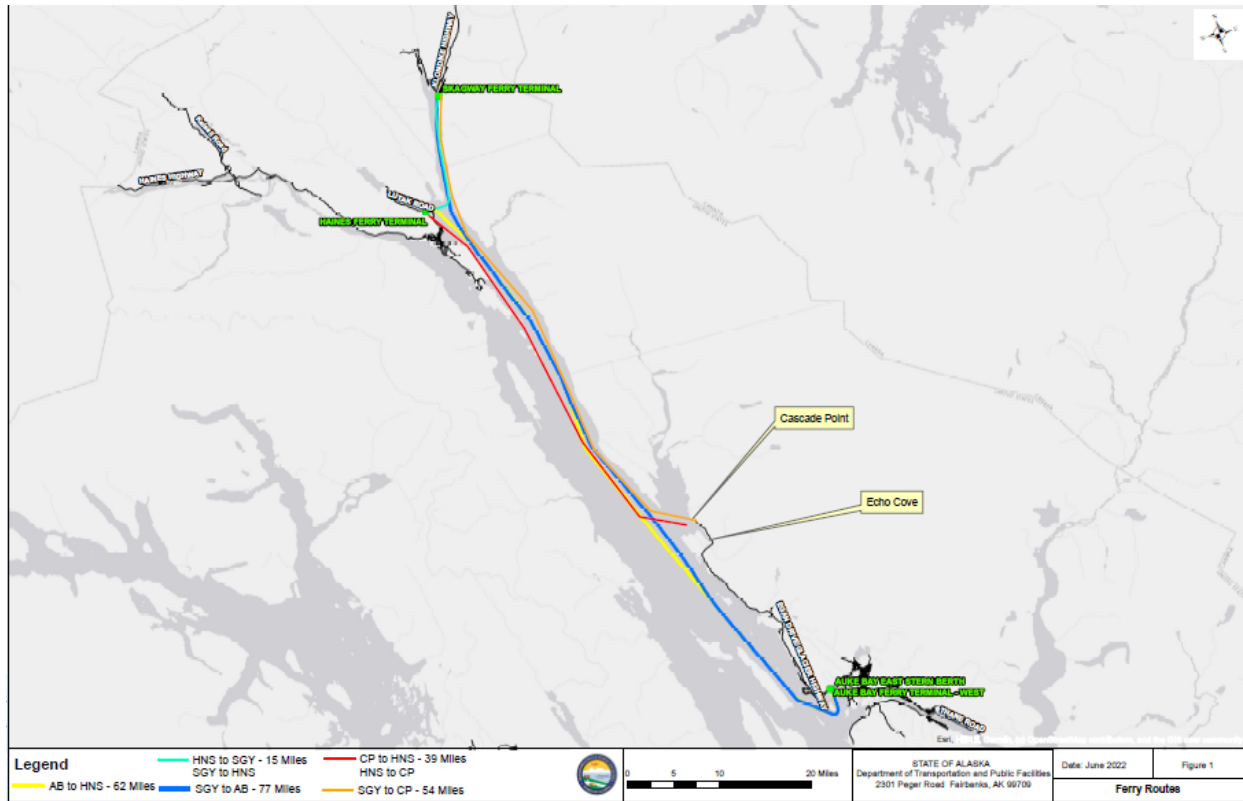
¹ See "Preliminary Scenario-based Modeling"

² See "IIJA Funding and Discretionary Grants" at <https://dot.alaska.gov/amhob/strategy.shtml>



Tazlina Modifications (STIP Amendment #4: \$23m)

Crew quarters on Tazlina enable AMHS to operate beyond the USCG work/rest rules and support its deployment across SE Alaska. They also open possibilities for winter service. While numerous scenarios exist, service to North Lynn Canal remains limited without crew quarters. Modernizing Tazlina will also include digitization of operation by adding sensors and software to collect needed run-time data. It also could include magnetic mooring to allow for unmanned docking in ten seconds for improved crew safety and fuel savings. The Hubbard is currently under construction getting crew quarters installed at an estimated \$17.9m.



Route	Miles	Time
Auke Bay to Haines	62	4.1
Cascade Point to Haines	39	2.6
Haines to Skagway	15	1.0
Skagway to Auke Bay	77	5.1
Skagway to Cascade Point	54	3.6

Fiscal Impact

The Tazlina Modifications are estimated to cost \$23m and the Cascade Point current estimate for the Cascade point Terminal is \$36M and will be broken out into four annual lease payments of \$9m.

End

CITY OF SKAGWAY, ALASKA

RESOLUTION NO. 03-08R

A RESOLUTION OF THE CITY OF SKAGWAY, ALASKA SUPPORTING IMPROVED FERRY SERVICE BETWEEN JUNEAU AND THE UPPER LYNN CANAL AND OPPOSING THE CONSTRUCTION OF ANY ROAD LINKING JUNEAU TO SKAGWAY OR HAINES.

WHEREAS, Skagway treasures its geographical and historical uniqueness; and

WHEREAS, a transportation system should be compatible with the existing economy and lifestyle of a community; and

WHEREAS, the greatest demand for ferry service exists in the Upper Lynn Canal between the ports of Haines, Skagway and Juneau; and

WHEREAS, the current demand for reliable, consistent, and economic travel exists in the Upper Lynn Canal between the ports of Haines, Skagway and Juneau; and

WHEREAS, any road up Lynn Canal involves enormous construction expense, high maintenance costs, potential threat to public safety, and environmental degradation; and

WHEREAS, roads frequently have serious negative impacts and historically result in the closure of small, locally owned businesses and services; and

WHEREAS, a road link to Juneau could end Skagway's historic position as the Gateway to the Yukon and the northern port facility for goods going into the interior; and

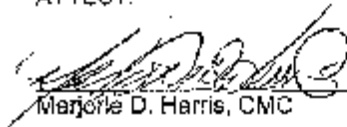
WHEREAS, a road could result in the loss of year-round jobs provided by tug and barge service, air service, freight and ore shipment, and ferry terminal and long shore services; and

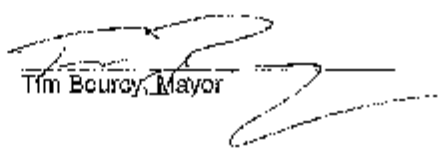
WHEREAS, a road could alter cruise ship traffic patterns, which could have negative impacts on Skagway as a tourist destination;

NOW THEREFORE, BE IT RESOLVED, that the Skagway City Council urges Governor Murkowski to support improved ferry service between Juneau and Upper Lynn Canal and reconsider the construction of any road linking Juneau to Skagway or Haines.

PASSED AND APPROVED this 15th day of January, 2004.

ATTEST:


Marjorie D. Harris, CMC


Tim Bourcy, Mayor

City Clerk

(SEAL)

March 18th, 2022

Governor Michael Dunleavy
PO Box 110001
Juneau, AK 99811-0001
Re: Alaska Marine Highway

Dear Honorable Governor Dunleavy,

The Skagway School Board supports reliable and dependable ferry services in Alaska. The Alaska Marine Highway System (AMHS) is a critical part of our lives in Skagway. The students of Skagway and their families rely on ferry services for critical medical care, economic opportunities, and school athletic and academic activities.

Due to our limited medical system in Skagway, the AMHS provides life-saving transportation to our students and their families in need of medical services. There have been many students and their family members who have had to delay seeing medical specialist due to unreliable ferry service. Sadly, the difficulty in the ability to travel to Juneau, Anchorage, and Seattle to see medical specialist has impacted learning, and we have seen students' untreated medical conditions impact their ability to learn and grow with their peers.

The unreliable ferry service has also impacted our students and their families economically. Many of our students and their families have been struggling financially during the pandemic. Skagway has relied heavily on independent travelers, and these travelers rely on AMHS to get to Skagway and other communities in Southeast Alaska. Without consistent services, this tourism market has declined impacting our community's economic health.

The lack of consistent ferry services has also greatly impacted school activity related travel. The district has been forced to cancel or pay for expensive alternatives for our students to participate in athletic and academic events. At times, the District has had to charter flights at the cost of \$25,000 and \$30,000 to ensure our students had opportunities to participate in extracurricular activities. If there were reliable and consistent ferry services, these trips could have only cost the district around \$4,000. These extracurricular activities provide an opportunity for broadening our students' interests and perspectives, while helping them achieve higher self-esteem and closer relationships with each other. Without consistent AMHS service, the district may have to cut back on these important travel and learning opportunities for our students.

The State of Alaska has an opportunity to rebuild our ferry system to be the best in the world, and we urge you not to delay in investing and putting all the energy of the Governor's office into making AMHS into the reliable, cost effective, and safe way to travel that our students, their families and the other residents of Alaska deserve.

Sincerely,

John Hischer
Skagway School Board President

Resolution 2022-03

Alaska Marine Highway Operations Board

Recommend that DOT&PF/AMHS include modifications to M/V Tazlina in the next statewide transportation improvement program (STIP) amendment.

WHEREAS, the Alaska Marine Highway Operations Board (AMHOB) was established by the State of Alaska House of Representatives Bill 63 to offer recommendations to the Alaska Department of Transportation and Public Facilities (DOT&PF), Alaska Marine Highway System (AMHS) regarding the statewide transportation improvement program (STIP); and

WHEREAS, at its meeting on July 1st, 2022, DOT&PF/AMHS discussed details regarding M/V Tazlina modifications; and

WHEREAS, the construction of crew quarters on Tazlina enables AMHS to operate with greater flexibility considering the 12 hour day USCG work/rest rules and supports its deployment across SE Alaska including possible winter service; and

WHEREAS, DOT&PF/AMHS recommends that Tazlina Modifications be included in the next STIP amendment to better serve residents on Alaska's marine highway; and

WHEREAS, DOT&PF/AMHS recommends to AMHOB members that they complete modifications to Tazlina, including the construction of crew quarters; and

THEREFORE BE IT RESOLVED, that AMHOB recommends that DOT&PF/AMHS begin modifications to Tazlina, including the construction of crew quarters, the first steps of which are to include it in the next STIP amendment and begin a formal public process.

CERTIFICATION

The undersigned, the AMHOB Secretary, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the Alaska Marine Highway Operations Board that was held on July 1st, 2022.

YEA:

NAY:

ABSTAIN:

ABSENT:

Board Admin Assistant