



Alaska Department of Transportation & Public Facilities

**Why Extending Roads and Shortening Ferry Links
is a Sound Policy Choice**

Jeff Ottesen, Director of Program Development
March 6, 2014



Outline

- If possible, why should Alaska build roads where ferries now operate?
 - Answer: Lowers long term costs for state and user while greatly expanding capacity and travel flexibility
- Some examples how this policy is approached in similar settings, both here and around the world.
- Why decision affects all Alaskans; the ongoing ferry subsidy is significant and alternatives deserve consideration.
- Specifics of Juneau Access Project (Mike Vigue)



Advantages of Dayboats

- Dayboat: is a ferry intended to operate 12 hours or less, from a home port, typically making 1 or more round trips per day.
- Advantages:
 - No hotel or restaurant functions required
 - Crew return home each night
 - Large capital and operating savings are typical



Why Consider a Road At All?

- Roads are far less costly to state in capital and operating costs over time
- Roads greatly increase capacity, frequency, travel opportunity and offer significant travel time and user cost savings.
- Ferries essentially restrict demand, reducing flexibility, making travel costly or prohibitive
- Ferry subsidies are very high. Without significant change these costs continue in perpetuity.

State's Preferred Plan

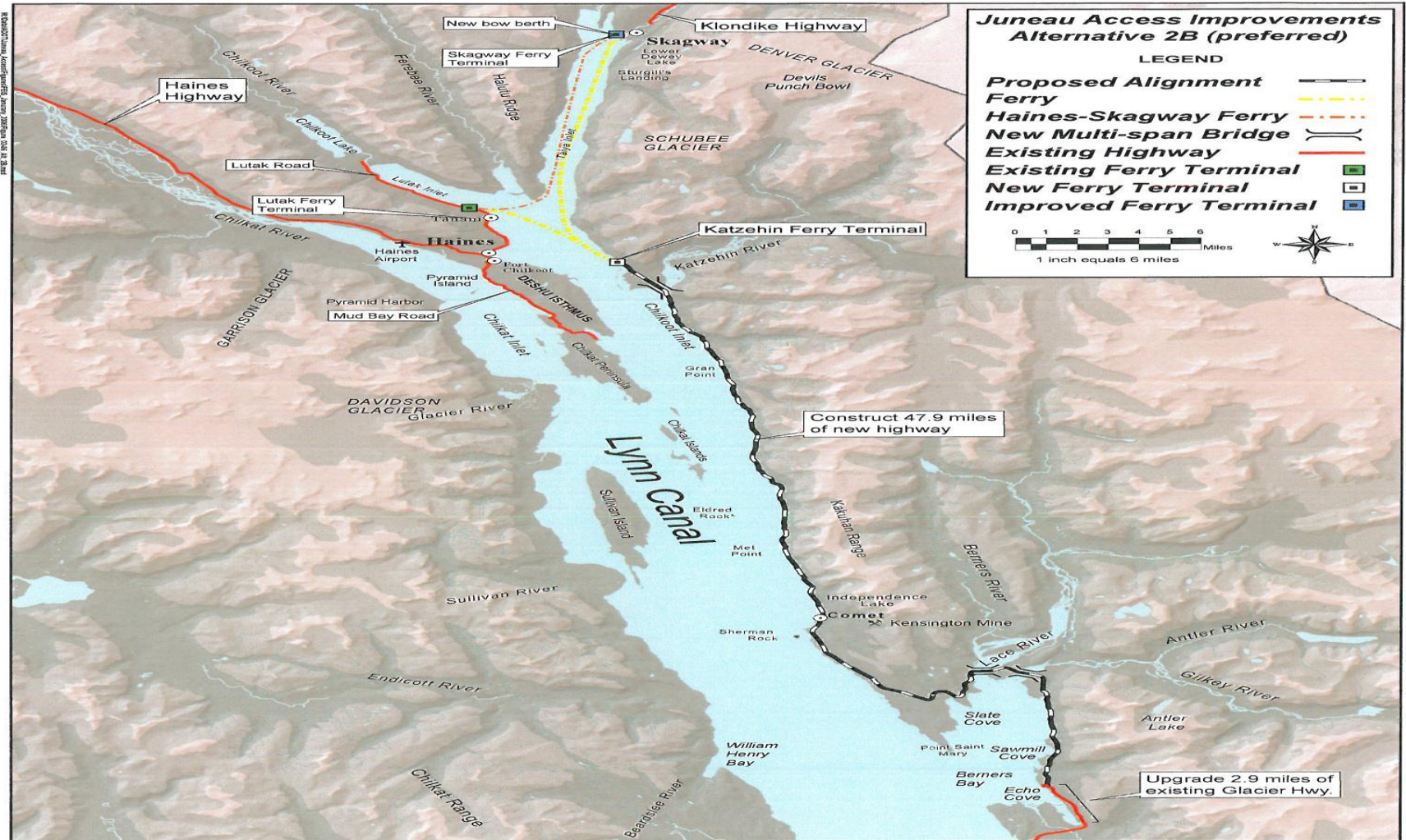


Figure 2-7
Alternative 2B: East Lynn Canal Highway to Katzechin Ferry Terminal with Shuttles to Haines & Skagway

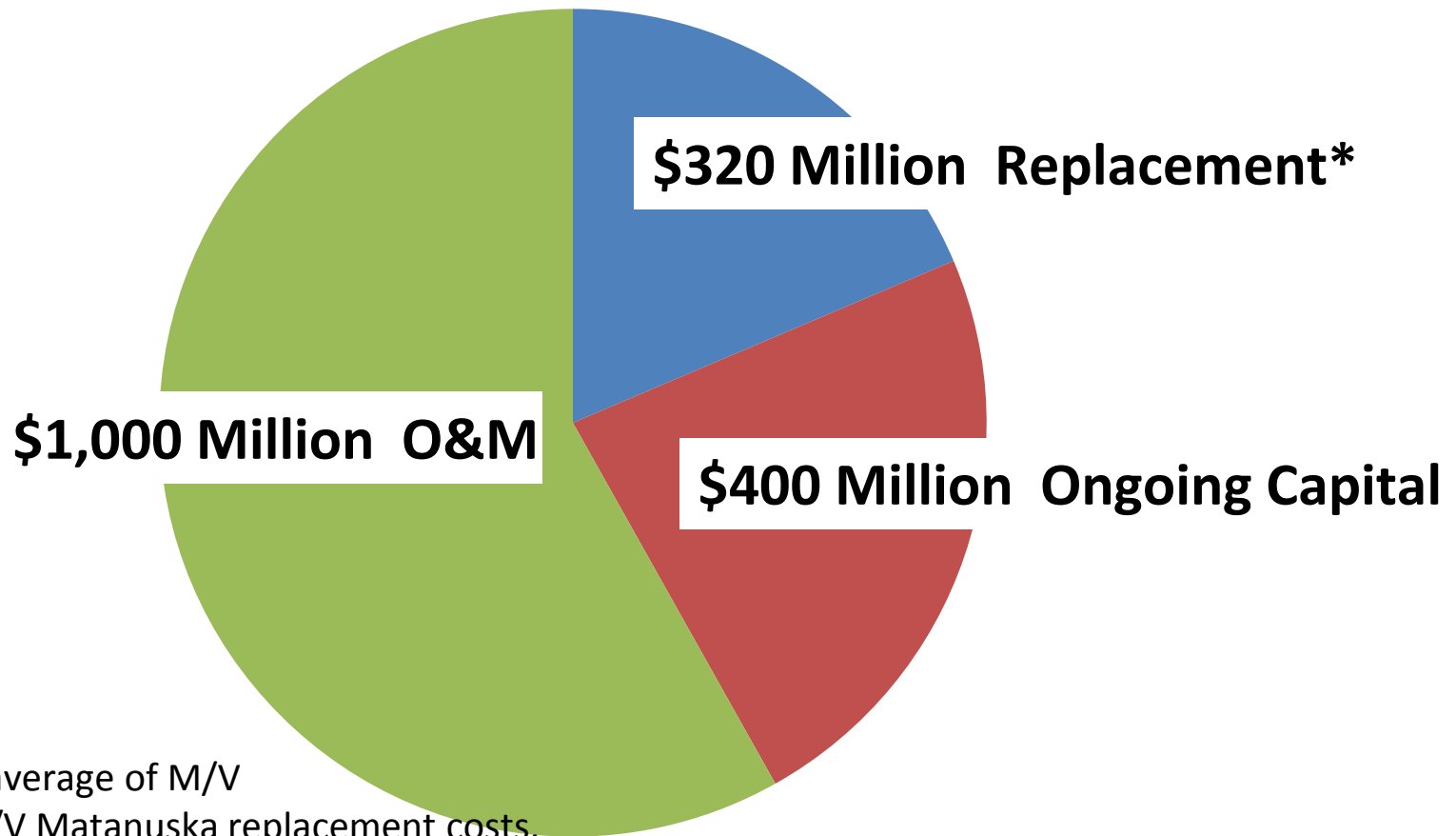


Advantages of Preferred Plan

- Ferry mainline operating distance can be reduced by 186 miles per voyage (Auke Bay to Skagway RT)
 - Based on Auke Bay as northern terminus of mainline service.
- Capacity in corridor significantly increased
- Capital costs substantially lowered
 - Unlike roads, ferry capital costs have little residual value upon replacement
- With proposed Alaska Class ferries and road, between 1 & 2 mainliners can be eliminated

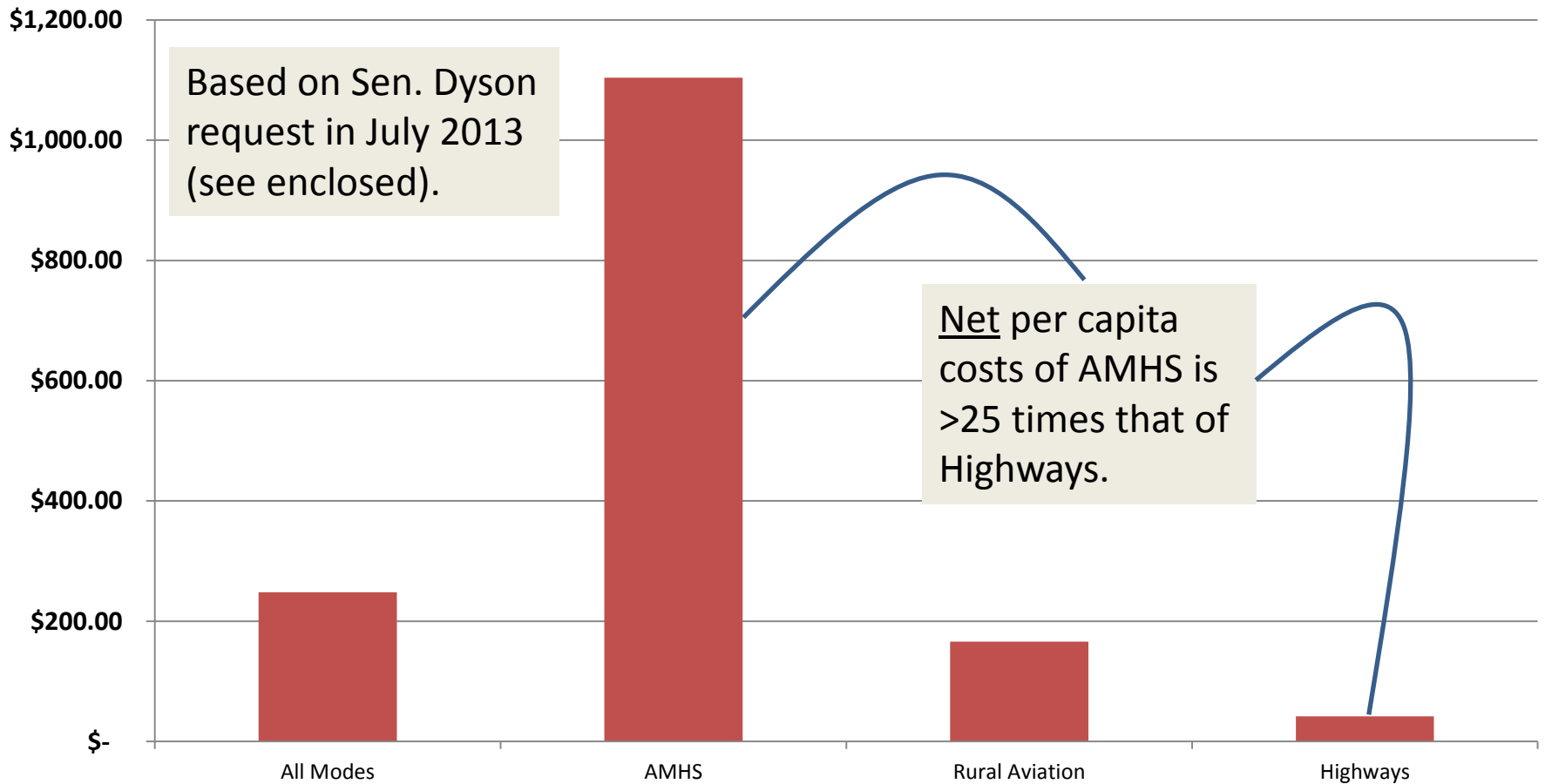


50 Year Mainliner Cost: \$1.72 B





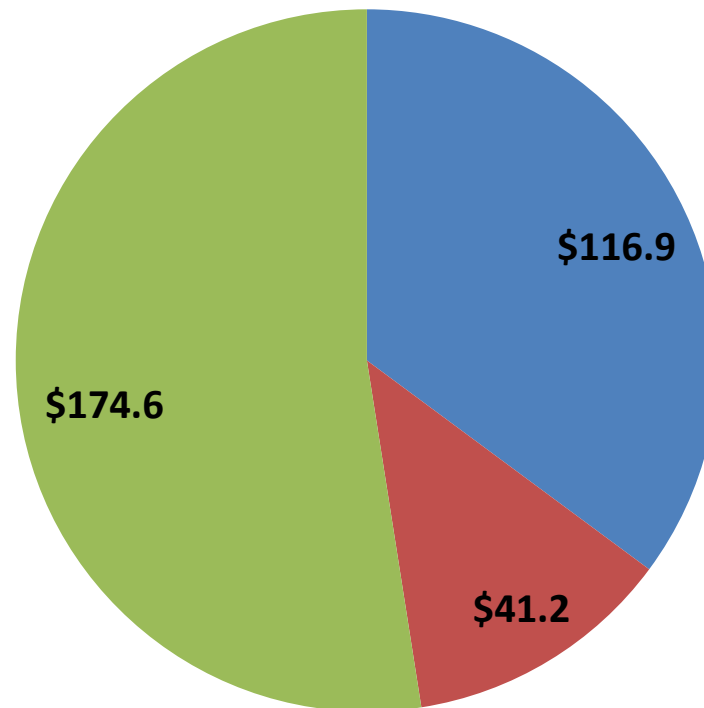
Modal Net Per Capita Costs Per Population Served





Alaska Modal Gross Operating Costs

DOT&PF SFY 2015 Request (Millions)



>99% of travel is achieved by highways and aviation. This requires less than one-half of DOT&PF's operating budget.

- Highways
- Rural Aviation
- AMHS

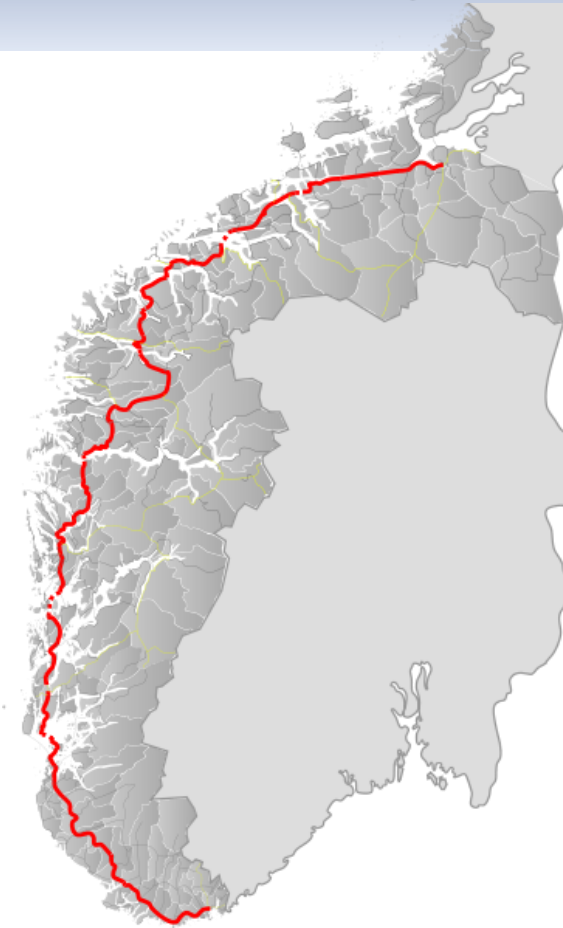


Other Ferry Systems

- Both Norway and Canada have recently focused on reducing or eliminating ferries, where possible
 - Canada's Prince Edward Is. bridge built with 33 year pledge of subsidy to finance new bridge.
 - Norway's ambitious effort to systematically reduce ferry crossings, with bridges and tunnels on Highway E-39 far more challenging than Juneau Access project.
- In Alaska, Metlakatla, Prince of Wales Island and proposed King Cove-Cold Bay ferries are also models of applying roads, dayboats.



Norway Highway E39



Ferry on E-39 Highway; one of 8 remaining.



Take Aways

- Replacing or shortening ferry routes with roads, and using dayboats is a rational public policy response:
 - It lowers public and private costs
 - It offers superior service to travelers
 - The actions in other places including Canada and Norway demonstrate that perpetual ferry subsidies are strong motivation to make changes.
- As stewards of transportation choices and their future costs, there is strong merit to building the preferred alternative.



Juneau Access Improvement Project

Michael Vigue



Purpose and Need

- To provide improved surface transportation to and from Juneau within the Lynn Canal corridor that will:
 - Provide the capacity to meet transportation demand in the corridor
 - Provide flexibility and improve opportunity for travel
 - Reduce travel times between the communities
 - Reduce State costs for transportation in the corridor
 - Reduce user costs for transportation in the corridor



National Environmental Policy Act (NEPA)

- Draft SEIS is an important element of the NEPA process providing an opportunity for the general public and interested parties, including governmental entities and regulatory agencies to comment on the project.
 - The Final SEIS will respond to all comments made on the Draft SEIS.
- FHWA and DOT&PF analyzed each alternative based on:
 - Consistency with 2004 Southeast Alaska Transportation Plan
 - Travel demand and capacity
 - Flexibility and opportunity to travel
 - Travel times
 - Total project life costs
 - Maintenance costs
 - User costs
 - State costs
 - Environmental impacts



Travel Capacity and Demand Alternative 2B (2020)

- Current and predicted summer vehicle capacity in Lynn Canal corridor:
 - 154 vehicles per day (2012)
 - 1,484 vehicles per day (2020)
- Current and predicted summer traffic in Lynn Canal corridor:
 - 71 vehicles daily (2012)
 - 1,345 vehicles daily (2020)



Current Situation compared to Alternative 2B - Haines

Current AMHS operation

- Juneau to Haines (summer)
 - 93 vehicles per day (capacity)
 - 7.2 hours one way
 - \$2.76 per mile (\$215 for family of 4)
 - Approximately 1 round trip per day (Juneau to Haines)

Alternative 2B

- Juneau to Haines (summer)
 - 848 vehicles per day (capacity)
 - 3.0 hours one way
 - \$.64 per mile (\$31.20 for family of 4)
 - 8 round trips per day (Katzehin to Haines)



Current Situation compared to Alternative 2B - Skagway

Current AMHS operation

- Juneau to Skagway (summer)
 - 61 vehicles per day (capacity)
 - 9.1 hours one way
 - \$3.08 per mile (\$286 for family of 4)
 - Approximately 1 round trip per day (Juneau to Skagway)

Alternative 2B

- Juneau to Skagway (summer)
 - 636 vehicles per day (capacity)
 - 3.4 hours one way
 - \$.64 per mile (\$59.52 for family of 4)
 - 6 round trips per day (Katzehin to Skagway)



Project History

- Juneau is the largest community on the North American continent not connected to the continental highway system.
- In 1997 FHWA issued a Draft Environmental Impact Statement (EIS) for the project.
- In 2000 Governor Knowles declared Alternative 2, an East Lynn Canal Highway, the State's preferred alternative but suspended work on the project and ordered construction of 2 fast vehicle ferries.
- In 2002 Governor Murkowski directed that the EIS be completed.
- A Supplemental Draft EIS was released in 2005, with a Final EIS in January 2006 stating the East Lynn Canal Highway as the Preferred Alternative.
- A Record of Decision (ROD) was issued by FHWA in April 2006.



Project History

- In August 2006 a lawsuit was filed in District Court.
- In February 2009 the District Court vacated FHWA's ROD concluding that the State and FHWA failed to consider an alternative for improved ferry service using existing ferries and terminals.
- DOT&PF appealed to the U.S. Court of Appeals for the 9th Circuit in May 2011. The 3 judge panel ruled 2-1 to uphold the District Court decision.
- As a result the DOT&PF and FHWA initiated preparation of an Supplemental EIS in January 2012.
- This Supplemental EIS evaluates the Court ordered alternative, known as Alternative 1B, Enhanced Service with existing AMHS Assets.



Alternative 1 – No Action

- The No Action Alternative (Alternative 1) includes a continuation of mainline ferry service in Lynn Canal and incorporates two Day Boat Alaska Class Ferries (ACF).
- Mainline service would include two round trips per week in the summer and one per week in the winter with Auke Bay-Haines-Skagway-Haines-Auke Bay routing.
- During the summer, one Day Boat ACF would make one round trip between Auke Bay and Haines six days per week, and one would make two round-trips per day between Haines and Skagway six days per week.
- In the winter, ferry service in Lynn Canal would be provided primarily by the Day Boat ACFs three times per week.

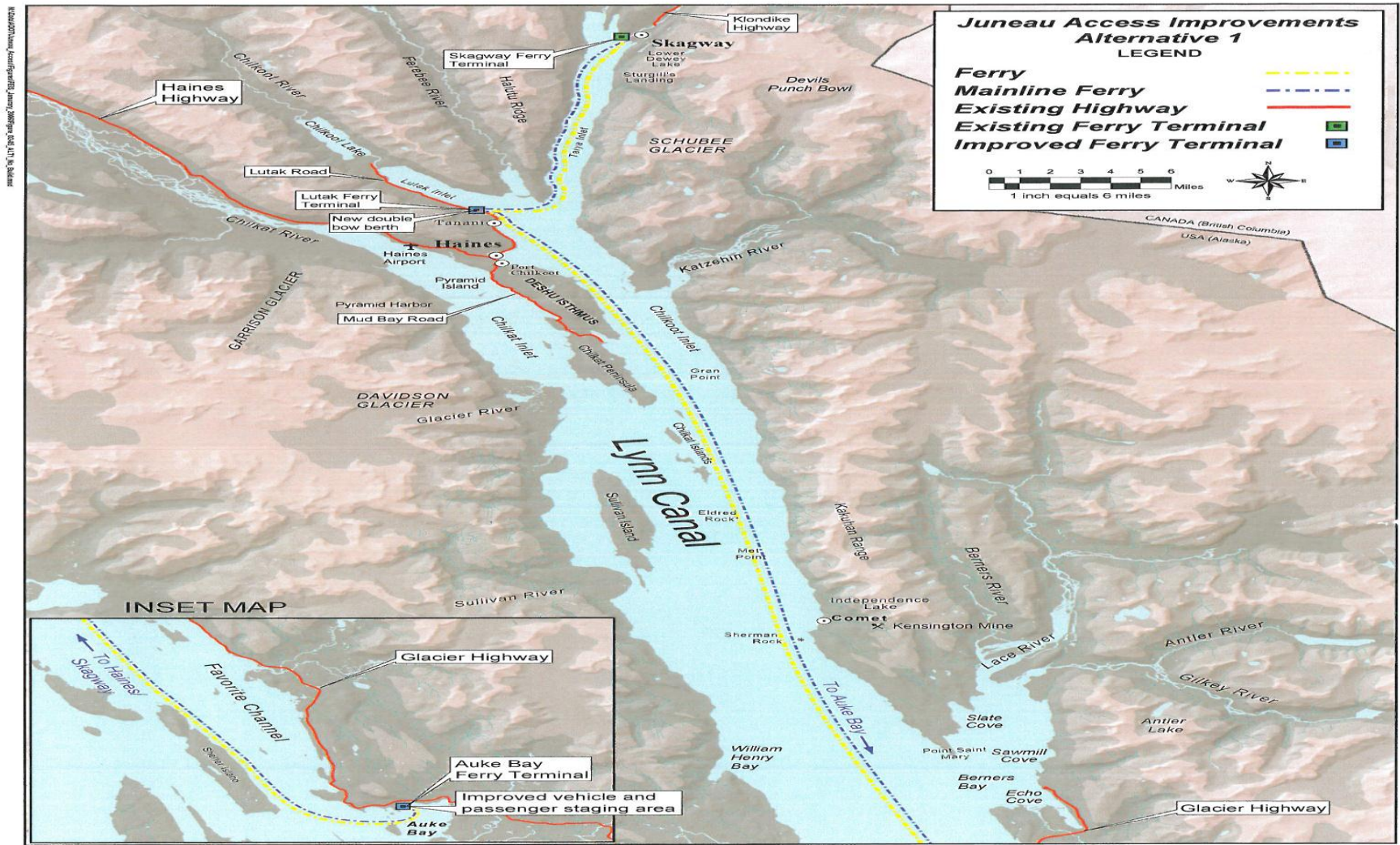


Figure 2-5
Alternative 1: No Action Alternative



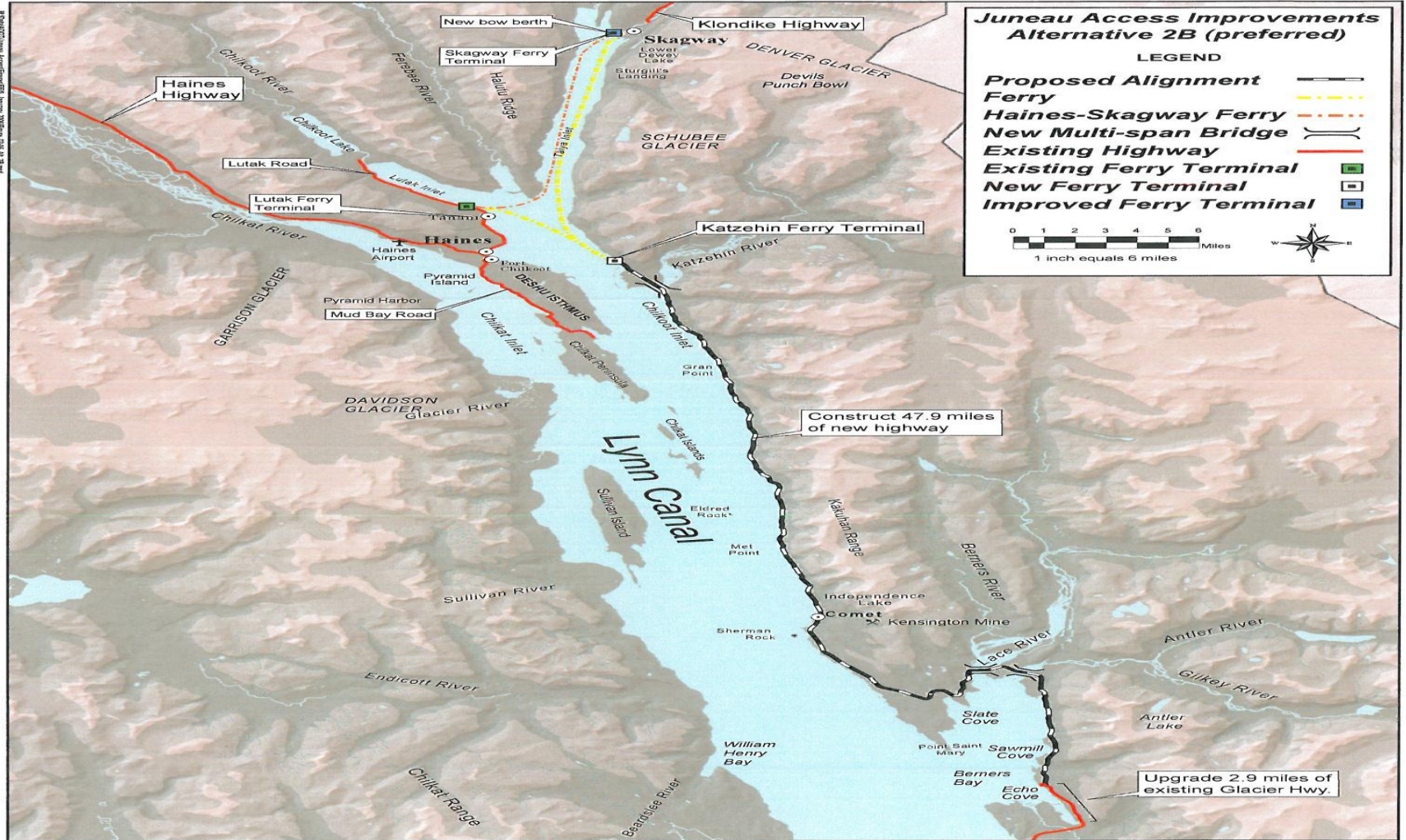
Alternative 2B- East Lynn Canal Highway

- Alternative 2B would construct the East Lynn Canal Highway (50.8-miles including 47.9 miles of new highway and upgrade to 2.9 miles of the existing Glacier Highway) from Echo Cove around Berners Bay to a new ferry terminal two miles north of the Katzehin River.
- Ferry service would connect Katzehin to Haines and Skagway.
- During the summer months, one Day Boat ACF would make eight round-trips per day between Haines and Katzehin, a second Day Boat ACF would make six round-trips per day between Skagway and Katzehin.
- The Haines-Skagway shuttle ferry would make two trips per day.
- During the winter, one Day Boat ACF would make six round-trips per day between Haines and Katzehin, and a second Day Boat ACF would make four round-trips per day between Skagway and Katzehin.



Why not end the road in Skagway?

- The 1997 Draft EIS analyzed the road continuing to Skagway with the National Park Service (NPS) on record with no 4(f) impacts.
 - 4(f) stipulates that FHWA cannot approve the use of land from publicly owned historical sites unless there are no feasible and prudent alternatives and harm to the property from use is minimized.
- Between 1997 and 2002 NPS updated their master plan and identified the Skagway and White Pass District National Historic Landmark (NHL) as a 4(f) resource.
- In 2004 FHWA and DOT&PF consulted with the NPS regarding the (NHL).
- In 2005 a letter from the U.S. Department of Interior made clear the NPS position that the NHL was protected by 4(f)
- FHWA determined that the NHL was protected under Section 4(f) of the Department of Transportation Act.
- Continuation of road to Skagway will not be included in this Federal-aid project. It could be re-evaluated at a later date as a separate project.



**Figure 2-7
Alternative 2B: East Lynn Canal Highway to Katzechin Ferry Terminal with Shuttles to Haines & Skagway**



Preferred Alternative

- After careful review and consideration of the updated information and analysis conducted in support of the Draft SEIS, FHWA and DOT&PF continue to prefer Alternative 2B.
- This is determined with regard to the Purpose and Need elements as well as comprehensive cost and impact analyses.
- In addition to completing the NEPA process there are several Federal actions necessary:
 - U.S. Army Corps of Engineers 404 permit
 - National Marine Fisheries Service Endangered Species Act consultation
 - National Marine Fisheries Service Marine Mammals Protection Act Incidental Harassment Authorization
 - U.S. Forest Service Right of Way easement



Current Project Schedule

- Cooperating Agency Review of Draft SEIS ended February 22, 2014
- Public Comment period on Draft SEIS begins April 2014
- Public Hearings in Juneau, Haines, Skagway will be held in May 2014
- Final SEIS/ROD in late August 2014



Conclusion

- The current Lynn Canal transportation system is the largest bottle neck in the state. It deserves a better and more efficient alternative.
- The proposed Juneau Access project is justified:
 - Capacity meets transportation demand in the corridor
 - Offers flexibility and improved opportunity for travel
 - Reduce travel times between the communities
 - Reduce state costs for transportation in the corridor
 - Reduce user costs for transportation in the corridor



Additional Information

Description of other alternatives.



Alternative 1B- Enhanced Service with Existing AMHS Assets

- Alternative 1B includes all of the components of Alternative 1, No Action, but focuses on enhancing service using existing AMHS assets without major initial capital expenditures.
- *Enhanced services included as part of Alternative 1B are a 20 percent reduction in fares for trips in Lynn Canal and extended hours of operations for the reservation call center.*
- Mainline service would include two round trips per week in the summer and one per week in the winter with Auke Bay-Haines-Skagway-Haines-Auke Bay routing.
- *During the summer, the M/V Malaspina would make one round-trip per day seven days per week on a Skagway-Auke Bay-Skagway route, while one Day Boat ACF would make one round trip between Auke Bay and Haines six days per week, and one would make two round-trips per day between Haines and Skagway six days per week.*
- *In the winter, ferry service in Lynn Canal would be provided primarily by the Day Boat ACFs three times per week.*

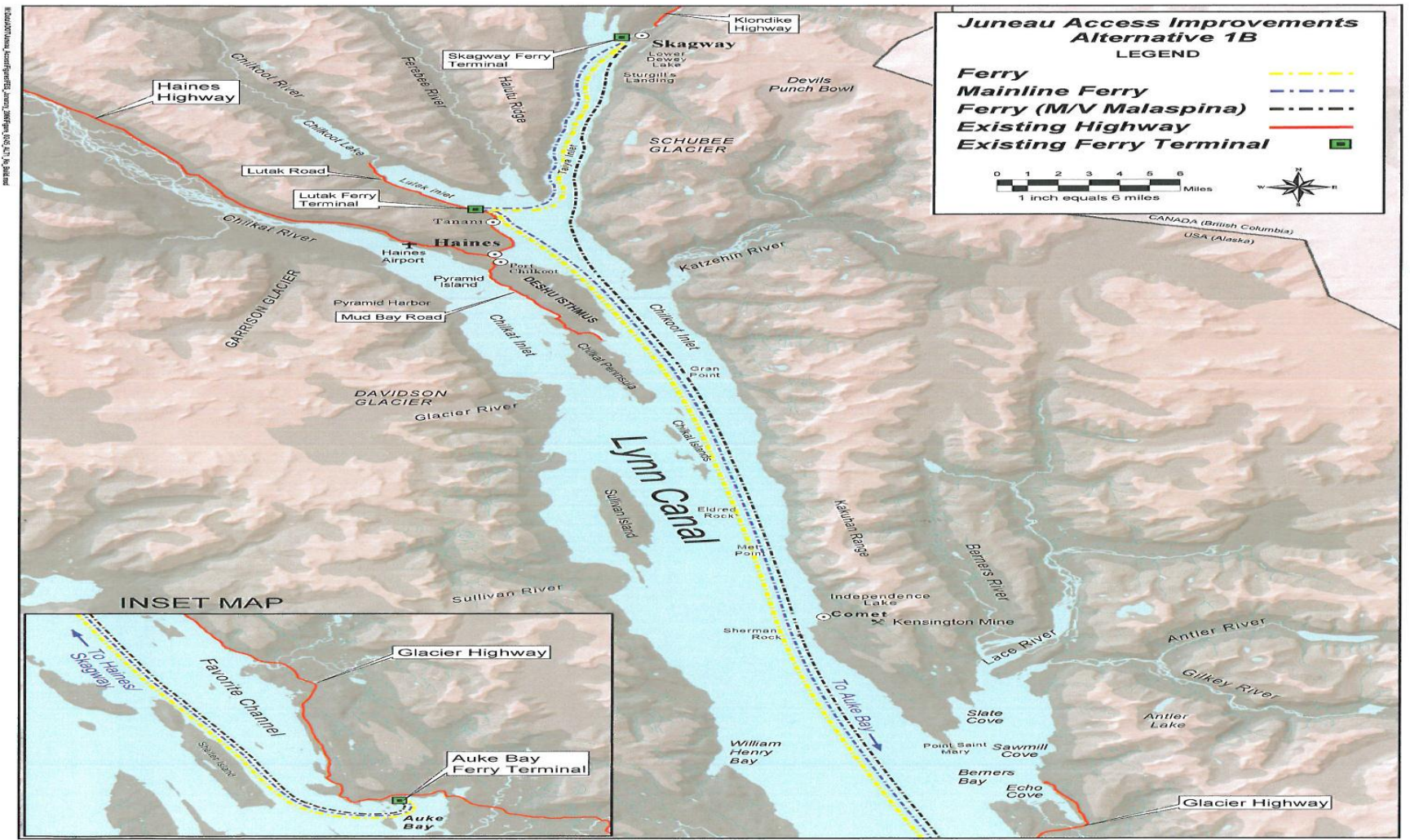


Figure 2-6
Alternative 1B: Enhanced Service with Existing AMHS Assets



Alternative 3 – West Lynn Canal Highway

- Alternative 3 would upgrade/extend the Glacier Highway (5.2 miles including 2.3 miles of new highway and upgrade to 2.9 miles of the existing Glacier Highway) from Echo Cove to Sawmill Cove in Berners Bay.
- New ferry terminals would be constructed at Sawmill Cove in Berners Bay and at William Henry Bay on the west shore of Lynn Canal, and the Skagway Ferry Terminal would be modified to include a new end berth.
- A new 38.9-mile highway would be constructed from the William Henry Bay Ferry Terminal to Haines.
- A new conventional monohull ferry would be constructed and would operate between Haines and Skagway.
- Mainline ferry service would end at Auke Bay.
- During the summer, two Day Boat ACFs would make six round-trips per day between Sawmill Cove and William Henry Bay (total of 12 trips each direction), and the Haines-Skagway shuttle ferry would make six round-trips per day.
- During the winter, one Day Boat ACF would make four round-trips per day between Sawmill Cove and William Henry Bay, and the Haines-Skagway shuttle ferry would make four round-trips per day.

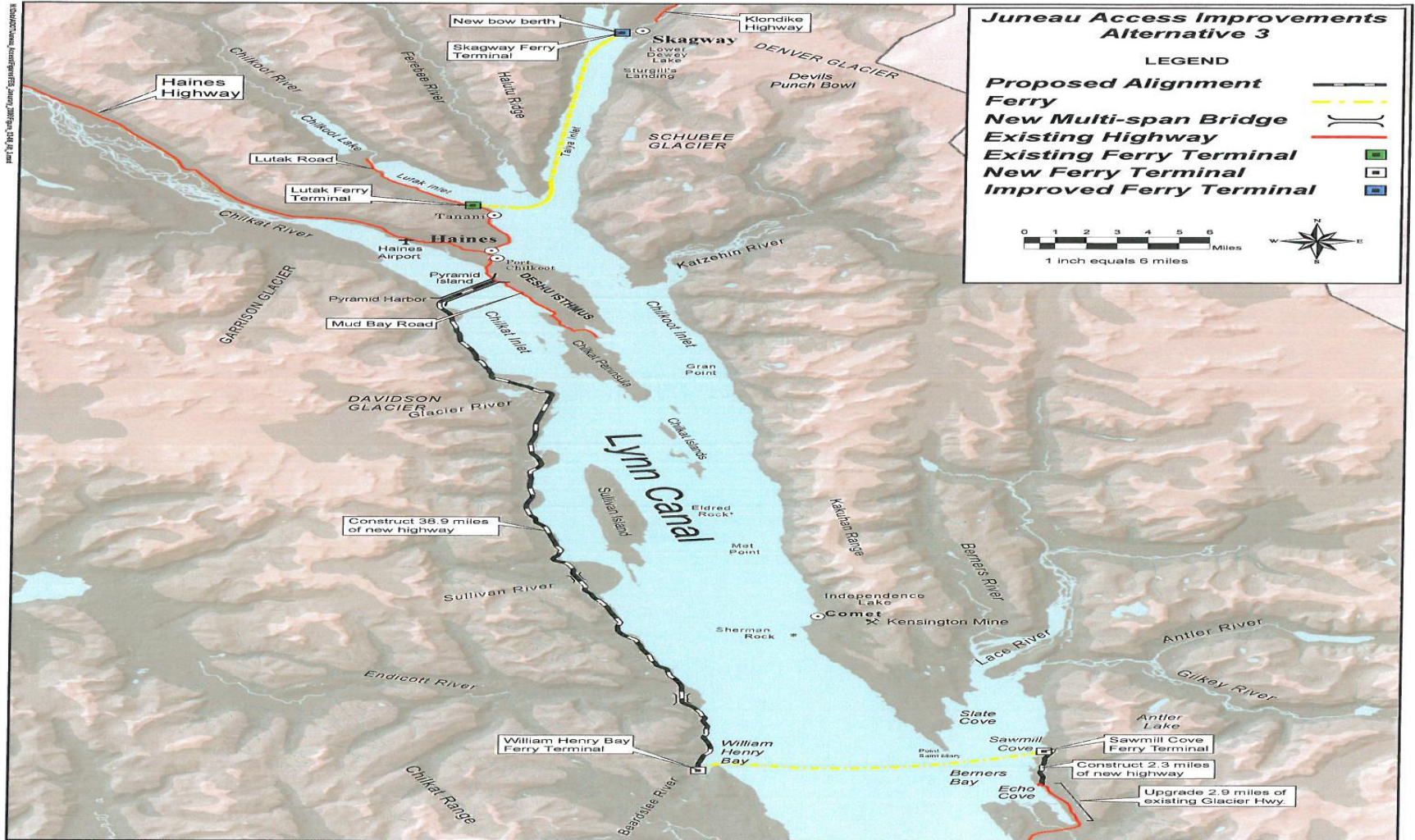


Figure 2-8
Alternative 3: West Lynn Canal Highway



Alternatives 4A thru 4D

- All four marine alternatives would include continued mainline ferry service in Lynn Canal with a minimum of two trips per week in the summer and one per week in the winter with Auke Bay-Haines-Skagway-Haines-Auke Bay routing.
- Each marine alternative includes a new conventional monohull shuttle that would make two round-trips per day between Haines and Skagway six days a week in the summer and a minimum of three round-trips per week between Haines and Skagway in the winter.
- The AMHS would continue to be the NHS route from Juneau to Haines and Skagway.
- These alternatives assume the following improvements will have been made independent of the JAI Project before the alternative comes on-line:
 - improved vehicle and passenger staging areas at the Auke Bay and Haines ferry terminals to optimize traffic flow on and off the Day Boat ACFs
 - expansion of the Haines Ferry Terminal to include new double bow berths



Alternative 4A – FVF from Auke Bay

- Alternative 4A would construct two new fast vehicle ferries (FVF).
- No new roads would be built for this alternative
- The Auke Bay Ferry Terminal would be expanded to include a new double stern berth.
- *The FVFs would make two round-trips between Auke Bay and Haines and two round-trips between Auke Bay and Skagway per day in the summer.*
- *During the winter, one FVF would make one round-trip between Auke Bay and Haines and one round-trip between Auke Bay and Skagway each day.*



Alternative 4C – Conventional Monohull from Auke Bay

- Alternative 4C would use Day Boat ACFs to provide additional ferry service in Lynn Canal.
- No new roads would be built for this alternative.
- The Auke Bay Ferry Terminal would be expanded to include a new double stern berth, and the Skagway Ferry Terminal would be expanded to include a new bow berth.
- In the summer, one Day Boat ACF would make one round-trip per day between Auke Bay and Haines, and one Day Boat ACF would make one round-trip per day between Auke Bay and Skagway.
- During the winter, one Day Boat ACF would alternate between a round-trip to Haines one day and a round-trip to Skagway the next day.

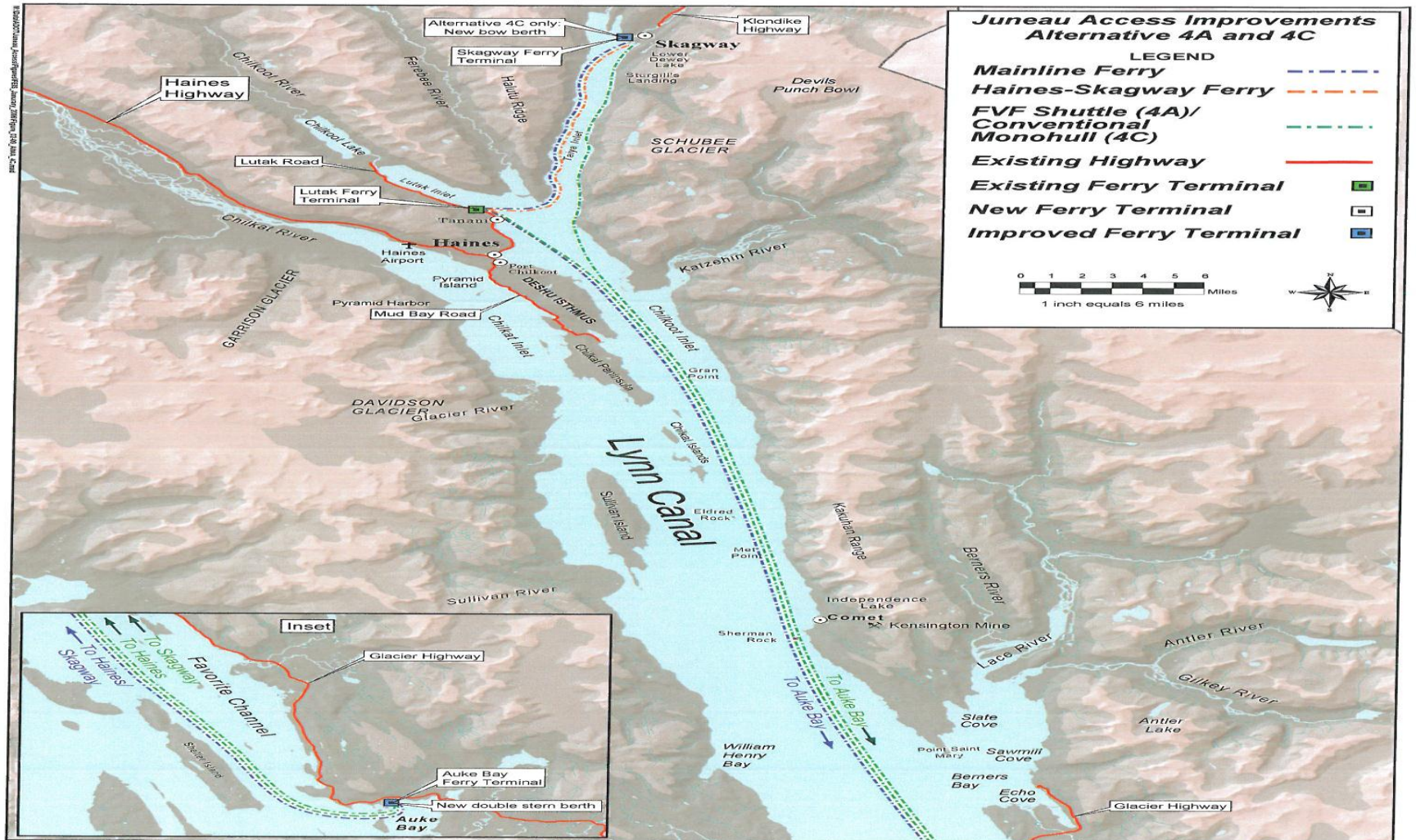


Figure 2-9
Alternative 4A: Fast Vehicle Ferry (FVF) and Alternative 4C: Conventional Monohull Shuttle Service from Auke Bay



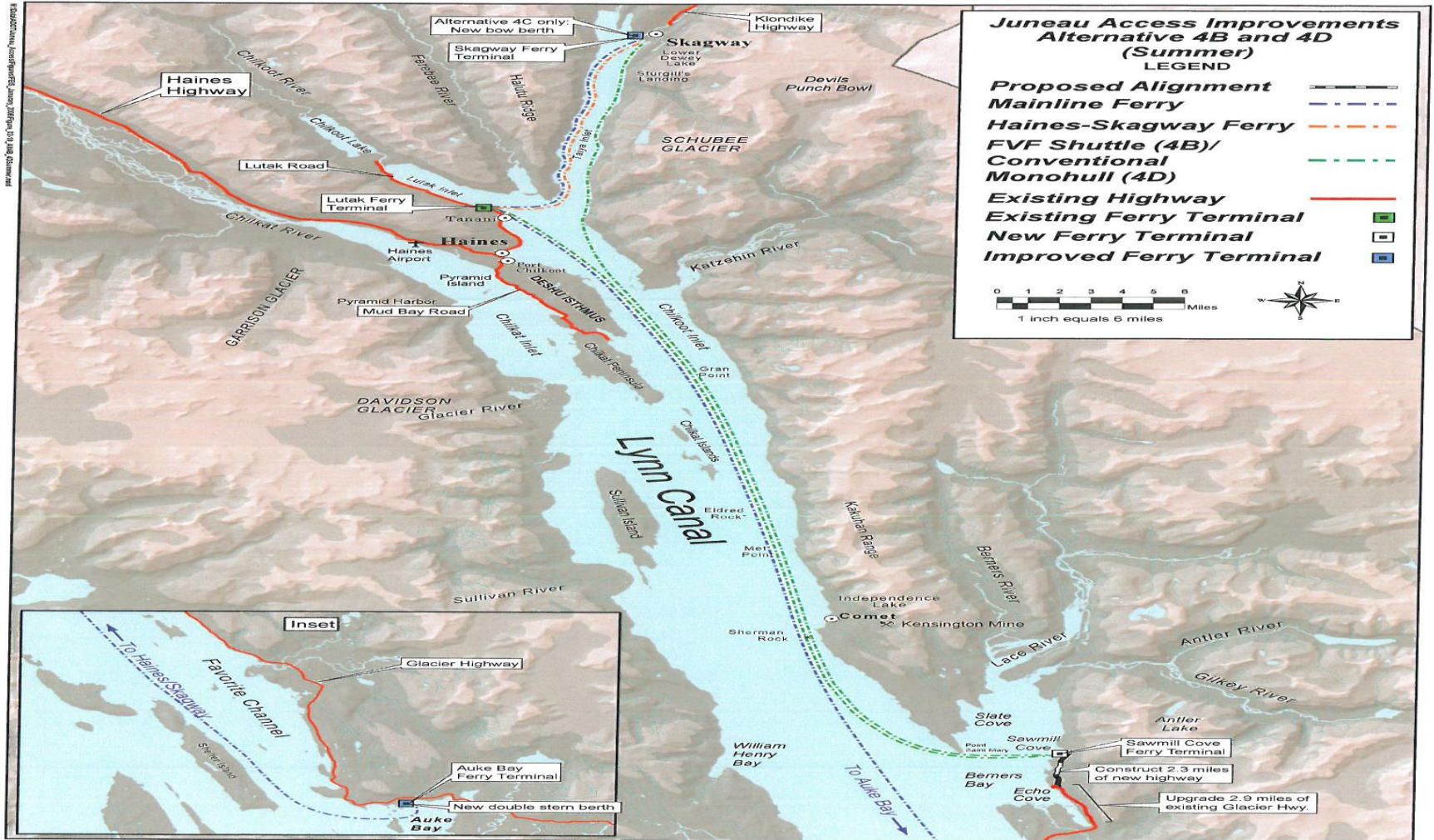
Alternative 4B – FVF from Berners Bay

- Alternative 4B would construct two new FVFs.
- This alternative would upgrade/extend Glacier Highway (5.2 miles including 2.3 miles of new highway and 2.9 miles of the existing Glacier Highway) from Echo Cove to Sawmill Cove in Berners Bay where a new ferry terminal would be constructed.
- The Auke Bay Ferry Terminal would be expanded to include a new double stern berth.
- *In the summer, the FVFs would make two round-trips between Sawmill Cove and Haines and two round-trips between Sawmill Cove and Skagway per day.*
- *During the winter, one FVF would make one round-trip between Auke Bay and Haines and one round-trip between Auke Bay and Skagway each day.*



Alternative 4D – Conventional Monohull from Berners Bay

- Alternative 4D would use Day Boat ACFs to provide additional ferry service in Lynn Canal.
- This alternative would upgrade/extend Glacier Highway (5.2 miles including 2.3 miles of new highway and 2.9 miles of the existing Glacier Highway) from Echo Cove to Sawmill Cove in Berners Bay where a new ferry terminal would be constructed.
- The Auke Bay Ferry Terminal would be expanded to include a new double stern berth, and the Skagway Ferry Terminal would be expanded to include a new bow berth.
- In the summer, the Day Boat ACFs would make two trips per day between Sawmill Cove and Haines and two trips per day between Sawmill Cove and Skagway.
- During the winter, a Day Boat ACF would operate from Auke Bay, alternating between a round-trip to Haines one day and to Skagway the next day.



**Figure 2-10
Alternative 4B: Fast Vehicle Ferry (FVF) and Alternative 4D: Conventional Monohull Shuttle Service
from Berners Bay (Summer)**