



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Transportation and Public Facilities

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10/15/2025

Dear Alaskans,

The Alaska Department of Transportation and Public Facilities (DOT&PF) commissioned the attached Analysis of the Proposed Cascade Point Ferry Terminal in direct response to questions and interest from residents of Juneau and the North Lynn Canal communities. Over the past 18 months, the State has conducted extensive engineering evaluations of the Cascade Point site to better understand its opportunities and constraints. In addition, DOT&PF has begun construction on the uplands work required for the terminal facility using existing state appropriations dedicated to improving access to Juneau.

This report reflects our commitment to listening to community concerns and framing Cascade Point comprehensively—beyond technical design—by considering operational improvements, economic development potential, tribal leadership, cultural stewardship, and environmental responsibility. Prepared by economist Ed King, the analysis weighs arguments both in support of and in opposition to the project and provides a structured framework to better understand its potential role in Southeast Alaska's transportation system and economy.

The Cascade Point project is aligned with key priorities and strategies of the Alaska Marine Highway System (AMHS) 2045 Long-Range Plan. That plan calls for modernizing fleet and terminal assets to promote resiliency and standardization, increasing system reliability, and improving community connections. It specifically identifies evaluating potential road connections—such as between Kake and Petersburg or Tenakee and Hoonah—to reduce ferry route lengths, improve efficiency, and lower operating costs without presuming those connections will be built. Cascade Point is consistent with this multimodal approach by extending road access to shorten ferry routes and enhance the overall resiliency of Southeast Alaska's transportation system.

The plan also underscores that standardization and resiliency across terminals and vessels allow for greater flexibility, improved reliability, and cost efficiency throughout the system.

The attached report is intended to inform and help frame this project at a high level, highlighting opportunities, trade-offs, and considerations identified through the analysis. We encourage all Alaskans—especially residents of Juneau and the North Lynn Canal communities, to review the findings in full and engage with us in follow-up discussions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ryan Anderson".

Ryan Anderson, P.E.
Commissioner

Alaska Department of Transportation & Public Facilities

"Keep Alaska Moving."

Analysis of the Proposed Cascade Point Ferry Terminal

Date: 9/26/25

Prepared for: Alaska Department of Transportation

Prepared by: Ed King, Economist

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I. Executive Summary

This report evaluates the potential impacts of relocating Alaska Marine Highway System (AMHS) ferry operations from Auke Bay to Cascade Point, located 28 miles north of the current terminal Juneau. The proposed terminal is expected to serve as a departure point for ferries operating in the Northern Lynn Canal, particularly those connecting Juneau, Haines, and Skagway. The decision involves a range of operational, economic, environmental, social, and cultural trade-offs that affect state agencies, local governments, Native corporations, and the public.

The report draws from data modeling, stakeholder input, historical ridership trends, and fiscal impact analysis to present a comprehensive assessment. It is structured to distinguish between testable claims, projected impacts, and subjective policy priorities.

A. Results

The proposed relocation of ferry operations to Cascade Point presents a range of tradeoffs for policymakers to consider. The project offers quantifiable operational efficiencies and emissions reductions, along with the potential to support tribally affiliated infrastructure and industrial logistics development. These benefits are offset by longer drive times for Juneau-based passengers, increased infrastructure responsibilities, and uncertainty regarding long-term financial returns.

From a fiscal perspective, direct Alaska Marine Highway System (AMHS) savings do not yield attractive financial returns on investment. However, the project yields public-sector outcomes typical of state-funded infrastructure, including improved reliability, lower emissions, and increased system flexibility. These align with AMHS's mandate to provide essential public transportation, independent of profitability.

A summary of quantified benefits and tradeoffs is provided below:

Benefits	Category	Costs
\$943,000 efficiency gains + \$136,000 revenue gains	✓ Operational	\$481,000 new expenses
1,306 metric ton CO2 reduction from ferries	✓ Environmental	118 metric ton CO2 addition from road vehicles
Short-term construction growth; long-term mining opportunities	✓ Economic	\$46,000 shift from general spending to fuel

Enhanced community accessibility and social interaction	✓ Social	No identified direct social costs with shuttle service in place
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From a broader perspective, the rationale for investment in Cascade Point depends in part on whether the project is evaluated as a standalone terminal or as part of a more integrated regional transportation strategy. Considered in isolation, the project offers modest operational improvements and introduces new infrastructure responsibilities. However, its strategic value becomes more apparent when viewed as a component of a restructured Northern Lynn Canal corridor—potentially enabling shorter shuttle routes, road extensions, and more flexible ferry service models.

Partnership opportunities, particularly with entities such as Goldbelt, Inc., could further enhance the utility of the site beyond ferry operations. Potential synergies include improved access to mineral and industrial logistics, expanded tourism infrastructure, and cost-sharing arrangements for capital and maintenance. While such partnerships do not eliminate financial uncertainties, they broaden the benefit profile and strengthen the overall feasibility of the project.

Ultimately, comparing these benefits to the required capital investment involves subjective judgments about the weight and value of operational, environmental, and social outcomes. The technical analysis establishes a consistent foundation for deliberation, but it does not produce a single definitive recommendation. Further study is unlikely to alter the essential tradeoffs identified here, suggesting that the decision rests primarily on policy priorities and strategic objectives rather than outstanding data gaps.

B. Review of Arguments for and Against

Public opinion remains divided. Paraphrasing the arguments for and against, supporters point to enhanced transportation reliability, environmental gains, and tribal economic participation. Opponents have expressed concerns about cultural and ecological impact, access equity, and financial justification. These viewpoints are tested through the report and are summarized below.

Category	Hypothesis	Finding Summary
Operational	Relocating the terminal to Cascade Point will	Supported. Reduced vessel hours are projected to save \$943,000 per year

	meaningfully reduce ferry operating costs.	compared to adding \$481,000 of new operating costs.
Operational	Cascade Point will increase ferry use on the Northern Lynn Canal route.	Supported. Ridership is projected to rise by around 5% due to route efficiency.
Economic	Cascade Point will increase general economic activity throughout the region.	Not supported. Most changes reflect redistribution, not new economic output.
Economic	Cascade Point will allow new resource development.	Supported. Reduces logistical barriers and costs, which improves economic feasibility of Amalga Mine.
Economic	Long-term savings will offset capital and maintenance costs.	Not supported. Construction costs are unlikely to be recovered in a meaningful timeline without additional changes.
Environmental	Cascade Point will disrupt natural habitats and result in ecological disruption.	Not supported. Impacts are possible but must be mitigated to receive permits.
Environmental	Net transportation emissions will decline.	Supported. Reduction in ferry emissions dwarf increases in motor fuel use.
Social & Cultural	The frequency of community travel will increase.	Supported. Ridership is expected to increase by around 5%, primarily for non-urgent regional travel. Commuting remains unlikely.

C. Key Findings by Category

1. Operational Efficiency

- ✓ The shortened ferry route from Cascade Point would save approximately 117,000 gallons of marine diesel annually, reducing fuel costs by an estimated \$560,000.
- ✓ Reduced engine hours would delay costly repairs during vessel overhauls, generating an estimated \$200,000 in average annual maintenance savings.
- ✓ Combined, these savings improve AMHS operating margins and extend asset longevity, though they will not fully recover construction costs.

- ✓ Up to \$500,000 in labor savings would be possible if the total route time fell below 12 hours per day. As the new route time is estimated to be 13 hours, no labor cost reductions are expected to materialize absent changes in AMHS assets and deployment.
- ✓ Cascade Point would offer strategic benefits by increasing the adaptability of the existing system and supporting the feasibility of further regional transportation infrastructure development.

2. Economic Impacts

- ✓ Terminal construction would provide a short-term boost to the local economy through job creation and procurement.
- ✓ Direct long-term employment effects are slightly positive, due to the 5 staff positions and 1 shuttle driver.
- ✓ The development of New Amalga Mine has the potential for substantial economic development in the region.
- ✓ A shift in fuel purchases from marine to road fuel would generate minimal net economic change—mostly a redistribution of activity.
- ✓ Impacts on shipping costs, fisheries, tourism, and regional industry are limited, though not zero.
- ✓ Property development could eventually expand the City and Borough of Juneau’s property tax base, although too speculative to quantify.

3. Social and Tribal Considerations

- ✓ Faster ferry service could enhance regional connectivity for Northern Lynn Canal communities and the Yukon, enabling more frequent participation in cultural, medical, and commercial activities.
- ✓ The added 28-mile drive imposes costs and access burdens for Juneau-based travelers and visitors, especially those without personal vehicles.

- ✓ A proposed shuttle service from Goldbelt Corporation would improve accessibility and is expected to be integrated with Capital Transit.
- ✓ As the landowner, Goldbelt views the project as an opportunity to demonstrate Alaska Native leadership in infrastructure development and to create shareholder employment and revenue.
- ✓ Culturally significant sites near Cascade Point require supervision and may offer archaeological learning opportunities during planned excavation.

4. Environmental Effects

- ✓ Ferry fuel savings would reduce net CO₂ emissions by approximately 1,188 metric tons annually, even after accounting for additional vehicle travel.
- ✓ The project will require environmental permitting, timing restrictions, and habitat mitigation.
- ✓ Project development and increased traffic will place new burdens on the local road system, with incremental maintenance costs estimated at \$30,000 per year.
- ✓ The location supports potential future electrification of ferry service with a hybrid vessel, enabling deeper decarbonization of marine transport.

5. Ancillary Effects:

- ✓ The project could enable further transportation upgrades, amplifying the value Cascade Point creates in isolation.
- ✓ New major customers (terminal and mine) could be enticed utility expansion for power, internet, and communications.
- ✓ The route would become eligible for National Highway System designation, potentially unlocking federal maintenance and infrastructure funding.
- ✓ Impacts on local and state governments exist, although minor in scale.

D. Final Assessment

The extensive capital costs of the Cascade Point terminal are difficult to justify based solely on operational cost savings. In isolation, the project provides modest reliability gains and reduces emissions but also introduces new infrastructure responsibilities and long-term maintenance obligations.

However, the project's perceived value increases when broader considerations are taken into account. It may serve as a foundational element in a more efficient Northern Lynn Canal transportation network—one that enables shorter shuttle routes, potential road extensions, and more adaptable service models. Strategic partnerships, particularly with entities such as Goldbelt, Inc., offer opportunities to expand utility beyond ferry service, support regional tourism and resource development, and reduce the financial burden on the State through shared investment and operational costs.

Whether these additional factors tip the balance in favor of investment cannot be resolved through technical analysis alone. The decision ultimately depends on how much weight policymakers assign to social value, long-term resilience, environmental considerations, and system-wide efficiency. These subjective judgments are an inherent part of public infrastructure planning and should be evaluated with an eye toward both present limitations and future potential.

Further research is unlikely to materially alter the underlying trade-offs. Instead, decision-makers may wish to ensure a consistent basis is present during debate. This may include:

- **Strategic Framing** – Viewing the project as a component of a larger, multi-phase transportation plan, comparable to other state-supported infrastructure such as rural roads and bridges.
- **Long-Term Public Value** – Weighing social and operational benefits over a longer time horizon, rather than focusing solely on short-term financial metrics.
- **System-Wide Efficiencies** – Accounting for improved reliability, emissions reductions, and flexibility across the broader AMHS network.
- **Partnership Potential** – Adjusting capital cost and economic assumptions to reflect co-investment or shared use with entities such as the mining sector or Alaska Native corporations.
- **Scenario Analysis** – Evaluating and comparing common best- and worst-case outcomes to better understand risks, upside potential, and resilience under varying conditions.

II. Foundational Information

A. Introduction

The proposed Cascade Point ferry terminal in Juneau, Alaska, has generated substantial debate among residents, policymakers, and stakeholders. Proponents emphasize the operational efficiencies, economic advantages, and enhanced accessibility that the terminal could bring, whereas opponents express concerns related to environmental impacts, cultural preservation, and the financial viability of the project.

A thorough evaluation requires a detailed understanding of both the potential benefits and the associated risks. Many critical factors influencing the project's feasibility remain uncertain, necessitating a comprehensive analysis to assess whether the anticipated benefits justify the investment required.

This report provides a structured framework for informed decision-making by systematically assessing and quantifying the benefits and costs associated with the Cascade Point terminal. It integrates publicly available data, stakeholder viewpoints, and operational considerations. Quantitative measures have been applied where possible to facilitate clear comparisons, while areas of uncertainty are acknowledged and represented with estimated value ranges.

While preliminary estimates for construction costs and funding strategies are in place, these elements remain fluid and subject to refinement. The primary objective of this analysis is to determine whether the expected benefits significantly outweigh the operational costs. Should a notable imbalance be evident, careful consideration of the capital investment should commence. If operational costs clearly exceed the anticipated benefits, the project can confidently be rejected. However, if benefits and costs are reasonably aligned, further targeted analysis should depend on whether the additional clarity gained from further research justifies the associated cost and effort.

B. Summary of Points Noted in Public Documents

Public discussions surrounding the proposed Cascade Point ferry terminal have highlighted a wide range of perspectives, encompassing economic, operational, environmental, social, and cultural dimensions. The following summary synthesizes key arguments identified from board meetings, public testimony, legislative debates, and

stakeholder communications, organized into arguments supporting and opposing the project. ***The validity of many of these points is tested in the rest of this report.***

1. Public Arguments Supporting the Cascade Point Terminal

i. **Enhanced Transportation Efficiency**

Advocates argue that relocating the ferry terminal to Cascade Point will significantly enhance the efficiency and reliability of transportation within the Alaska Marine Highway System (AMHS). A shorter and more direct ferry route is anticipated to reduce travel times, improve schedule reliability, and strengthen regional connectivity. Proponents emphasize that operational savings realized through reduced vessel hours, and crew costs could be reinvested to improve services elsewhere in Southeast Alaska. Furthermore, the establishment of a dedicated North Lynn Canal route may facilitate future use of hybrid diesel-electric ferries, potentially offering additional operational and environmental benefits.

ii. **Economic Development and Improved Accessibility**

Supporters highlight the economic advantages associated with improved transportation infrastructure, including increased tourism, enhanced market access, and strengthened commercial relationships among Juneau, Haines, and Skagway. They assert that a reliable ferry system could attract higher visitor volumes, boosting spending in local businesses and hospitality sectors. Additionally, improved transportation predictability may encourage weekend tourism by Juneau residents to neighboring communities and improve access to essential medical care for Northern Lynn Canal residents.

iii. **Employment Opportunities**

Proponents argue that construction and ongoing operation of the Cascade Point terminal is expected to generate significant employment opportunities. They suggest that temporary construction jobs and permanent operational positions—both directly with AMHS and indirectly within related sectors such as tourism, transportation, and retail—would benefit the regional economy. Additionally, proponents believe improved intercommunity transportation could expand the available labor pool for Juneau's mining sector, thereby supporting long-term regional economic growth.

iv. **Environmental Benefits**

Advocates emphasize that a shorter ferry route from Cascade Point to Haines and Skagway would substantially reduce overall ferry fuel consumption, leading to lower emissions and operational cost savings. They also argue that increased ferry utilization could reduce reliance on higher-emission transportation options, such

as air travel and long-haul ferry routes, further contributing to environmental sustainability.

v. **Social Connectivity**

Proponents assert that improved transportation reliability and connectivity between Northern Lynn Canal communities would enhance social interactions, fostering greater participation in regional events, youth and adult sports, cultural gatherings, and family activities. This strengthened connectivity is expected to contribute positively to regional quality of life.

2. Public Arguments Opposing the Cascade Point Terminal

i. **Environmental and Ecological Concerns**

Opponents have expressed significant concerns regarding potential environmental impacts arising from constructing and operating a new ferry terminal at Cascade Point. They highlight potential disruptions to marine habitats, sensitive coastal ecosystems, and wildlife corridors. Increased vehicle traffic associated with extending road access to Cascade Point raises concerns about higher local emissions, noise pollution, and ecological disturbances.

ii. **Cultural and Historical Preservation**

Critics emphasize potential threats to culturally and historically significant sites within the proposed terminal area. They argue that construction activities could adversely impact archaeological resources, traditional land use areas, and heritage landmarks of particular importance to Indigenous communities, potentially resulting in irreparable loss or disruption.

iii. **Financial Feasibility and Resource Allocation**

Opponents raise concerns over the substantial financial investment required to construct and maintain the new terminal. They question whether public funds might be more effectively utilized to address other critical community needs, such as education, healthcare, or existing infrastructure improvements. Additionally, some critics doubt whether anticipated revenue generation and operational savings from relocating ferry operations to Cascade Point would justify the significant capital expenditure, especially if projected ridership growth does not materialize.

iv. **Demand Uncertainty and Necessity**

Some critics question the necessity of establishing a new ferry terminal at Cascade Point, suggesting that the current Auke Bay facility sufficiently meets existing transportation demands. They challenge assumptions underlying projected ridership increases, arguing that expected benefits may be overstated. Additionally, opponents express concerns about potentially negative impacts on businesses and

service providers established around Auke Bay, questioning whether the benefits justify disrupting current economic patterns.

c. Baseline Assumptions

The following assumptions define the current operational framework of the Alaska Marine Highway System (AMHS) for ferry service between Juneau, Haines, and Skagway. This baseline serves as a consistent reference point for evaluating the specific operational impacts of relocating terminal operations from Auke Bay to Cascade Point in isolation. Broader implications are discussed throughout the remainder of this report.

Factor	Auke Bay	Cascade Point
Route	Juneau → Haines → Skagway → Haines → Juneau	No change
Vessel in Operation	M/V Hubbard	No change
Speed	15 knots	No change
Fuel Use	185 gallons per hour	No changes
Service Days per Year	197	No change
Distance to Haines	68 nautical miles (78 statute)	44 nautical miles (51 statute)
Ticket prices	\$45 per passenger and \$120 per vehicle	No change
Drive from VTC	4.5 miles (8 mins)	33 miles (41 mins)

D. Baseline Traffic Volumes

Traffic volumes are based on data from the 2023 Annual Traffic Volume Report published by the Alaska Department of Transportation and Public Facilities. The relevant data for this analysis includes only passenger and vehicle traffic between Juneau and Haines/Skogway. The following volumes were reported for the calendar year 2023:

From	To	Passengers	Vehicles
Juneau	Haines	16,559	4,146
Juneau	Skagway	9,935	2,365
Haines	Juneau	16,074	4,215
Skagway	Juneau	10,153	3,213

E. Methodology

Normalization of Data

Because not all 2023 traffic volumes would be affected by the relocation to Cascade Point, data must be normalized to enable consistent comparisons. The 2023 ATVR (page 75) provides trip frequency data by port pairing. The relevant pairs are summarized below.

From	To	Trips
Juneau	Haines	238
Haines	Skagway	238
Skagway	Haines	234
Haines	Juneau	234
Juneau	Skagway	8
Skagway	Juneau	11
Bellingham	Ketchikan	41

Using this data, average passenger and vehicle loads per sailing are calculated:

From	To	Total Trips	Average Passengers	Average Vehicles
Juneau	Haines	238	70	17
Juneau	Skagway	242	41	10
Haines	Juneau	234	69	18
Skagway	Juneau	245	41	13
Total per day boat loop			221	58

Following the removal of mainline data (explained below), this analysis focuses on the 197 day boat routes directly affected by the Cascade Point scenario. This results in an annual impacted traffic volume of approximately 48,942 passengers and 13,871 vehicles (including both directions).

Mainline Route Exclusion

The 238 trips between Juneau and Haines serve as a representative measure of overall travel along the Northern Lynn Canal route. Of those, the 41 trips operating between Bellingham, WA, and Ketchikan, AK, are indicative of mainline routes traversing the Northern loop from Auke Bay. It is assumed that the mainline route would not be redirected to Cascade Point from the south, and incorporating Cascade Point into the route would be

redundant. As such, baseline traffic data related to mainline passengers and vehicles have been omitted from this Cascade Point assessment.

Operational Change Handling

It is essential to clearly distinguish between direct impacts attributable to the project and those resulting from subsequent administrative or operational decisions. In this analysis, all financial impacts are quantified in dollar terms, specifically reflecting operational differences stemming directly from relocating baseline operations from Auke Bay to Cascade Point.

This method ensures that double counting of value creation is avoided. For instance, should operational savings be used to reduce fares, any corresponding decrease in ticket revenue must be incorporated into the total valuation of realized savings. Moreover, any fare adjustments would require evaluation of their potential effects on baseline demand to ensure that the true economic impact of the project is accurately isolated from changes resulting from increased budgetary support.

Likewise, maintenance savings associated with reduced vessel utilization must not be conflated with potential gains from redeploying vessels to other routes. Accurate accounting demands precise identification and consistent attribution of where value is realized. The most effective practice is to report directly quantifiable dollar savings and revenues, intentionally excluding secondary impacts resulting from subsequent deployment or administrative decisions.

This methodology allows for a clear comparison of the value generated by the project itself. Unlike previous assessments—which projected increased service frequency and reduced fares—this approach focuses strictly on causal impacts of the project itself.

III. Ridership Impacts

Relocating the ferry terminal to Cascade Point would shorten the ferry route and improve overall reliability for the Northern Lynn Canal communities. Passengers traveling between Juneau, Haines, and Skagway would benefit from faster transit times, enabling more efficient trip planning and better coordination with connecting transportation. These efficiencies may also increase the ferry's appeal as a cost-effective alternative to regional air travel.

In addition to shorter sailing times, the new terminal may enhance the passenger experience through:

- ✓ Modernized waiting areas, including Wi-Fi and internet access.
- ✓ Optimized vehicle staging to improve loading efficiency.
- ✓ Streamlined boarding procedures.

However, the relocation introduces additional costs as well. Passengers must drive a longer distance to or from the terminal, resulting in more fuel use, vehicle degradation, and time on the road. This section examines how the benefits of faster ferry service compare with the additional travel costs.

A. Demand Response Assumptions

Shorter travel times, improved reliability, and modernized facilities are expected to generate increased demand for ferry travel. Although demand increases from improved amenities are difficult to quantify directly, studies consistently show that travelers respond to changes in time and cost.

A report by the Transportation Research Board (TRB)¹ indicates that:

- A 10% reduction in travel time typically results in a 2%–4% increase in ridership.
- A 10% increase in travel costs leads to a 1%–3% decrease in ridership.

¹ Transportation Research Board (TRB). (2003). *Traveler Response to Transportation System Changes, Chapter 12: Transit Pricing and Elasticities (TCRP Report 95)*. Washington, D.C.: National Academy Press. Retrieved from <http://www.trb.org>

These elasticity estimates, while derived from broader ferry systems, provide a useful benchmark for forecasting potential changes in AMHS ridership following the Cascade Point terminal development

B. Demand Response to Travel Time Reduction

The table below compares total travel time between the Valley Transit Center (VTC) and Haines under the two terminal scenarios:

Segment	Auke Bay	Cascade Point	Change
Drive Time (VTC → Terminal)	8 min	41 min	+33 min
Waiting and Loading Time	45 min	45 min	No change
Arrival and Departure Maneuvering	20 min	20 min	No change
Ferry Time (Terminal → Haines)	272 min	176 min	-96 min
Total Travel Time (VTC → Haines)	345 min	282 min	-63 min (-18%)

This 18% reduction in total travel time is expected to result in a 4% to 8% increase in ridership.

C. Demand Response to Travel Costs Increase

Relocating to Cascade Point increases travel costs for passengers due to the extended drive. Holding ferry ticket prices constant, vehicle-related costs (fuel and maintenance) and longer rideshare distances contribute to higher total travel costs.

1. Vehicle Passengers

The added fuel cost of driving 28 miles is roughly another gallon of gasoline at the current price of \$3.72 per gallon.

There are also maintenance costs for each mile driven. An additional 28 miles of driving will result in greater routine expenses, less time before major services, and faster depreciation. We quantify that burden as \$0.50 per mile. The following table illustrates the impact of additional fuel and maintenance costs for a vehicle driving an extra 28 miles to Cascade Point.

Vehicle Travel Cost Table

Factor	Auke Bay	Cascade Point	Change
Gas	\$0.60	\$4.31	\$3.72
Wear and Tear	\$2.25	\$16.25	\$14.00

Ferry Ticket (car)	\$120	\$120	\$0
Ferry Tickets (3 riders)	\$135	\$135	\$0
Total	\$257.85	\$275.56	\$17.72 (7%)

The 7% increase in travel cost is expected to reduce ridership by 1% to 2%.

2. Walk on Passengers

Passengers relying on taxis or rideshare services would experience higher costs due to the extended drive—estimated at \$56 based on \$2/mile pricing. In response to this substantial increase, these riders may reduce usage or seek alternatives. However, Goldbelt Corporation has committed to providing a shuttle service to Cascade Point, with stops at the Auke Bay terminal and Mendenhall Valley. Downtown passengers could use existing public transit to reach the shuttle. As a result, no additional change in demand is assumed for walk-on passengers versus vehicle passengers.

D. Net Change in Demand

In total, Cascade Point is estimated to increase ridership by about 471 vehicles and 1,783 passengers per year².

The following tables apply demand elasticities for time and cost to passenger counts using data from the 2023 Marine Traffic Report³. These projections are based on simulations that apply elasticity factors to adjusted traffic volumes. The model incorporates variability in user behavior, producing a range of outcomes:

Vehicles	Low	Mean	High
Time Reduction Impact	497	630	764
Cost Increase Impact	(107)	(159)	(213)
Net change⁴	328	471	616
<i>Change in Revenue</i>	<i>\$39,340</i>	<i>\$56,516</i>	<i>\$73,895</i>

² The ability for the system to facilitate increased demand would be a policy decision by the AMHS, which may include an additional vessel during peak season.

³ [atvr_2023.pdf](#)

⁴ Low and high values of a range cannot be summed. Reported numbers reflect a consistent range of P5-P95.

Passengers	Low	Mean	High
Time Reduction Impact	1,881	2,383	2,892
Cost Increase Impact	(405)	(600)	(807)
Net change⁴	1,241	1,783	2,331
<i>Change in Revenue</i>	<i>\$55,843</i>	<i>\$80,225</i>	<i>\$104,895</i>

IV. Impacts on AMHS Operations

An important consideration in evaluating the Cascade Point terminal is its impact on Alaska Marine Highway System (AMHS) operations. Prior to factoring in capital costs, this section assesses operational benefits such as reduced route length, lower fuel consumption, decreased maintenance expenses, and changes in ticket revenue due to ridership shifts. As outlined in the methodology, these effects are monetized without speculating on how AMHS might reallocate any resulting savings.

A. Cost Reductions

Operational efficiency improves when the same service can be delivered at a lower cost. Because Cascade Point shortens the ferry route by 24 nautical miles, the ferry consumes less fuel, operates for fewer hours, and incurs lower labor and maintenance costs. This subsection evaluates the magnitude of these savings.

1. Fuel Cost Savings

Fuel savings represent the most substantial operational benefit. Based on the M/V Hubbard's consumption rate, the following estimates apply:

Estimated Fuel Savings

Metric	Calculation	Result
Distance Reduction	68 NM from Auke Bay – 44 NM from Cascade Point	24 NM Shorter link, 2 links per day = 48 NM reduction
Time Reduction	48 NM / 15 knots	3 hours 12 minutes per day
Fuel Usage Reduction	185 gallons per hour x 3 hours 12 minutes	592 gallons saved per day
Total Annual Savings	592 gallons per day x 197 service days	116,624 gallons saved annually

Depending on the price of fuel, the reduction in fuel costs could reasonably be estimated at between \$250,000 and \$600,000 per year.

Fuel Price per Gallon	Annual Fuel Savings
\$2.00	\$233,248
\$3.00	\$349,872
\$4.00	\$466,496

\$5.00	\$583,120
\$6.00	\$699,744

2. Routine Maintenance Cost Savings

Reduced daily operating time delays maintenance cycles and reduces wear. Savings are based on standard AMHS service intervals:

Routine Service Type	Interval	Cost per service	Cost per operating hour	Savings
Oil Changes & Fluid Checks	Every 250 hours	\$15,000	\$60	\$36,600
Minor Engine Service	Every 500 hours	\$25,000	\$50	\$30,500
Consumables (filters, fluids, belts, etc.)	Every 500 hours	\$10,000	\$20	\$12,200

3. Major Overhaul Cost Savings

Although AMHS conducts comprehensive vessel overhauls annually on a calendar basis—typically once per vessel regardless of operational intensity—a reduction in yearly operating hours may yield moderate financial advantages. Decreased usage can result in less mechanical wear, potentially reducing the need for corrective repairs during scheduled inspections. This, in turn, will lower material expenditures, decrease average annual labor requirements, and minimize vessel downtime.

While these benefits are subject to variation depending on the year and vessel condition, it is anticipated that the reduced operating hours associated with the Cascade Point scenario will generate incremental cost savings. Precise quantification of these savings necessitates further analysis; however, current estimates suggest potential annual savings in the vicinity of \$100,000.

4. Sewage Hauling

The AMHS currently hauls sewage from Auke Bay, due to the lack of disposal equipment on the ACFs. The cost of sewage removal and disposal from Auke Bay was \$185,000 in 2024. The current design plan at Cascade Point is to have on-site disposal equipment. Therefore, this cost would be avoided with the construction of the new port.

5. Summary of Cost Savings

Category	Low	Mean	High
Fuel Cost Savings	\$420,065	\$550,867	\$685,581

Minor Maintenance Cost Savings	\$70,895	\$82,070	\$93,749
Major Maintenance Cost Savings	\$54,137	\$115,737	\$169,412
Sewage Disposal Cost Savings	\$162,004	\$185,000	\$207,995
Total Estimated Savings⁴	\$785,207	\$933,673	\$1,085,700

B. Labor Impacts

Labor cost implications of the Cascade Point ferry terminal are shaped by union contract terms and U.S. Coast Guard regulations, which define crew size and duty limits. Unlike fuel or maintenance expenses, labor costs are not directly tied to distance traveled. Crews are compensated based on duty hours, not sailing time, and vessels must be staffed to prevent any crew member from exceeding the 12-hour daily work limit. As a result, labor cost savings are not continuous but binary: either the schedule allows for a dayboat operation with reduced crew needs, or it requires a full continuous-operations crew.

1. Workday Schedule Comparison

The table below compares estimated workday durations for the Northern Lynn Canal route under current operations at Auke Bay and proposed operations at Cascade Point.

Segment	Auke Bay	Cascade Point
Pre-launch Work	1h 30m	1h 30m
Juneau to Haines (sailing)	4h 37m	3h 01m
Haines Arrival & Unload/Load	1h 45m	1h 45m
Haines to Skagway (sailing)	0h 57m	0h 57m
Skagway Arrival & Unload/Load	1h 00m	1h 00m
Skagway to Haines (sailing)	0h 57m	0h 57m
Haines Arrival & Unload/Load	1h 45m	1h 45m
Haines to Juneau (sailing)	4h 37m	3h 01m
Juneau Arrival & End-of-Day Tasks	1h 00m	1h 00m
Total Estimated Workday	16h 28m	13h 16m

While Cascade Point reduces the overall workday by more than three hours, the route remains over the 12-hour limit, preventing labor savings under current operations.

2. ACF Dayboat Operations

The Alaska Class Ferries (ACFs) were originally designed for dayboat operations, meaning crew could return to shore each night, eliminating the need for overnight accommodation and allowing for smaller crews. Cascade Point moves the route closer to this threshold but does not reach it under current assumptions—particularly during peak summer months, when increased passenger volume extends port turnaround times.

In winter, reduced traffic might enable quicker port calls, but inclement weather introduces schedule risk that could again push workdays over the 12-hour ceiling. Therefore, no labor savings are expected if Cascade Point is implemented in isolation.

However, if combined with slightly faster vessels, serving the Haines–Skagway leg with another vessel, or introducing additional time saving infrastructure, dayboat operations would become feasible. Under this scenario, AMHS could reduce labor costs on the ACF by up to \$500,000 annually.

3. Crew Quarters

Initial project discussions included the possibility that Cascade Point might eliminate the need to retrofit ACF vessels with crew quarters. However, AMHS has since committed to outfitting all vessels with accommodations to preserve scheduling and route flexibility across the broader system. As such, Cascade Point does not change current capital plans for crew accommodation.

That said, if a new vessel or future acquisition is introduced, the shortened route from Cascade Point may increase the viability of a crew-quarter-free dayboat, particularly if optimized for speed.

4. Recruitment and Retention Considerations

AMHS, like many ferry operators nationwide, faces workforce shortages in licensed mariners and shoreside support staff. These shortages constrain operations and may contribute to schedule disruptions, vessel layups, and diminished service reliability.

While not quantifiable at this stage, the potential for shorter routes and earlier return times to home ports may contribute positively to crew morale, recruitment, and retention. If realized, these factors could have second-order effects on operational resilience and long-term labor cost management.

C. Added Facility Costs

The new terminal introduces additional operating expenses. While these are attributed to AMHS in this analysis, cost-sharing with private users may reduce the actual burden. Estimated cost categories include:

✓ **Facility Maintenance** – Ongoing upkeep of infrastructure, including janitorial services, utilities, and waste management.

✓ **Terminal Staffing** – Ticketing agents, security, and dockworkers, depending on staffing model.

✓ **Emergency Preparedness** – Compliance with safety standards and emergency protocols.

✓ **Power & Heat** – Initially dependent on on-site diesel generation, with future savings possible from the Juneau Hydropower Inc. (JHI) utility connection

The following table approximates what initial terminal expenses may be:

Category	Low	Mean	High
Facility Maintenance	\$15,677	\$25,000	\$34,322
Terminal Staffing (3 FT + 2 PT) ⁵	\$347,128	\$409,419	\$479,348
Emergency Preparedness & Compliance	\$16,892	\$20,000	\$23,107
Power and Heat Generation	\$19,814	\$25,942	\$32,237
Total Estimated Cost⁴	\$416,871	\$480,361	\$551,154

⁵ Haines terminal is used for reference. The management plan for Haines is \$536,513, which we use as the upper bound. Baseline is \$100,000 fully burdened cost for each FTE position.

D. Total Change in Operational Finances

Factoring in both efficiency gains and added facility expenses, Cascade Point is expected to generate a net positive financial impact for AMHS. These savings could be further enhanced through facility-sharing arrangements or external funding partnerships.

Category	Low	Mean	High
Total Efficiency Gains	\$785,207	\$933,673	\$1,085,700
Total Additional Facility Costs	(\$416,871)	(\$480,361)	(\$551,154)
Total Change in Revenue	\$95,183	\$136,742	\$178,790
Net Financial Impact⁴	\$463,518	\$590,054	\$713,336

E. Utilization of Operational Savings

How policymakers choose to allocate operational savings from relocating the ferry service to Cascade Point remains an open question. If retained within AMHS, these savings could support expanded service frequency, fare reductions, or reinvestment in infrastructure and staffing. Alternatively, the legislature may choose to reduce the overall subsidy to the marine highway system or redirect funds to other state programs.

Each of these scenarios would have distinct implications for ferry operations, regional accessibility, economic development, and state budgeting. However, it is essential to separate the direct operational benefits of the Cascade Point relocation from any subsequent decisions regarding how savings are used.

A proper analysis must avoid double-counting. The savings themselves represent the full extent of the project's direct financial impact. Any additional benefits resulting from the reallocation of those savings—whether through reinvestment, subsidy reduction, or other programs—are external to the project and should be evaluated independently. Similarly, benefits that could be achieved through alternative funding approaches, regardless of Cascade Point, should not be attributed to the terminal project.

V. Economic Impacts

The Cascade Point project presents a mix of economic effects, with the most immediate and measurable benefit arising from construction spending. Based on current cost estimates, the project is expected to support between 75 and 152 full-time equivalent (FTE) 5-year positions. These include direct construction workers, support services (e.g., fuel suppliers, equipment rental, hospitality), and induced jobs from household spending. Most of these jobs will be completed when construction is completed.

The most promising opportunity for sustained economic growth lies in the proposed New Amalga mine, which is expected to use Cascade Point for logistics. If the mine develops along a trajectory similar to the nearby Kensington Mine, it could generate 250–400 ongoing regional jobs during operations and several hundred more during its development phase. This outcome, however, is contingent on further exploration results and regulatory approvals and is therefore speculative at this stage.

Outside of mining, most other effects—including tourism, commuting, and general freight handling—are best described as redistributive rather than generative. That is, they shift where economic activity occurs (e.g., moving spending from Juneau to Haines) rather than creating new net output. While certain businesses and locations may experience gains, the overall effect on Southeast Alaska’s non-mining economy is likely to be modest absent integration with broader transportation networks.

A. Construction Phase

The construction phase impacts were estimated using benchmark multipliers for public infrastructure projects and adjusted for Alaska-specific wage and cost structures.

Type	Low	Mid	High
Direct	\$28,171,791	\$37,501,362	\$47,696,668
Indirect	\$12,607,518	\$18,127,260	\$24,340,467
Induced	\$5,146,350	\$8,876,758	\$13,167,523
Total Economic Impact	\$47,394,728	\$64,505,381	\$83,582,887
FTE Job Years	374	546	759
5-Year positions created	75	109	152

Assumptions:

- Phase 1 (2026–2027): Road extension, bridge, and site preparation, costing \$20–30 million, with labor accounting for 25–50% of costs.

- Phase 2 (2028–2031): Dock, breakwater, and terminal construction, costing \$50–100 million, with similar labor shares.
- Alaska wage structures assume an average fully burdened cost of \$100,000 ± \$40,000 per job-year, including benefits and payroll taxes.
- Multipliers for indirect and induced impacts range from 0.3 to 0.7, reflecting uncertainty in local supply chain capture rates.

Although most materials would be imported, there will be a measurable increase in local demand for fuel, equipment rentals, accommodations, food services, and other support functions. These effects, however, are temporary and largely conclude once construction is finished.

B. Mining Development

The Cascade Point terminal could deliver significant logistical advantages for the mining sector by facilitating the movement of workers, supplies, and extracted materials. A Letter of Intent between Grande Portage Resources and Goldbelt Inc. outlines plans to co-develop a freight barge terminal at Cascade Point, specifically to support ore shipments from the proposed New Amalga Gold Project. By enabling direct export of unprocessed ore to third-party processing facilities, the terminal would reduce dependence on the Port of Juneau, shorten haul distances, lower operational costs, and enhance project feasibility through shared infrastructure—potentially transforming a marginal project into a viable one.

To evaluate the potential scale of New Amalga’s impact, the Kensington Gold Mine serves as a relevant analog. It opened in 2010 and currently employs approximately 372 direct jobs, plus hundreds more in support roles.

Kensington processes ore onsite in a flotation mill—producing concentrates that are shipped offsite. New Amalga, in contrast, plans to ship unrefined ore offsite for processing, meaning it will likely require 20–40% fewer long-term onsite staff compared to Kensington. Assuming a comparable resource and stage-by-stage development, we derive the following employment projections:

Phase	Estimated Direct Jobs
Exploration (2023–2027)	10–30
Pre-construction (2027–2030)	20–80
Construction (2030–2032)	100–200

Phase	Estimated Direct Jobs
Operations (from 2032)	180–240

Additionally, ongoing support services (logistics, transport, maintenance) could generate 54–108 indirect jobs, with another 16–65 induced jobs in the local service economy. This translates into a stable operational impact in the range of 250–400 permanent annual jobs—a significant long-term regional employment benefit, potentially made viable by Cascade Point.

C. Consideration of Other Impacts

1. Imports

Most goods consumed in Juneau are produced elsewhere and must be imported. Cascade Point’s multi-use design could theoretically reduce some transportation costs by allowing barge landings alongside AMHS ferry traffic. Shifting certain freight operations from downtown Juneau to Cascade Point might lower port fees, ease scheduling constraints, or improve logistical efficiency.

However, Cascade Point is 28 miles farther from Juneau’s commercial core, increasing overland transport costs that likely offset any marine-side savings. Even a generous 10% reduction in port fees would translate to about \$3 per resident per year, assuming savings are fully passed on to consumers—which is uncertain. As a result, Cascade Point is unlikely to produce meaningful macroeconomic gains through reduced import costs.

2. Exports

The terminal could improve logistics for certain exports, particularly raw ore (such as from the proposed New Amalga gold project), seafood processors, and Juneau-based manufacturers. Improved overland connections might reduce spoilage risk for perishable goods and slightly expand market reach.

Despite these advantages, most export activities are unlikely to shift. Frozen seafood continues to move south by barge, fresh seafood already ships by air, and durable goods are not constrained by current ferry schedules. Existing barge routes also operate below capacity, indicating limited latent demand. In practice, the most significant export potential at Cascade Point is probably restricted to mining logistics rather than general freight.

3. Regional Trade

Shorter and more reliable ferry service could enhance trade between Juneau, Haines, and Skagway. For trade volumes to increase meaningfully, however, businesses and travelers would need to adjust supply chains or travel frequency specifically due to the shorter crossing. Given that such decisions are influenced by many factors beyond ferry time, any boost in regional commerce is expected to be modest.

4. Resident Tourism

Cascade Point could make weekend trips easier for Juneau residents visiting Haines or Skagway and vice versa. While this might increase spending on lodging, dining, and attractions in those communities, it represents a geographic shift in existing spending rather than net new economic activity. For the state as a whole, the effect is expected to be neutral. Changes in ferry ridership linked to these trips are already addressed in chapter II of this report. Social impacts of this shift are addressed in the next chapter.

5. Non-Resident Tourism

For Cascade Point to create new tourism-driven economic gains, it would need to attract visitors who otherwise would not travel to the region. Cruise itineraries and long-distance road trips are typically set months in advance and are unlikely to change due to the terminal's location. A limited number of air travelers might add a side trip to Haines or Skagway, but this primarily redistributes spending away from Juneau rather than creating new demand. Overall, regional tourism impacts are expected to be minor and offset geographically.

6. Petroleum

The relocation shifts some fuel demand from marine diesel (ferry use) to gasoline (passenger vehicles traveling to Cascade Point). Local gas stations could see small sales increases, but these purchases would likely displace other discretionary spending. On balance, the shift represents a redistribution of spending rather than net new economic output.

7. Commuters

A shorter ferry crossing has prompted speculation about increased commuting between Northern Lynn Canal communities. In practice, daily commuting remains unrealistic because of time, cost, and scheduling limitations. Northbound commuting from Juneau becomes marginally more feasible but is still constrained; high-wage commuters already prefer air travel, while most other workers are unlikely to accept longer travel times. Southbound commuting into Juneau is even less viable, as schedules would still require

overnight stays. Only rotational or contract-based work could see modest benefit, particularly at the mines. Without broader changes (e.g., high-frequency shuttle ferries or new road links), Cascade Point is unlikely to meaningfully expand commuter activity.

VI. Social, Environmental, and Other Impacts

Unlike private enterprises, the Alaska Marine Highway System (AMHS) is funded to deliver public service rather than profit. As such, evaluating the relocation of ferry operations to Cascade Point requires consideration of non-monetary factors that influence community well-being, equity, cultural resources, and environmental quality.

A. Social Impacts

Relocating ferry operations to Cascade Point would change how people access transportation services and interact across communities. These effects are primarily related to connectivity, equity, public safety, and community cohesion.

1. Regional Connectivity and Equity

The shorter ferry route from Cascade Point to Haines and Skagway could improve service reliability and travel times, particularly benefiting residents of smaller communities traveling to Juneau for healthcare, education, and government services. For Juneau residents, the change introduces a 40-minute drive to reach the new terminal.

To mitigate this, Goldbelt has proposed operating a dedicated shuttle service, which would connect Cascade Point with Auke Bay and the Capital Transit system. If implemented effectively, the shuttle would improve equity by providing options for walk-on passengers and individuals without personal vehicles. If service is infrequent or costly, however, some users could experience new access barriers.

2. Community and Cultural Engagement

A shorter ferry crossing may make it easier for residents to attend cultural and community events throughout the Northern Lynn Canal, including festivals, family gatherings, sports tournaments, and tribal ceremonies. While participation changes are difficult to quantify, improved connectivity tends to support stronger community ties and regional cohesion over time.

3. Public Safety and Emergency Communications

Cascade Point's location increases travel distances for emergency responders but may also lead to improved road safety and communications infrastructure. The project could support extended cellular coverage in a region with historically limited service, improving emergency response for both ferry passengers and recreational users.

Conversely, a longer drive introduces risks of vehicle collisions farther from population centers, which may lengthen response times in some cases. However, potential redesignation of the route as part of the National Highway System (NHS) could fund roadway upgrades and enhance safety over time. The overall safety impact is uncertain but manageable through planning and infrastructure investment.

B. Cultural Impacts

The Cascade Point project intersects with Alaska Native land ownership, archaeological resource protection, and broader tribal development opportunities.

1. Alaska Native Leadership and Economic Participation

Goldbelt, an Alaska Native urban corporation, owns the land at Cascade Point and supports the project as an opportunity to demonstrate Native leadership in regional infrastructure development. Goldbelt anticipates benefits including land-based revenue, new contracting opportunities, and shareholder employment, with an emphasis on local hiring and workforce development.

From Goldbelt's perspective, Cascade Point could serve as a model for how Native-owned lands can be leveraged for public infrastructure while advancing tribal economic participation and stewardship. Broader impacts on tribal empowerment will depend on long-term project outcomes and engagement with other Native and cultural organizations.

2. Cultural and Archaeological Resources

Previous studies at the Cascade Point area have noted a disrupted archaeological site - indicating historical human presence while leaving some aspects of its context unclear. Given that most surface evidence has already been disturbed, archaeologists suggest that the site will provide greater cultural and historical understanding through subsurface monitoring during construction. Permit requirements will include archaeological supervision, which aims to preserve, document, and recover any material found.

With these measures integrated into the permitting process and given the current state of the site, heritage concerns at Cascade Point are considered addressed and are not seen as grounds to stop the project in advance.

C. Environmental Impacts

Relocating ferry operations to Cascade Point introduces a range of environmental considerations, including potential reductions in transportation-related emissions,

localized habitat disruptions, and long-term sustainability implications. The project’s environmental effects include both benefits and tradeoffs, many of which will depend on implementation details, mitigation measures, and future infrastructure development.

The permitting process will serve as the primary mechanism for evaluating and managing these impacts. This section presents an initial analysis of emissions and habitat concerns based on available information.

1. Emissions

The proposed terminal location would shorten the ferry route between Juneau and communities in the Northern Lynn Canal, thereby reducing fuel consumption and associated emissions from marine operations. At the same time, increased overland vehicle travel from Juneau to Cascade Point may result in additional road emissions.

Based on AMHS route data and emission factors, ferry fuel savings are estimated at approximately 117,000 gallons annually—equivalent to a reduction of roughly 1,300 metric tons of CO₂.

Ferry Emissions	Auke Bay	Cascade Point	Change
Nautical Miles per Link (Juneau/Haines)	68	44	(24)
Total Links Sailed	394	394	-
Total Nautical Miles Sailed	26,792	17,336	(9,456)
Gallons Used (12.3 gallons/NM)	330,435	213,811	(116,624)
Tons of Co2 (22.4 lbs./gallon)	3,700.87	2,394.68	(1,306)

However, this environmental gain is partially offset by increased vehicle emissions due to the longer 28-mile drive for ferry users from the existing Auke Bay Ferry Terminal to Cascade Point. The additional vehicle fuel consumption, including added traffic demand from the improved ferry service, is estimated to contribute approximately 116 metric tons of CO₂ per year.

Vehicle Emissions	Auke Bay	Cascade Point	Change
Vehicle Count per Year	11,489	11,961	472
Miles per car (from VTC)	4.5	32.5	29
Total Miles Driven	51,701	388,718	337,017
Gallons used (28 MPG)	1,814	13,639	11,825
Tons of Co2 (19.6 lbs./gallon)	17.8	133.7	116

Net Emissions Impact

CO2 Change	Low	Mean	High
Ferry Emissions	(1,393)	(1,308)	(1,230)
Vehicle Emissions	114	116	117
Net Effect	(1,277)	(1,192)	(1,114)

The net environmental effect is a projected reduction of approximately 1,190 metric tons of CO₂ annually. This outcome could improve further if AMHS transitions to hybrid diesel-electric ferries in the future. The shortened route may support future electrification of marine segments, particularly if utility infrastructure—including electric power and broadband—is extended to Cascade Point as proposed.

2. Habitat Considerations

Cascade Point, as a waterfront development, has the potential to impact local habitats due to nearshore construction activities and increased maritime traffic. These concerns are acknowledged, and established protocols exist to address them. All environmental impacts and proposed mitigation measures will undergo comprehensive review during the permitting process, which involves thorough impact assessments and consultations with relevant agencies. Ultimately, the project will either proceed with proper mitigation

strategies in place or be halted if insurmountable risks to habitats and ecosystems are identified. As such, this topic is neutral in the context of the current analysis.

D. Summary

The Cascade Point project generally moves social and cultural issues in a positive direction while providing environmental benefits that outweigh localized ecological risks. Most concerns raised—such as habitat impacts, cultural resource disturbance, and access equity—are fully addressable through mitigation, regulatory oversight, and planned infrastructure support.

Impact Area	Overall Impact
Regional Connectivity and Equity	Positive – Better access for remote communities, offset by increased road travel but mitigated by shuttle service.
Community and Cultural Engagement	Positive – Easier access to events and regional social interaction.
Public Safety and Emergency Communications	Unclear – Longer routes balanced by potential infrastructure upgrades and improved communications.
Alaska Native Leadership and Economic Participation	Positive – New opportunities for tribal-led infrastructure and employment.
Cultural and Archaeological Resources	Neutral – Addressed through regulatory processes; potential for positive archaeological discoveries.
Net Transportation Emissions	Positive – Approximately 1,190 metric ton reduction of CO ₂ annually.
Habitat Considerations	Neutral – Addressed through regulatory processes

VII. Ancillary Effects

Beyond its direct effects, relocating the ferry service to Cascade Point may create secondary impacts on state and local government entities. These include fiscal effects on tax revenues, municipal service requirements, regulatory oversight, and public infrastructure responsibilities. While many of these impacts are modest in scale, they merit consideration in evaluating the project's broader public-sector implications.

A. Fiscal and Tax Revenue Impacts

The shift in terminal location alters patterns of fuel consumption and passenger activity, leading to modest changes in both state and local tax collections.

1. Motor Fuel Tax Revenue

The proposed change reduces AMHS marine fuel usage by approximately 117,000 gallons annually. Because AMHS is exempt from Alaska's \$0.05–\$0.08 per gallon marine fuel tax, these savings do not reduce existing state revenues. However, the project is expected to increase private vehicle fuel use by roughly 12,000 gallons per year due to longer drives to Cascade Point. This added gasoline consumption would generate an estimated \$591 annually in new motor fuel tax revenue for the state.

2. Local Sales Tax Shifts

Increased vehicle fuel purchases do not generate local sales tax in Juneau, as fuel is exempt. As a result, approximately \$44,000 in new fuel spending may come at the expense of other taxable goods and services, potentially reducing municipal sales tax collections by \$2,200 annually (at a 5% rate). The overall net effect on local sales tax revenue is uncertain and would depend on actual changes in travel and spending behavior.

3. Property Tax Base Expansion

The Cascade Point site is currently held as undeveloped Native corporation land under ANCSA and is therefore exempt from local property taxes. If the land is developed for ferry and commercial operations, it would become subject to City and Borough of Juneau property taxes, potentially generating new annual revenues.

Furthermore, the extension of public utilities (e.g., electricity and internet) to Cascade Point could increase the viability of additional commercial or residential development in

the area over time. This may further expand the taxable property base, though the scale and timing of such growth remain speculative.

B. Government Infrastructure & Service Costs

Relocating ferry operations to Cascade Point has broader implications for government-managed infrastructure and services. These impacts primarily concern state highway maintenance, federal funding eligibility, transportation accessibility, and emergency preparedness. While many effects are modest in scale, they may require ongoing operational adjustments and budget considerations for both state and local agencies.

1. Road Maintenance and State Transportation Costs

The relocation will shift an estimated 12,000 vehicles annually to a longer route—adding approximately 28 miles each way on Glacier Highway between Auke Bay and Cascade Point. This increase in vehicle miles traveled (VMT) will result in additional wear on the state-owned road and likely lead to increased maintenance costs for the Alaska Department of Transportation & Public Facilities (DOT&PF).

Using a conservative estimate of \$0.05 per vehicle-mile for maintenance and winter operations, the annual cost increase is projected at approximately \$30,000. This includes added snow removal, sanding, pavement upkeep, and other routine maintenance activities. However, these additional costs must be weighed against funding source change opportunities.

2. National Highway System (NHS) Reclassification and Funding Eligibility

Currently, the segment of Glacier Highway leading to Cascade Point is not part of the National Highway System (NHS). If Cascade Point becomes the primary ferry terminal for the Northern Lynn Canal, there is a strong case for reclassifying the final 28 miles of the highway as part of the NHS.

Inclusion in the NHS would make this segment eligible for federal highway funding under programs such as the National Highway Performance Program (NHPP) and Surface Transportation Block Grant Program (STBG). This could help offset increased maintenance costs and support future improvements in safety, resilience, and capacity. However, NHS designation requires approval by the Federal Highway Administration (FHWA) and would involve a formal application and review process by the State of Alaska.

While NHS designation does not guarantee additional funding, it significantly expands access to federal resources and positions the corridor as part of the state’s core transportation network.

3. Transit Access and Passenger Mobility

Relocating ferry operations to a more remote terminal introduces potential challenges for walk-on passengers and residents without private vehicles. At first glance, the move appears to reduce public access, as Cascade Point is beyond the reach of Juneau’s Capital Transit system.

However, it is important to note that the current Auke Bay Ferry Terminal is also not served by public transit. To address this, Goldbelt Corporation has committed to operating a paid shuttle service between Auke Bay and Cascade Point, with a proposed additional stop in the Mendenhall Valley—likely at the new transit hub.

This proposed service could improve overall transit connectivity by creating a formal link between Juneau’s ferry system and the city’s public transportation network. The effectiveness of this system will depend on shuttle frequency, fare structure, accessibility, and alignment with ferry schedules, all of which will require close coordination and monitoring to ensure equitable service.

4. Emergency Response Planning and Public Safety

The impacts of the additional 28 miles are not expected to require new infrastructure or facilities. However, they may prompt revisions to emergency response plans. Agencies such as Capital City Fire/Rescue, Alaska State Troopers, and DOT&PF maintenance personnel may need to coordinate protocols for traffic incidents, medical evacuations, or hazardous material spills.

Improved cellular and utility infrastructure—if deployed as part of the terminal development—could help mitigate some of these challenges by enhancing communication and coordination in the area.

VIII. Conclusions and Policy Considerations

The purpose of this chapter is to synthesize key findings from the technical analysis and stakeholder input, providing clear takeaways for policymakers considering whether to fund the Cascade Point ferry terminal project. It does not duplicate the executive summary but instead focuses on the implications of the analysis for decision-making.

A. Operational Efficiency

Relocating ferry operations to Cascade Point would shorten travel distances on the Northern Lynn Canal route, reducing ferry fuel consumption by approximately 117,000 gallons annually. The reduced vessel time in service adds another \$200,000 of average annual maintenance reduction. The result is an overall operational savings of approximately \$934,000 per year, extending vessel lifespan and potentially freeing resources for other AMHS routes.

B. Economic Effects

Construction activity would generate a temporary boost of approximately 75–152 full-time equivalent positions over five years, injecting \$47–83 million in wages and contracting revenue into the regional economy. Post-construction, direct long-term job impacts are neutral; two new terminal positions are offset by reduced crew hours equivalent to five positions. Broader regional economic impacts are primarily redistributive, except for the potential development of the New Amalga gold mine, which could add 250–400 jobs if fully realized and is likely to use Cascade Point as its logistics base.

C. Social, Cultural, and Environmental Outcomes

The project generally advances social and cultural connectivity by improving travel reliability and regional cohesion while empowering an Alaska Native corporation (Goldbelt) through infrastructure development and land use. Environmental impacts are positive under established permitting frameworks, with the project producing a net reduction of approximately 1,190 metric tons of CO₂ annually. Concerns related to habitat and archaeological resources are mitigable through standard regulatory processes.

D. Policy Implications

Funding decisions should consider that:

1. The project is expected to deliver measurable operational savings and lower carbon emissions.

2. Long-term economic growth is unlikely to emerge without associated industrial or resource development, but near-term construction jobs are significant.
3. Social and cultural benefits are positive, although equitable access hinges on the effectiveness of the proposed shuttle service.
4. Environmental and cultural resource risks do not appear to be barriers given existing permitting safeguards.

E. Overall Conclusion

The Cascade Point Ferry Terminal offers clear operational, cultural, and environmental benefits, along with modest but positive social improvements. The economic impacts are contingent upon speculative, yet potentially significant, industrial development opportunities. While direct AMHS operational savings alone do not justify the capital cost from a pure finance perspective, the value of broader public-sector benefits should be considered. When supported by a private-sector partnership to improve the viability of developing the New Amalga Mine, the potential advantages become significant. Additionally, if Cascade Point serves as a critical component in establishing an effective transportation network between Haines and Juneau, its value increases substantially.

In conclusion, although the Cascade Point Ferry Terminal presents challenges as an independent initiative, it may prove valuable as a strategic investment that facilitates resource development and improves access to the Capital.

IX. Data Sources

This report relies on the following publicly available data sources, industry reports, and government records as of the date of this report:

1. Alaska Marine Highway System (AMHS) Schedules & Budget Reports

Source: Alaska Department of Transportation & Public Facilities (DOT&PF)

Relevant Data:

Ferry schedules, route maps, and fleet details

Annual operating budgets and financial reports

Ridership statistics and system-wide performance data

Official Website: <https://dot.alaska.gov/amhs/>

Recent Budget Reports: <https://dot.alaska.gov/comm/pressbox/arch2023.shtml>

2. CBJ Public Transit & Road Maintenance Records

Source: City & Borough of Juneau (CBJ) Public Works and Engineering Department

Relevant Data:

Capital Transit bus routes and service schedules

Road maintenance budgets and infrastructure costs

Official Website: <https://juneau.org/engineering-public-works>

Capital Transit Information: <https://juneau.org/capitaltransit>

3. Alaska DOT Mileage Data & Fuel Consumption Reports

Source: Alaska Department of Transportation & Public Facilities (DOT&PF)

Relevant Data:

State highway mileage and maintenance costs

Ferry fuel consumption reports and vessel operating costs

Official Website: <https://dot.alaska.gov/>

Fuel & Mileage Data Reports: <https://dot.alaska.gov/stwdplng/mapping/index.shtml>

4. Legislative Hearings & Public Testimony

Source: Alaska State Legislature (House & Senate Transportation Committees)

Relevant Data:

Public testimony regarding AMHS funding and route changes

Legislative budget hearings on ferry service and capital projects

Official Website for Alaska Legislature: <http://akleg.gov/>

Committee Hearings Archive: <http://w3.akleg.gov/index.php#tab5>

5. Economic Impact Studies on Ferry Operations & Regional Business

Source: McDowell Group & Other Independent Studies

Relevant Data:

Economic impact assessments of AMHS on Southeast Alaska

Studies on ferry ridership and its effect on local economies

McDowell Group Reports: <https://www.mcdowellgroup.net/>

Past Economic Reports on AMHS:

https://dot.alaska.gov/amhs/doc/AMHS_Economic_Impacts_Study_2016.pdf

6. Industry Standards for Fuel Consumption & Travel Cost Modeling

Source: U.S. Department of Transportation, Bureau of Transportation Statistics (BTS)

Relevant Data:

Average fuel consumption rates for marine vessels and highway vehicles

Transportation cost models for infrastructure projects

Bureau of Transportation Statistics: <https://www.bts.gov/>

Fuel Efficiency & Cost Modeling Reports: <https://afdc.energy.gov/>

7. Modernization Task Force Report

Source: AMHS Reshaping Work Group (Task Force Established by the Governor)

Relevant Data:

Recommendations for AMHS cost reductions and route efficiencies

Long-term sustainability strategies for the ferry system

Task Force Report (2020): <https://dot.alaska.gov/amhs/reshaping.shtml>

8. Southeast Conference Reports

Source: Southeast Conference (Regional Development Organization for Southeast Alaska)

Relevant Data:

AMHS reform proposals and community-driven planning efforts

Economic and transportation studies for the region

Official Website: <https://www.seconference.org/>

AMHS Studies & Policy Reports: <https://www.seconference.org/transportation/>