

Purpose & Need

The purpose of this project is to improve surface transportation between Revillagigedo Island and Gravina Island.

The need for improving access is threefold:

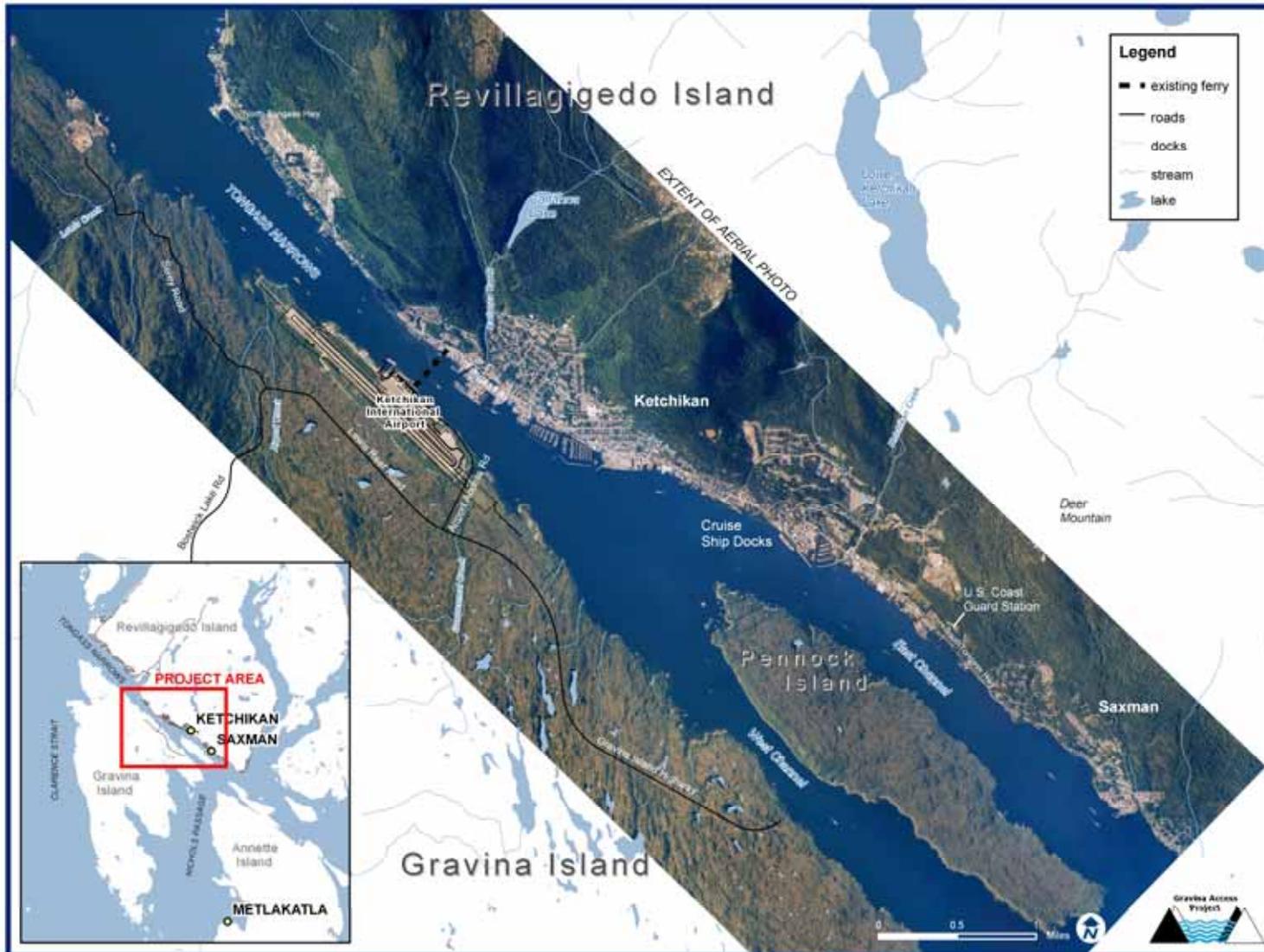
- ◆ To provide the Ketchikan Gateway Borough and its residents more reliable, efficient, convenient, and cost-effective access for vehicles, bicycles, and pedestrians to Borough lands and other developable or recreation lands on Gravina Island in support of the Borough's adopted land use plans.
- ◆ To improve the convenience and reliability of access to Ketchikan International Airport for passengers, airport tenants, emergency personnel and equipment, and shipment of freight.
- ◆ To promote environmentally sound, planned long-term economic development on Gravina Island.



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Project Area



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Why prepare an SEIS?

On Sept. 21, 2007, Governor Palin announced that the State could not fund the selected bridge alternative identified in the Gravina Access Project Record of Decision and directed the DOT&PF to look for the most fiscally responsible alternative for access to the Ketchikan Airport and Gravina Island. DOT&PF is now preparing a Supplemental EIS to consider proposed reasonable alternatives that include the recently constructed Gravina Island Highway which DOT&PF began constructing in 2006. The No Action Alternative will also be considered. The SEIS will result in a FHWA Record of Decision selecting a new alternative.

Supplemental Environmental Impact Statement

- ◆ An SEIS is necessary when there are changes, new information, or further developments on a project that result in significant environmental impacts not identified in the most recently distributed version of the draft or final EIS (40 CFR 1502.9 (c)).
- ◆ The SEIS should provide sufficient information to briefly describe the proposed action, the reasons why a supplement is being prepared, and the status of the previous draft or final EIS.

Why an SEIS for the Gravina Access Project?

- To consider the **funding available**.
- To include **Gravina Island Highway** as an element of all proposed reasonable alternatives.

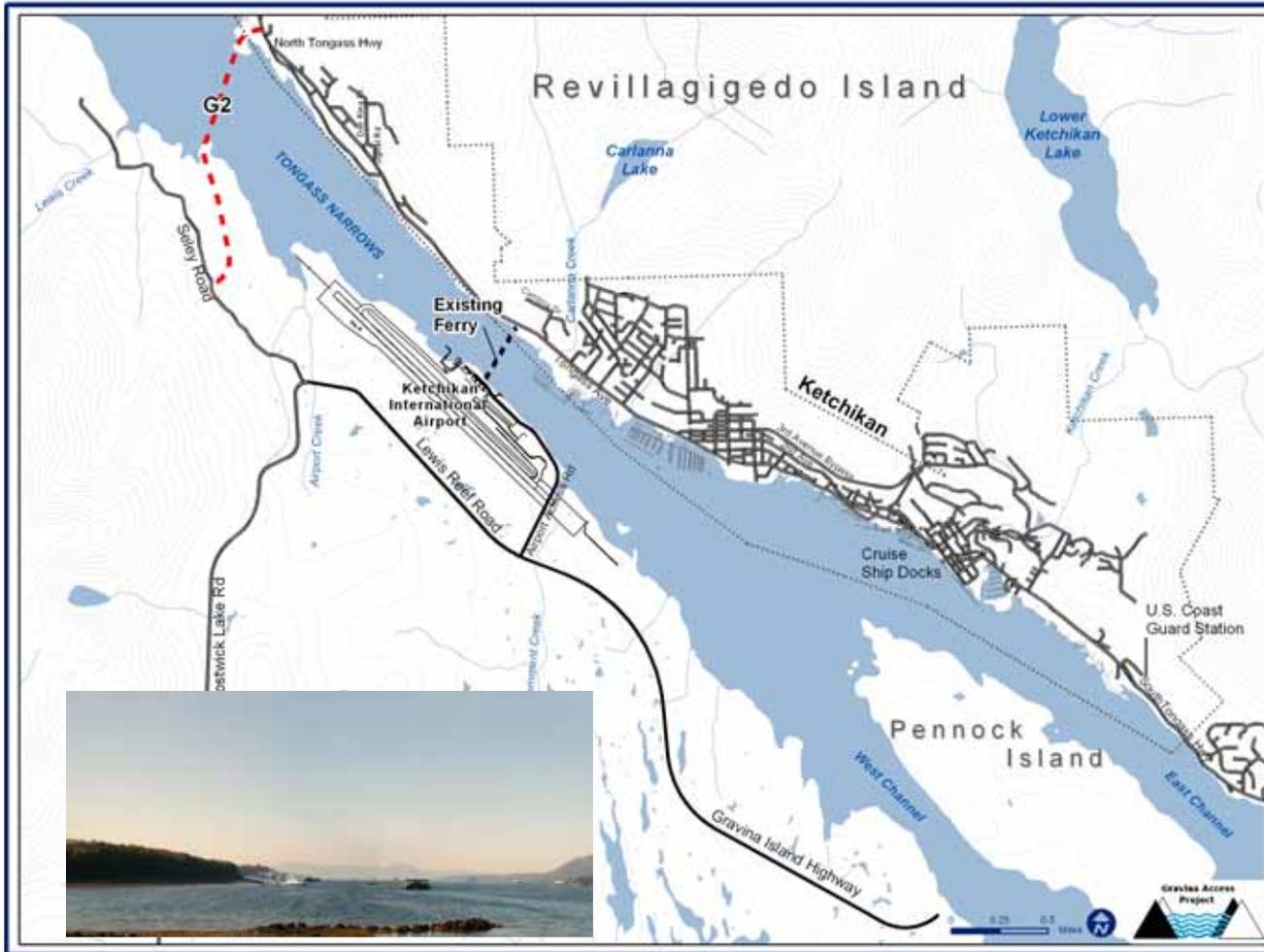


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Alternative G2

New ferry service between Peninsula Point and Lewis Point near Ward Cove



- Supplements existing shuttle ferry
- Two ferry routes
- Total of four ferries (two new ferries)
- Total of four terminals (two new terminals)
- Total of four ferry docks (two new docks)
- 60-passenger waiting facility with restrooms at Charcoal Point on Revilla Island
- Shuttle van service for pedestrians and their luggage from Charcoal Point to the terminal
- Heavy freight terminal and 3/4-acre staging area built south of current ferry dock on Gravina Island
- 4.1 mile paved access from Lewis Point to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway to provide access to developable lands
- Constructed Cost = \$84 Million

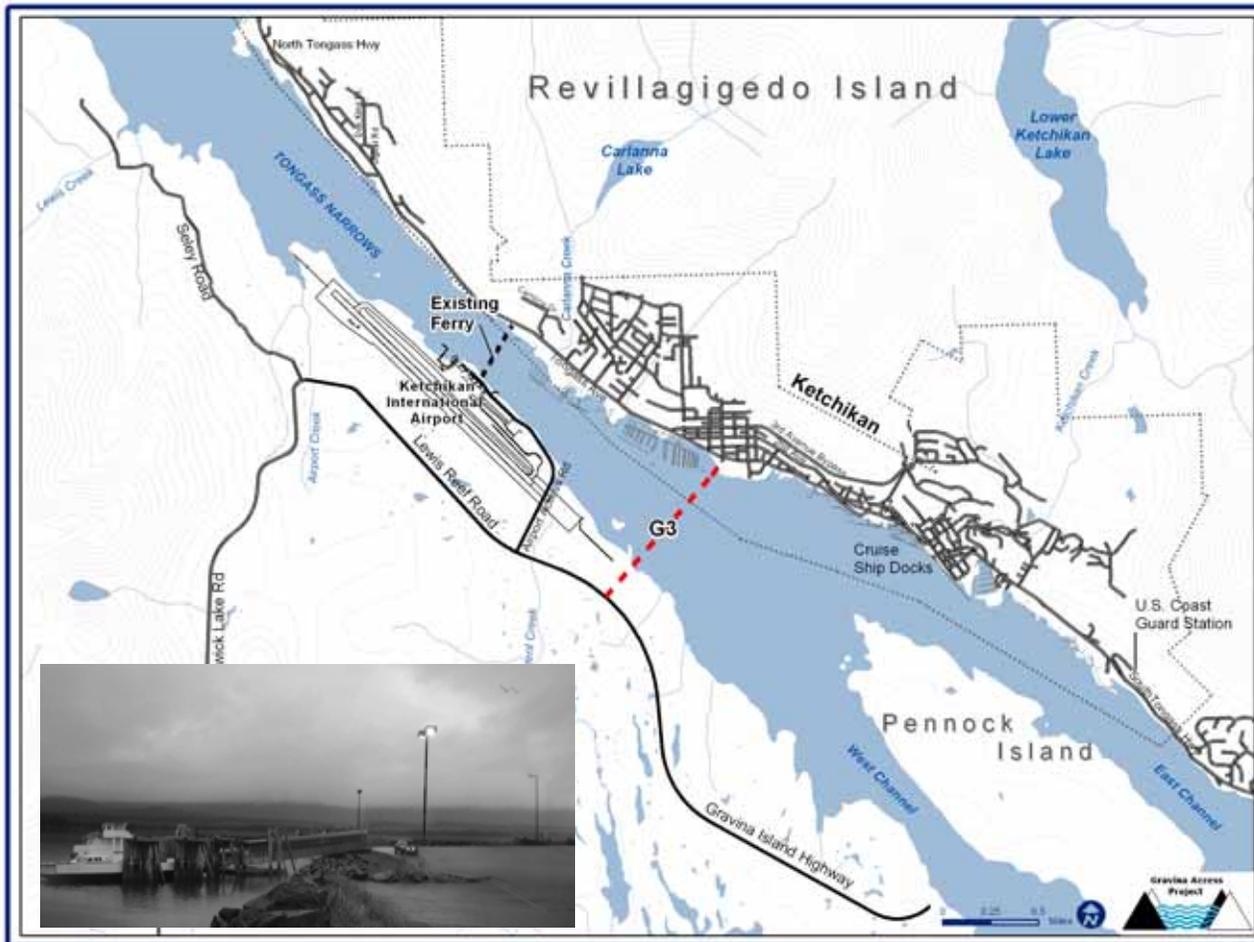


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Alternative G3

New ferry service between Bar Point downtown and Clump Cove



- Supplements existing shuttle ferry
- Two ferry routes
- Total of four ferries (two new ferries)
- Total of four terminals (two new terminals)
- Total of four ferry docks (two new docks)
- Widening of existing breakwater for Revilla Island terminal
- 60-passenger waiting facility with restrooms at Charcoal Point on Revilla Island
- Shuttle van service for pedestrians and their luggage from Charcoal Point to the terminal
- Heavy freight terminal and 3/4-acre staging area built south of current ferry dock on Gravina Island
- 1.9 mile paved access from Clump Cove to airport terminal
- Includes the maintenance and operation of the rest of Gravina Island Highway, and the Lewis Reef and Seley roads to provide access to developable lands
- Constructed Cost = \$77 Million



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Alternative G4

New ferry service between Charcoal Point and airport terminal



- Supplements existing shuttle ferry
- Two ferry routes
- Total of four ferries (two new ferries)
- Total of three terminals (one new terminal)
- Total of four ferry docks (two new docks)
- 60-passenger waiting facility with restrooms at Charcoal Point on Revilla Island
- Shuttle van service for pedestrians and their luggage from Charcoal Point to the terminal
- Heavy freight terminal and 3/4-acre staging area built south of current ferry dock on Gravina Island
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$63 Million



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Alternative G4v

Ferry service between Charcoal Point and airport terminal

Variant (new) of G4 (new ferry service adjacent to the existing airport ferry when demand warrants)



- Existing ferry route
- Total of two ferries (no new ferries built at this time)
- Total of two terminals (no new terminals constructed at this time)
- Total of two docks (no new docks constructed at this time)
- 60-passenger waiting facility with restrooms at Charcoal Point on Revilla Island
- Shuttle van service for pedestrians and their luggage from Charcoal Point to the terminal
- Heavy freight terminal and 3/4-acre staging area built south of current ferry dock on Gravina Island
- When demand warrants, one new ferry, one new terminal, and two new docks would be constructed at the same location as proposed in Alternative G4
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Initial Cost = \$16 Million



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Alternative C3a

High bridge crossing Tongass Narrows in the vicinity of the airport



- Bridge is located north of the KIA passenger terminal
- Alignment connects at Signal Road
- 6,800-foot long bridge
- Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal navigational clearance
- Would penetrate FAA Part 77 airspace
- Would accommodate one-way passage of cruise ships
- Would accommodate two-way passage of most other vessels including AMHS ferries
- 2.2 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$463 Million



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Alternative C3b

Low bridge crossing Tongass Narrows in the vicinity of the airport



- Bridge is located north of the KIA passenger terminal
- Alignment connects at Signal Road
- 4,250-foot long bridge
- Main bridge span would have a 120-foot vertical navigational clearance and a 500-foot horizontal navigational clearance
- Would not penetrate FAA Part 77 airspace
- Would not accommodate passage of most cruise ships
- Would accommodate two-way passage of most other vessels including AMHS ferries
- 1.6 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$352 Million



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Alternative C4

High bridge crossing Tongass Narrows in the vicinity of the airport



- Bridge is located north of the KIA passenger terminal
- Alignment connects at Cambria Drive
- 5,000-foot long bridge
- Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal navigational clearance
- Would penetrate FAA Part 77 airspace
- Would accommodate one-way passage of cruise ships
- Would accommodate two-way passage of most other vessels including AMHS ferries
- 2.0 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$441 Million



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Alternative C 3-4

Variant (new) of C3a and C4 consisting of a high bridge crossing in the vicinity of the airport



- Bridge is located north of the KIA passenger terminal
- Alignment connects to the proposed KGB Bench Road, and then to Rex Allen Drive/Misty Marie Lane/Signal Road near Wal-Mart
- 4,190-foot long bridge
- Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal navigational clearance
- Would penetrate FAA Part 77 airspace
- Would accommodate one-way passage of cruise ships
- Shifts cruise ship track line approximately 175 feet to the east
- Would accommodate two-way passage of most other vessels including AMHS ferries
- 2.0 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$240 Million



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Alternative D1

Low bridge crossing Tongass Narrows at the airport



- Bridge is located directly across from the KIA passenger terminal
- Alignment connects at Cambria Drive
- 3,600-foot long bridge
- Main bridge span would have a 120-foot vertical navigational clearance and a 500-foot horizontal navigational clearance
- Would not penetrate FAA Part 77 airspace
- Would not accommodate passage of most cruise ships
- Would accommodate two-way passage of most other vessels including AMHS ferries
- 1.4 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$291 Million



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Alternative F1

Two bridges that cross East and West Channels via Pennock Island



- Alignment from South Tongass Avenue to Gravina Island Highway to Airport Access Road to the KIA passenger terminal
- There would be two structures constructed via Pennock Island—East Channel and West Channel bridges

- East Channel bridge
 - 3,400-foot long bridge
 - Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal navigational clearance
 - Would accommodate both one-way passage for cruise ships, and two-way passage for AMHS ferries

- West Channel bridge
 - 2,465-foot long bridge
 - Main bridge span would have a 120-foot vertical navigational clearance and a 500-foot horizontal clearance
 - Would accommodate two-way passage for AMHS ferries and smaller vessels, but would not accommodate passage of most cruise ships

- Would not penetrate FAA Part 77 airspace
- Selected alternative from 2004 Record of Decision
- 7.0 miles of paved access to airport terminal
- Includes the maintenance and operation of the Lewis Reef and Seley roads to provide access to developable lands
- Constructed Cost = \$375 Million



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Alternative F3

Two bridges that cross East and West Channels via Pennock Island



- Alignment from South Tongass Avenue to Gravina Island Highway to Airport Access Road to the KIA passenger terminal
- There would be two structures constructed via Pennock Island—East Channel and West Channel bridges

- East Channel Bridge
 - 1,985-foot long bridge
 - Main bridge span would have a 60-foot vertical navigational clearance and a 350-foot horizontal navigational clearance
 - Would accommodate passage for smaller, very low air draft vessels

- West Channel Bridge
 - 2,470-foot long bridge
 - Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal clearance
 - Would accommodate both one-way passage for cruise ships, and two-way passage for AMHS ferries
 - Dredging in the West Channel would be required to accommodate large cruise ships

- Would not penetrate FAA Part 77 airspace
- 5.9 miles of paved access to airport terminal
- Includes the maintenance and operation of the Lewis Reef and Seley roads to provide access to developable lands
- Constructed Cost = \$304 Million



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Alternative F3v

Variant (new) of F3 that consists of two bridges that cross East and West Channels via Pennock Island



- Same alignment as F3—South Tongass Avenue to Gravina Island Highway to Airport Access Road to the KIA passenger terminal
- There would be two structures constructed via Pennock Island—East Channel and West Channel bridges

- Utilizes a significant amount of fill in East and West Channels to reduce bridge lengths
- Two types of bridges considered for construction
 - Concrete box girder
 - Cable-stayed bridge
- The concrete box girder bridges include a 1,700-foot long bridge over the East Channel and a 1,720-foot long bridge over the West Channel
- The cable-stayed bridges include a 1,700-foot long bridge over the East Channel and a 1,760-foot long bridge over the West Channel
- East Channel bridge would accommodate passage for low air draft vessels
- West Channel bridge considerations would accommodate one-way passage of cruise ships, and two-way passage for AMHS ferries
- Would not penetrate FAA Part 77 airspace
- Dredging in West Channel proposed to accommodate large cruise ship passage
- 5.9 miles of paved access to airport terminal
- Includes the maintenance and operation of the Lewis Reef and Seley roads to provide access to developable lands
- Construction Cost = \$349 Million (Concrete Box Girder Bridges)



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Alternative M1

Straight moveable bridge crossing Tongass Narrows from Charcoal Point to the airport (new)



Arthur Kill Railroad Lift Bridge between New Jersey and New York

- Bridge is located directly east of the KIA passenger terminal
- Moveable vertical-lift steel truss bridge
- 1,400-foot long bridge
- Main bridge span would have a 200-foot vertical navigational clearance and a 550-foot horizontal navigational clearance in the raised position
- Provides 20 feet of vertical navigational clearance in the lowered position
- Would accommodate both one-way passage of cruise ships, and two-way passage of AMHS ferries in the raised position
- Time to raise the span and lower can be up to 30 minutes for each passage
- Would need to be raised for the majority of vessel traffic transiting Tongass Narrows
- Would move the cruise ship and AMHS tracklines together
- Would penetrate FAA Part 77 airspace
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access to developable lands
- Constructed Cost = \$375 Million



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Alternative M2

Curvilinear moveable bridge crossing Tongass Narrows from Charcoal Point to the airport (new)



- Bridge is located between the Charcoal Point parking lot and the KIA passenger terminal
- Moveable vertical-lift steel truss bridge
- 1,700-foot long bridge
- Main bridge span would have a 200-foot vertical navigation clearance and a 550-foot horizontal navigational clearance in the raised position
- Provides 60 feet of vertical navigational clearance in lowered position
- Would accommodate both one-way passage of cruise ships, and two-way passage of AMHS ferries in the raised position
- Time to raise the span and lower can be up to 30 minutes for each passage
- Would move the cruise ship and AHMS tracklines together
- Would penetrate FAA Part 77 airspace
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef, Seley and Airport Access roads to provide access developable lands
- Constructed Cost = \$413 Million

Photo of the top view of the Arthur Kill Lift Bridge between New Jersey and New York

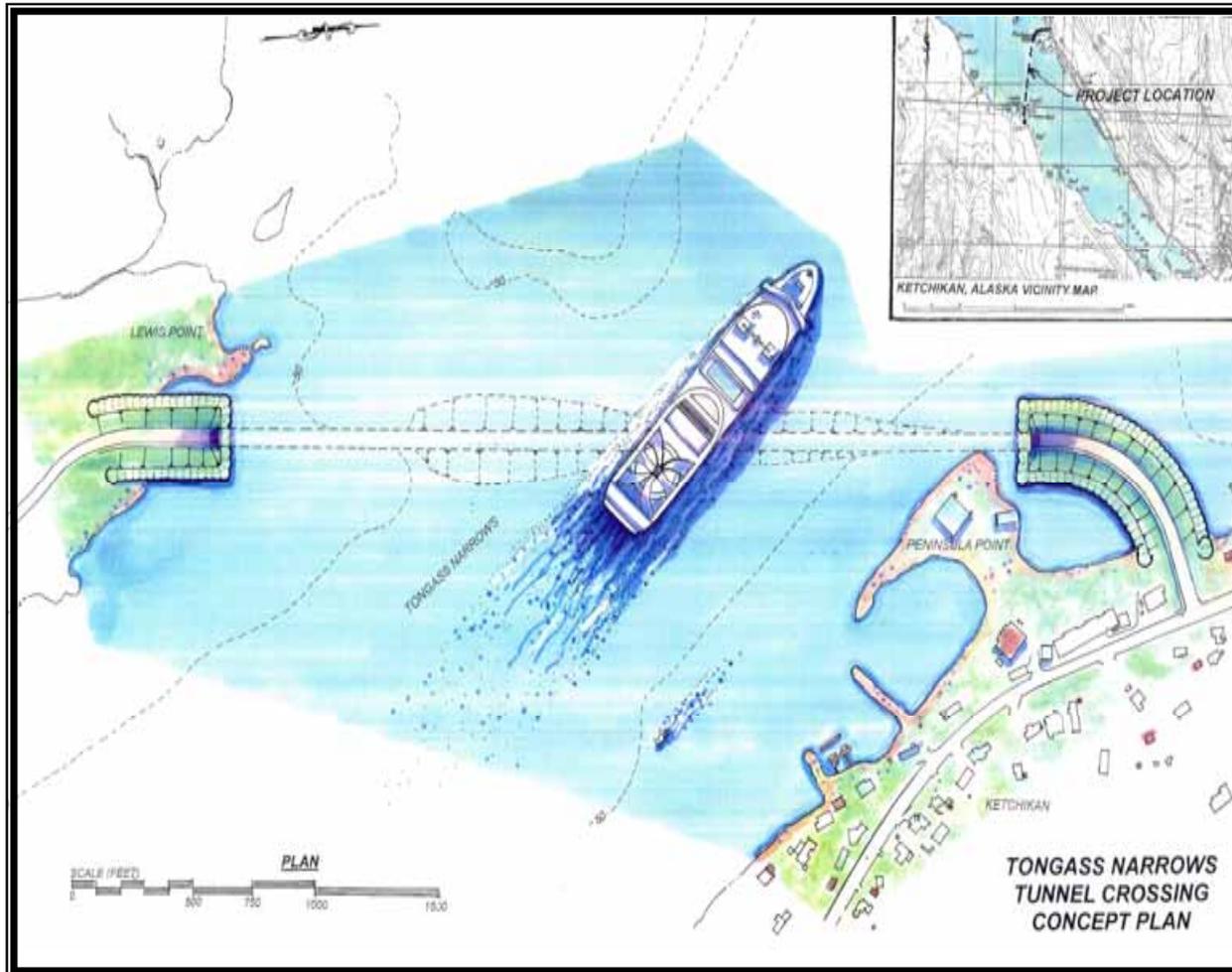


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Alternative T1

Tunnel crossing Tongass Narrows between Peninsula Point and Lewis Point (new)



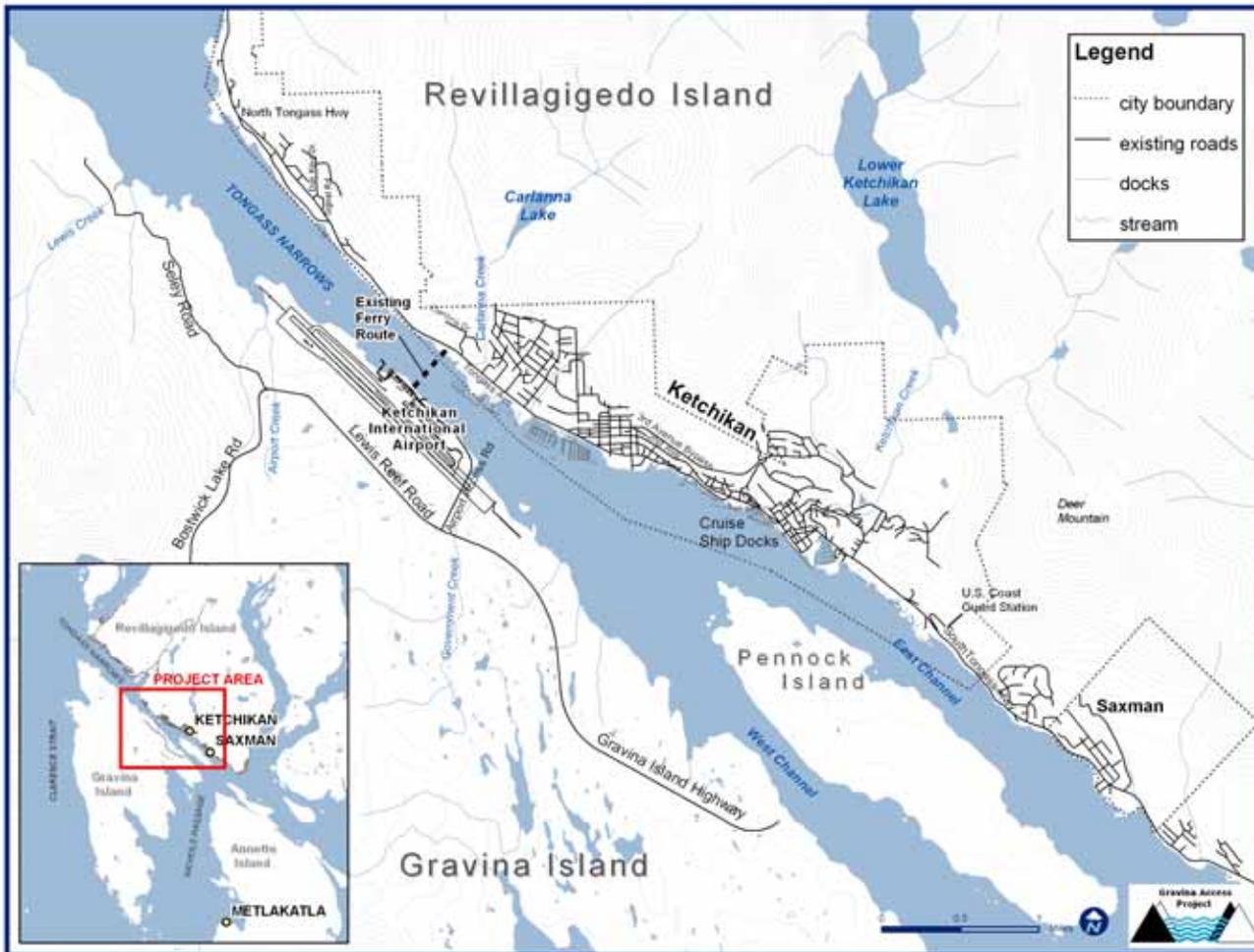
- Alignment from North Tongass Avenue to Lewis Point to Seley Road to Lewis Reef Road to Airport Access Road to the Ketchikan International Airport passenger terminal
- 3,200-foot long submersed tunnel
- Accommodates both one-way passage of cruise ships and two-way passage for AMHS ferries
- Does move the cruise ship trackline to the east
- Would not penetrate FAA Part 77 airspace
- 4.8 miles of paved access to airport terminal
- Includes the maintenance and operation of the Gravina Island Highway to provide access to developable lands
- Constructed Cost = \$417 Million



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No Action Alternative



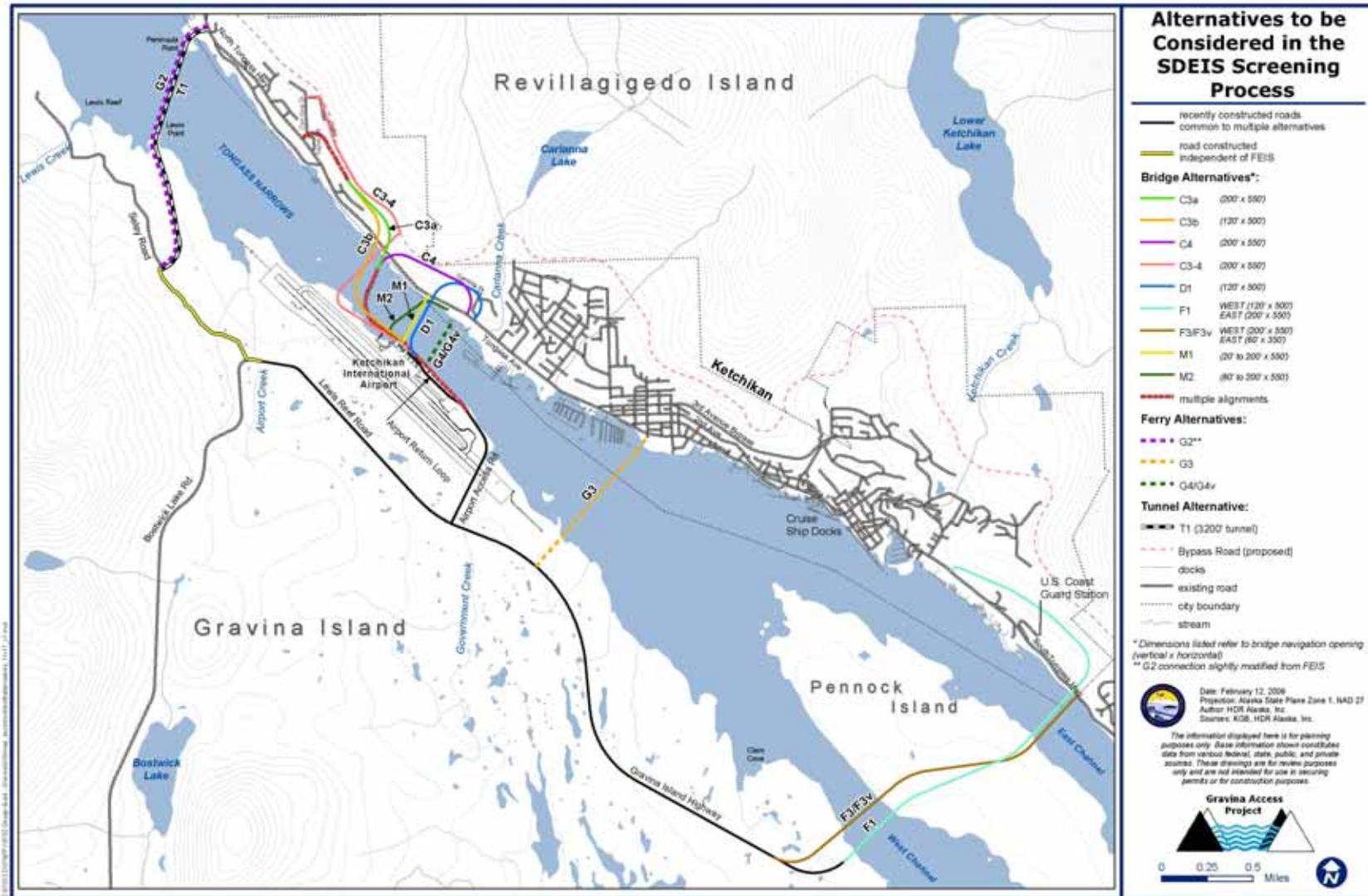
- Public access to Gravina Island would continue to be provided by the existing airport ferry system at the current level of service
- Total of two existing ferries
- Total of two existing terminals
- Total of two existing ferry docks
- Includes the maintenance and operation of the Gravina Island Highway, Lewis Reef and Airport Access roads
- Constructed Cost = \$0



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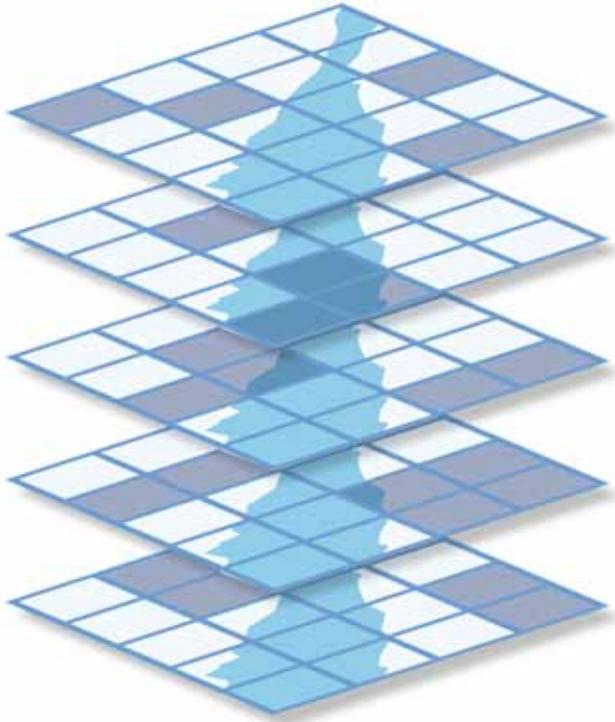
Alternatives to be Considered in the SDEIS Screening Process



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Screening Factors



Several factors will be considered in determining the alternatives to be evaluated in detail in the SEIS. Screening factors will include:

- how well each build alternative meets the purpose and need for the project,
- its construction and operation costs,
- any potential Section 4(f) impacts,
- and the presence of designated special areas or a high level of environmental impacts that might make permitting and/or authorization for the alternative unlikely.



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Alternative Construction and Life-Cycle Cost Estimates

Alternative	Construction Cost (\$Million)	Life-Cycle Cost (\$Million)	Revenue-Adjusted Life-Cycle Cost (\$Million)
C3a	463	435	
C3b	352	332	
C4	441	411	
C3-4	240	231	
D1	291	275	
F1	375	369	
F3	304	301	
F3v	349	342	
G2	84	211	168
G3	77	198	155
G4	63	181	138
G4v	16	148	105
M1	375	388	
M2	413	445	
T1	417	442	
No-Build	0	76	30



Project Schedule

PROJECT MILESTONE	SEASON								
	WINTER 2008	SPRING 2008	SUMMER 2008	FALL 2008	WINTER 2009	SPRING 2009	SUMMER 2009	FALL 2009	WINTER 2010
Project Kickoff	■								
Public & Agency Scoping		■							
Public Meetings			●		●				
Scoping Summary Report				■					
Alternatives Development & Screening				■					
Develop & Distribute Draft SEIS				■		■			■

What is Next?

- Screening Methodology is developed in collaboration with the participating and cooperating agencies
- The alternatives are screened to determine the range of reasonable alternatives to be evaluated in detail in the SEIS
- Public opportunity to comment on the range of reasonable alternatives

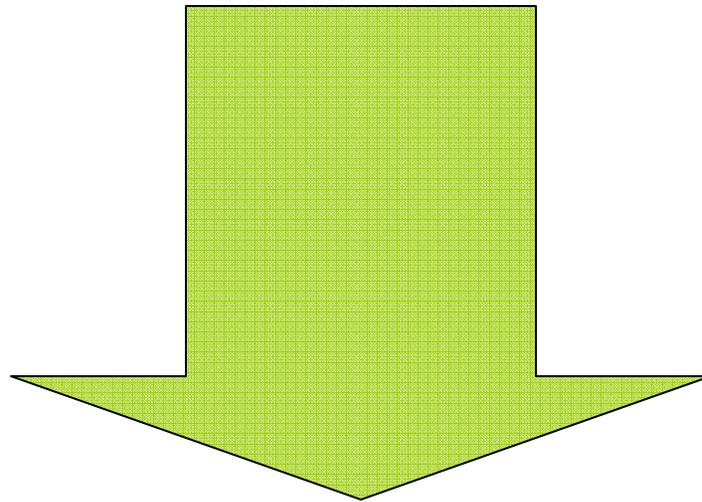


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We want to hear from you!

Please place your filled out comment form in the box.



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