7.0 COMMENTS AND COORDINATION

To fulfill the requirements of NEPA and Section 6002 of SAFETEA-LU for the Gravina Access Project SEIS, FHWA, DOT&PF, and the project team consulted and coordinated with federal, state, and local agencies, tribal governments, and the public during the environmental review. These stakeholders provided input during the public and agency scoping process, and on the alternative and screening methodology development. They also were given an opportunity to review and comment on the screening report, which identified the reasonable alternatives for analysis in the SEIS. Section 7.1 describes coordination with federal, state, and local agencies in accordance with SAFETEA-LU. The public and agency scoping process is described in Section 7.2. Section 7.3 describes the processes for development and screening of the alternatives, including coordination with agency and public stakeholders for input and comment.

7.1 Agency Involvement

SAFETEA-LU Section 6002 established new guidance for the roles and responsibilities for agency involvement during the environmental review process for transportation projects. The types of agency involvement and their respective roles and responsibilities include:

- Lead Agency/Agencies. The lead agencies must perform the functions that they have traditionally performed in preparing an EIS. New guidance also requires the lead agency to identify and involve participating agencies, develop coordination plans, and provide opportunities for public and participating agency involvement in defining the purpose and need and determining the range of alternatives. Additionally, lead agencies must provide increased oversight in managing the process and resolving issues. For purposes of the SEIS, FHWA and DOT&PF serve as "joint lead agencies."
- **Cooperating Agency.** Cooperating agencies are those agencies with jurisdiction by law or special expertise regarding the proposed action. Cooperating agencies have a higher degree of authority, responsibility, and involvement in the environmental review process. Every cooperating agency will also be a participating agency.
- Participating Agency. A participating agency is any agency that "may have an interest in the project." These agencies include all federal, state, tribal, regional, and local government agencies. Participating agencies are involved in the NEPA process, especially in development of the purpose and need statement, range of alternatives, methodologies, and the level of detail to analyze the alternatives.

Agencies consulted during the development of the 2004 Final EIS were considered potential cooperating and participating agencies for the SEIS. FHWA, in collaboration with DOT&PF, invited these agencies in July 2008 to become either cooperating or participating agencies.

7.1.1 Cooperating Agencies

In July 2008, FHWA sent a letter to federal agencies with jurisdiction in the project area explaining the language in SAFETEA-LU, outlining the responsibility of cooperating agencies, and extending an invitation to serve as a cooperating agency in accordance with FHWA regulation 23 CFR 771.111(d). Table 7-1 lists the agencies that accepted the invitation to become cooperating agencies and their areas of jurisdiction or expertise.

Page 7-1 June 2017

Table 7-1: Cooperating Agencies and their Areas of Jurisdiction/Expertise

Cooperating agency	Jurisdiction/Expertise
U.S. Coast Guard (USCG)	Responsible for approval of the location and plans of bridges and causeways constructed across navigable waters of the United States
U.S. Army Corps of Engineers (USACE)	Responsible for issuing permits under Section 404(b)(1) of the Clean Water Act for impacts to wetlands or waters of the United States and under Section 10 of the Rivers and Harbors Act of 1899

EPA, USFS, USFWS, and FAA were invited to be cooperating agencies, but declined the invitation. EPA, USFWS, and FAA requested designation as participating agencies (see Section 7.1.2). USFS declined participation as a cooperating or participating agency.

7.1.2 Participating Agencies

On June 26, 2008, DOT&PF sent a letter to the state agencies, municipal governments, tribal governments, and Native corporations listed below to solicit scoping comments and invite them to become participating agencies.

- ADEC, Division of Air and Water Quality
- ADF&G, Division of Habitat
- DNR, The Trust Land Office
- DNR, Division of Coastal and Ocean Management¹
- ADF&G, Office of Habitat Management and Permitting²
- DNR, SHPO
- Ketchikan Gateway Borough
- City of Ketchikan
- City of Saxman
- Organized Village of Saxman
- Ketchikan Indian Community
- Metlakatla Indian Community
- Central Council Tlingit and Haida Indian Tribes of Alaska
- Hydaburg Cooperative Association
- Craig Community Association
- Klawock Cooperative Association
- Organized Village of Kasaan

Page 7-2 June 2017

¹ The Division of Coastal and Ocean Management was dissolved on July 1, 2011, with the sunset of the Alaska Coastal Management Program.

² At the time DOT&PF sent its scoping letter, the Office of Habitat Management and Permitting was in DNR. The office has been within the ADF&G since July 2008.

Table 7-2 lists the agencies that provided written responses affirming their involvement as participating agencies, and their jurisdiction or expertise.

Table 7-2: Participating Agencies and their Areas of Jurisdiction/Expertise

Participating Agency	Jurisdiction/Expertise
FAA	Provides regulation and oversight for the safety and efficiency of air travel
USFWS	Administers the ESA, manages migratory bird populations, restores nationally significant fisheries, and conserves and restores wildlife habitat such as wetlands
EPA	Reviews, rates, and publicly comments on the environmental impacts of major federal actions Has a significant role in the Clean Water Act Section 404 process
DNR, The Trust Land Office	Manages Mental Health Trust land
ADF&G, Office of Habitat Management and Permitting	Primarily responsible for the protection of Alaska's fish and wildlife resources and their habitats
	Coordinates with other agencies during plan reviews to provide expertise for protecting important fish and wildlife habitat throughout the state.
Ketchikan Gateway Borough	Provides local government services including operation of the existing ferry service, airport management, and has planning authority within Borough boundaries
City of Ketchikan	A Home Rule city within the Ketchikan Gateway Borough
	Provides local city services including public school education, regional land-use planning and regulation, and property assessment and collection of taxes for both the Borough government and any cities within the Borough

As of August 19, 2008, the end of the formal scoping period, no tribal government had affirmed in writing its interest to be involved as a participating agency. On August 28, 2008, FHWA made follow-up calls to the tribes and Native corporations receiving the invitation letter. The Craig Community Association provided a definitive response indicating it was not interested in participating agency status. In other cases, either no direct contact could be made (left messages) or no definitive statement regarding participating agency status was obtained.

7.2 Public and Agency Scoping Process

The scoping process encompasses the methods used to engage agencies and the public in the environmental review and the means by which agency and public comments and concerns are reflected in the alternatives development and environmental analysis. More detailed information about the scoping activities undertaken for the SEIS is available in the *Gravina Access Project Supplemental Environmental Impact Statement Scoping Summary Report (Scoping Summary Report)*. Scoping activities included public notices of SEIS development activities, individual and small group meetings and briefings, agency review of study documents, public scoping meetings, and identification of comment opportunities.

7.2.1 Notice of Intent

On July 2, 2008, FHWA (in cooperation with DOT&PF) published in the *Federal Register* a Notice of Intent (NOI) to prepare the Gravina Access Project SEIS. The NOI described the project's proposed action, stated the purpose and need for action, and announced opportunities to comment on the scope of the analysis for the project and the range of alternatives. The NOI also announced the opportunity for anyone interested in the SEIS to attend public scoping meetings held on July 22, 2008, in Ketchikan, Alaska. The deadline for scoping comments (August 19, 2008) was also published in the NOI.

Page 7-3 June 2017

³ Published in December 2008.

The NOI was posted on the Gravina Access Project Web site (http://dot.alaska.gov/sereg/projects/gravina_access/) and published in the newspapers listed in Table 7-3.

Table 7-3: Notice of Intent Publication List

Publication	Publication Date
Ketchikan Daily News	June 20, 2008
Juneau Empire	June 20, 2008
Southeast Island News	July 14, 2008

7.2.2 Agency Consultation

Agency consultation included written invitations to agencies soliciting their participation in the project either as cooperating or participating agencies (see Section 7.1), one-on-one agency scoping meetings, and letters to agencies requesting scoping and alternative development comments. The *Scoping Summary Report* includes the invitation letters, responses, meeting minutes, and related materials. Scoping comments received from the agencies are included in Appendix A of that report.

In addition to the meetings and requests for comments, the agencies, including tribal governments and Native corporations, received the following documents for review and comment:

- Gravina Island Access Supplemental Environmental Impact Statement Coordination Plan, October 2008.
- Gravina Access Project Supplemental Environmental Impact Statement Scoping Summary Report, December 2008.
- Gravina Access Pre-Screening Alternatives Memorandum, February 2009.
- Gravina Access Project Alternatives Screening Methodology Report, February 2009.
- Gravina Access Project SEIS Alternatives Screening Report, March 2010.

Table 7-4 provides the chronology of consultation and outreach efforts to the agencies and stakeholders with jurisdiction in the project area and/or a specific interest related to the project. Table 7-4 also documents the efforts by DOT&PF to obtain input during the scoping and alternative screening process to identify the reasonable alternatives evaluated in this <u>Final</u> SEIS.

Table 7-4: Agency and Stakeholder Consultation Activities

Meeting Date	Agency	Topics Discussed
May 6, 2008 Anchorage	DNR—SHPO	Appropriate season for field workNeeds for additional surveys and information gathering
June 10, 2008 Ketchikan	ADF&G, Division of Habitat	 Information regarding SEIS Issues or concerns related to ADF&G resources Project information, alternatives ADF&G confirmed the level of analysis conducted during the FEIS was appropriate
June 10, 2008 Ketchikan	City of Ketchikan	 Information regarding SEIS Issues or concerns identified by the City Project information, alternatives The point of contact for the City

Page 7-4 June 2017

Meeting Date	Agency	Topics Discussed
June 12, 2008 Juneau	USFS	 Information regarding SEIS Issues or concerns related to USFS resources Project information, alternatives
June 12, 2008 Juneau	DNR—Division of Coastal and Ocean Management ⁴	 The point of contact for the USFS Information regarding SEIS Issues or concerns related to coastal resources
June 23, 2008	EPA	 Project information, alternatives The point of contact for the Division Information regarding SEIS
Anchorage		 Issues or concerns expressed by EPA Project information, alternatives The point of contact for the EPA
June 25, 2008 Juneau	USCG	 Information regarding SEIS Issues or concerns related to navigation Information needs
June 25, 2008 Juneau	NMFS	 Project history Project information, alternatives Issues or concerns related to marine wildlife
July 21, 2008 Ketchikan	Ketchikan Gateway Borough	SEIS proposed purposeProject area and range of alternatives
July 21, 2008 Saxman	City of Saxman	SEIS proposed purposeProject area and range of alternatives
May 12, 2010 Ketchikan	Ketchikan Gateway Borough	Assumptions for population growth and future land use on Gravina Island
May 24, 2010 By phone	Misty Fjords Air (seaplane pilots)	 Concerns related to bridge alternatives Online availability of <i>Alternatives Screening Report</i> Other opportunities to meet and discuss alternatives with seaplane pilots
June 14, 2010 Ketchikan	Southeast Alaska Pilots' Association	Range of alternatives and screening criteriaAreas of concern for marine pilots
October 20, 2011 Ketchikan	Misty Fjords Air (seaplane pilots)	Range of alternatives and screening criteriaAreas of concern for small airplane operators
October 20, 2011 Ketchikan	Ketchikan Gateway Borough	Range of alternatives and screening criteriaSEIS schedule update
November 2, 2011 Juneau	USCG	Range of alternatives and screening criteriaIssues related to bridge alternatives

7.2.3 Tribal Government Consultation

FHWA recognizes the sovereignty of tribal governments and works to coordinate communication and outreach efforts under Executive Order (EO) 13175 Consultation and Coordination with Indian Tribal Governments and the requirements of Section 106 of the National Historic Preservation Act. EO 13175 defines "Indian tribe" as an Indian or Alaska Native tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian tribe pursuant to the Federally Recognized Indian Tribe List

Page 7-5 June 2017

⁴The Division of Coastal and Ocean Management was dissolved on July 1, 2011, with the sunset of the Alaska Coastal Management Program.

Act of 1994, 25 U.S.C. 479a, and as expanded by the Omnibus Trade Act of 2000. EO 13175 outlines the manner in which each federal agency must ensure that it operates with a government-to-government relationship with the Indian tribe and also directs agencies to consult with the Indian tribe before taking action that affects tribal lands, resources, and members.

In June 2008, FHWA and DOT&PF reinitiated consultation with tribal governments and Native corporations in the project area for the SEIS. The list of potentially interested tribes and Native corporations was derived from the 2004 Final EIS effort and from communication between the agencies. FHWA sent an invitation to the tribes and Native corporations requesting their involvement as a participating agency on July 21, 2008.

Individual meetings were conducted with the Ketchikan Indian Community (June 10, 2008) and the Organized Village of Saxman (June 11, 2008). The lead agencies determined that it would be appropriate to meet with these tribal governments because of the potential adverse impacts of the project based on proximity of the alternatives to their communities. FHWA and DOT&PF described the SEIS process, shared the project schedule, described the project area, and introduced members of the study team. The project team also notified the Metlakatla Indian Community of the public scoping meetings.

7.2.4 General Public Outreach

7.2.4.1 Public Meetings

Two rounds of public meetings were conducted for scoping and to present the range of alternatives to be considered for the supplemental study of the Gravina Access Project. Two scoping meetings were held on July 22, 2008, and a meeting to discuss the range of alternatives was held on March 5, 2009. Both meetings were held in Ketchikan, Alaska, and were conducted in similar open house format.

The open house format was used to provide an informal environment for the project team members to engage the public. Each meeting provided the opportunity for the public to question individual team members and to provide written comments, which could be left with the project team at the open house or mailed at a later date. Table 7-5 summarizes the information about the meeting venue, times, and activities. Copies of the scoping meeting materials are included in the *Scoping Summary Report*. Copies of the Range of Alternatives meeting materials are included in Appendix B of that report.

Page 7-6 June 2017

Table 7-5: Public Meeting Venue, Schedule, and Content

Location/Venue	Date and Time	Activities
Ted Ferry Civic Center Ketchikan	July 22, 2008: 11:00–1:00 p.m. July 22, 2008: 5:00–7:00 p.m.	 Describe study area Present the purpose and need statement Explain SAFETEA-LU Solicit input on special studies needed, issues and concerns, historic and cultural properties, and conceptual alternatives Present previous alternatives studied Explain need for supplemental study
Ted Ferry Civic Center Ketchikan	March 5, 2009: 11:00–1:00 p.m. March 5, 2009: 5:00–7:00 p.m.	 Describe study area Present range of alternatives to be considered for the SEIS Discuss the issues and concerns Present proposed screening criteria Solicit input on purpose and need, range of alternatives, and proposed screening criteria

The public meetings were advertised as follows:

- Display advertisements in the *Ketchikan Daily News*, each coordinated to be published approximately 2 weeks and 1 to 5 days before the public meetings
- Flyers posted in public places such as the local grocery store, post office, municipal offices, tribal government offices, and libraries
- Public service announcements to *Ketchikan Daily News*, *What's Up* email distribution list, *Southeast Alaska Island News*, and KRBD—105.9 FM in Ketchikan, Alaska
- Information and notices on the project Web site
- Newsletters and postcards distributed to contacts on the project mailing list
- State of Alaska Online Public Notice Web site

7.2.4.2 Newsletters

The public involvement team wrote three issues of a project newsletter to communicate project information and to provide status updates of the project. Each newsletter issue was distributed by mail to the mailing list and posted on the project Web site.

The following is a list of information presented in the three newsletter issues:

- January 2009, Volume 1, Issue 1
 - Draft SEIS announcement
 - Project schedule
 - Review of comments provided during scoping
- October 2010, Volume 1, Issue 2
 - Announcement and explanation of the reasonable alternatives to be studied in the SEIS
 - Updated project schedule
 - Overview of project studies
- June 2013, Volume 1, Issue 3
 - Expected release date of Draft SEIS
 - Public hearing announcement

Page 7-7 June 2017

7.2.4.3 Project Web Site

The Web site (http://dot.alaska.gov/sereg/projects/gravina_access//) for the Gravina Access Project is maintained by the DOT&PF to provide information about the proposed project and related studies for persons with Internet access. The Web address was included in all public notification materials related to the project. The Web site includes the following pages and information:

- Home: Welcome
- Project Background & Information
- Project Library
- Maps and Photos
- Submit Comments
- Contacts

7.2.4.4 Postcards

Two postcards were distributed by mail to the project mailing list. The first postcard was written to announce the SEIS and requested the addressees to send back confirmation that they would like to continue to receive information. Also included in the postcard were the Project Manager's contact information and the project Web site address. The postcard was mailed to 7,781 households; as of October 2008, 275 addressees affirmed their interest in being part of the project mailing list.

The second postcard announced the availability of the *Alternatives Screening Report* on the project Web site and requested comments, by April 16, 2010. The postcard provided the methods to submit comments to the project team.

7.3 <u>2013</u> Draft SEIS Review Process

7.3.1 Review Process

The FHWA and DOT&PF issued the Gravina Access Project Draft SEIS is—for review on June 21, 2013, providing the public and other interested parties (including government entities, regulatory agencies, and Native organizations) an opportunity to comment on its content during a 54-day comment period. The commenting period ran from June 21, 2013 to August 13, 2013. The 2013 Draft SEIS did not identify a preferred alternative. —available for review and public comment for 45 days following its release. In developing the SEIS, the joint lead agencies, FHWA and DOT&PF, met regularly with the Project Team and the Cooperating Agencies to collaborate, review, and revise the Draft SEIS. Cooperating and participating agencies and other stakeholders are afforded the same 45-day comment period. The 2013 Draft SEIS is available was available to the public for viewing during the comment period to the public for review on the project web site and at the following locations:

- Ketchikan Gateway Borough Planning Office
- City of Ketchikan Library
- City of Ketchikan Clerk's office
- City of Saxman Clerk's office
- Ketchikan Indian Community
- Organized Village of Saxman
- Metlakatla Library
- Southeast (now Southcoast) DOT&PF office (Juneau)

Page 7-8 June 2017

Compact disk versions of the document are—were available for free upon request at 2525 C Street, Suite 305, Anchorage, AK 99503 and at the Southeast DOT&PF office in Juneau. A printed version of the entire document with appendices can be was available for purchased by contacting the Special Projects Office at (907) 465-1828; for a the fee to will help offset printing costs.

The advertising and notices for the 2013 Draft SEIS release and comment process were as follows:

- Notice of Availability, Notice of Public Hearing, and Request for Comments published by FHWA in the Federal Register in Washington, DC, and on the internet June 21, 2013.
- Notice of Availability and Notice of Public Hearing published as a paid legal ad in the Juneau Empire on June 21, June 28, July 1, and July 14, 2013.
- Notice of Availability and Notice of Public Hearing published as a paid legal ad in the Ketchikan Daily News on June 21, 2013.
- Notice of Public Hearing published as a paid display on July 6 and July 13, 2013.
- Notice of Public Hearing was sent to the following for free public service notices or announcements:
 - Ketchikan radio stations
 - What's Up online listserv
 - GovDelivery
 - State Online Public Notices
 - DOT&PF Facebook page and Twitter

A public open house meeting with a formal hearing is scheduled forwas held on July 17, 2013, at Ted Ferry Civic Center, 888 Venetia Avenue, Ketchikan, Alaska 99901, from 11 a.m. to 8 p.m. FHWA and DOT&PF representatives were present during the public hearing portion of the meeting (5 p.m. to 8 p.m.). Attendees were given an opportunity to provide oral testimony at the public hearing and to provide written comments during the open house on a comment form. Written comments on the 2013 Draft SEIS were also accepted in the following ways:

7.3.2 Commenting on the Draft SEIS

Comments on the Draft SEIS will be accepted in the following methods:

- Provide verbal comments at Public Hearings
- Submitted comment form
- Faxed to: (907) 465-4414
- Submit<u>ted</u>-comments through project web site: http://dot.alaska.gov/sereg/projects/gravina_access/
- Emailed comments to: deborah.holman@alaska.gov
- Mailed to:

Deborah Holman, Project Administrative Coordinator Gravina Access Project SEIS DOT&PF Southeast [now Southcoast] Region P.O. Box 112506 Juneau, Alaska 99811-2506

Page 7-9 June 2017

7.3.2 2013 Draft SEIS Comments and Responses

The project team reviewed all comments received during the comment period for the 2013 Draft SEIS. Table 7-6 presents agency and public comments with FHWA's and DOT&PF's responses.

Table 7-6: 2013 Draft SEIS Comments and Responses [New]

Gravina Access Project 2013 Draft SEIS Comments

Response/Final SEIS Revision

U.S. Army Corps of Engineers Dated August 13, 2013

For all of the proposed alternatives, it is imperative the following information is provided to the USACE:

- A delineation of waters of the U.S. along with their functions. (This would include all streams, drainages, creeks, and wetlands.)
- Identification of the upland and/or offshore disposal sites for dredged materials.
- 3. Consultation information with the National Marine
 Fisheries Service, United States Fish and Wildlife
 Service, Environmental Protection Agency, and
 the State Historical Preservation Officer.

In accordance with 33 CFR Part 325.1 (d) (7). "For activities involving discharges of dredged or fill material into waters of the U.S., the application must include a statement describing how impacts to waters of the United States are to be avoided and minimized. The application must also include either a statement describing how impacts to waters of the United States are to be compensated for or a statement explaining why compensatory mitigation should not be required for the proposed impacts." Therefore, it is important to keep in mind the FSEIS should address all measures to avoid and minimize impacts to waters of the U.S., and then compensatory mitigation should be considered for fill impacts associated with the alternatives. Additional information can be obtained from the Alaska District's Final Mitigation Rule Public Notice, No. POA-2008-834, which is available for viewing our website: on http://www.poa.usace,army.mil/Missions/Regulator y.aspx.

- 1. FHWA and DOT&PF will continue to coordinate with USACE and provide USACE with a delineation of waters of the U.S. that would be affected by the preferred alternative and an assessment of their functions. The Final SEIS includes a draft Section 404 permit application and draft 404(b)(1) evaluation, which provide this detail on affected wetlands and waters (see Final SEIS, Appendix H).
- Alternatives F3, G2, G3, and G4 would require dredging in marine waters. Section 4.25.12.4 of the Final SEIS explains that dredged debris from Alternatives G2, G3, and G4 would be placed "onto a barge where it would enter a settling basin and then be disposed of on land." Section 4.25.11 states, "The contractor will set the location for disposal of waste material to meet the following conditions of approval by DOT&PF: the site must be an upland location resulting in no fill placement in wetlands..." DOT&PF would inform USACE of upland disposal sites when they are identified. Dredged material from Alternative F3 would require ocean disposal. If Alternative F3 were selected, DOT&PF would request a permit from USACE under Sections 102 and 103 of the Marine Protection, Research, and Sanctuaries Act, as well as Section 404 of the Clean Water Act for disposal of dredged material in the ocean (see Final SEIS Section 4.13).
- Appendix E of the Final SEIS includes consultation information with NMFS on ESA, MMPA, and EFH. No ESA-listed species under the jurisdiction of USFWS occur within the project area; therefore, no consultation with USFWS under Section 7 of the ESA was warranted. USFWS and EPA are participating agencies for the project and were consulted in that capacity. Section consultation is described in Sections 4.21 and 7.2.3 of the Final SEIS. Chapter 7 of the Final SEIS has been updated to include information on agency consultation that has occurred since the 2013 Draft SEIS was released. The Final SEIS addresses measures to avoid and minimize impacts to waters of the U.S. and compensatory mitigation for fill impacts associated with the preferred alternative.

Department of the Interior Dated August 13, 2013

We recommend that the Final SEIS include an evaluation of the effects of each alternative on migratory birds to

A discussion on potential impacts to migratory birds has been added to Section 4.15.6 of the Final SEIS.

Page 7-10 June 2017

<u>assist in identifying an environmentally-preferred</u> <u>alternative and informing plan modifications that would</u> <u>help minimize potential impacts to migratory birds.</u>

Potential impacts to project area wetlands vary from 13 to 33 acres; marine impacts vary from 0 to 3 acres; and temporary disturbance to freshwater habitat ranges from 4 to 16 acres, depending on the alternative. These wetlands and freshwater habitats are important for feeding and nesting of migratory birds, as well as spawning and rearing of anadromous fish. The Alaska Department of Transportation and Public Facilities proposes to compensate for permanent loss of wetlands by paying a fee in lieu of mitigation (Draft SEIS page 4-161). These fees are likely to be assessed at ratios that vary with the functional qualities of the impacted resources. We recommend that the Final SEIS include a calculation of the functions and values provided by potentially-impacted aquatic resources using the Wetland Ecosystem Services Protocol for Southeast Alaska methodology, which was developed specifically for Southeast Alaska. This evaluation is important since it will identify the potential effects of each alternative in a more meaningful way, which in turn, will allow reviewers to evaluate the adequacy of proposed mitigation. We recommend that costs for wetland mitigation be shown for all alternatives, based on recent wetland debit costs and anticipated ratios commensurate with the functions and values afforded by the potentially impacted habitats. This will provide reviewers with information necessary for comparing the alternatives.

FHWA and DOT&PF have coordinated with USACE throughout development of the SEIS to adequately assess potential impacts to wetlands. In October 2011, DOT&PF submitted a Wetlands Reevaluation Report to USACE for review and issuance of a new jurisdictional determination for the Gravina Access Project. The report was prepared following consultation with USACE, and updated the wetland mapping and functional assessment completed for the 2004 FEIS in the Wetland Evaluation Technical Memorandum (Appendix M of the 2003 DEIS). The descriptive functional assessment completed for the 2004 FEIS was based on the professional judgment of wetland scientists after a field investigation was conducted and with input from ADF&G, USFWS, and USACE personnel. Wetland functions assessed included groundwater recharge and discharge; stream flow moderation; shoreline, stream bank, and soil stabilization; nutrient cycling, primary production, and carbon export; fish and wildlife habitat; and human values. The functional assessment completed for the 2004 FEIS adequately represents the current conditions of the wetlands potentially affected by the Gravina Access Project alternatives.

The recently developed Wetland Ecosystem Services Protocol for Southeast Alaska (WESPAK-SE; 2011) and Nearshore Assessment Tool for Alaska: Southeast (NATAK-SE; 2016) were published subsequent to the baseline data collection for the Gravina Access Project. DOT&PF believes that using the WESPAK-SE or NATAK-SE methodology would not provide a more meaningful assessment of wetland functions and that the qualitative description of wetland habitat functions and values provided in the 2013 Draft SEIS (see Section 3.14) is sufficient for determining compensatory mitigation ratios associated with aquatic resource impacts. In the 2013 Draft SEIS, the DOT&PF proposed to compensate for unavoidable adverse impacts to wetlands by paying a fee in lieu of on-site restoration, enhancement, or preservation. The DOT&PF has revised its approach to compensatory mitigation to include development of permittee-responsible mitigation projects at a watershed level to the options that could be used to offset unavoidable wetland impacts. A detailed Compensatory Mitigation Plan for project impacts to wetlands and other Waters of the U.S will be developed during the USACE Section 404/10 permitting process. The USACE requires verification that impacts to wetlands have been avoided and minimized to the maximum extent practicable prior to their review of a Compensatory Mitigation Plan.

Ketchikan Gateway Borough Dated August 13, 2013

The Assembly is aware of concerns on the part of some that either of the bridge options might negatively impact the local cruise ship tourism industry. Those concerns are addressed at length in the August 9 letter from the City of Ketchikan. I note that the Draft SEIS reached different conclusions than those expressed in the letter

FHWA and DOT&PF have carefully considered the City's concerns related to the potential impact of the bridge alternatives on the local cruise ship tourism industry and revised Section 4.26.3.3 of the Final SEIS. Section 4.26.3.3 of the Final SEIS acknowledges the potential fiscal impact associated with changes to cruise ship

Page 7-11 June 2017

from the City. Therefore, I urge you to carefully evaluate the City's concerns and determine whether legitimate concerns on the part of the City might be readily mitigated by reasonable redesign of the bridge options.

operations that may result with a bridge alternative.

Extensive study of the navigational clearances was performed in development of the original alternatives for the 2004 FEIS. Alternative F1, which was selected in the 2004 ROD and permitted by both the USCG and USACE, had the same vertical and horizontal clearances as the 2013 Draft SEIS bridge alternatives.

DOT&PF would consider only minor design changes during the design phase, if a bridge alternative were identified and selected as the preferred alternative. It is not possible to redesign the bridges with a navigational opening large enough to mitigate the concerns expressed by cruise ship operators without elevating project costs substantially and beyond available funding. As stated in the Final SEIS at Section 2.1.4, current State and federal fiscal constraints were a major factor in the identification of the preferred alternative. Given the effort and associated cost to re-engineer the bridge alternatives with the knowledge that construction costs would substantially increase would be a poor use of limited State and federal resources.

Similarly, some in the community have raised concerns that the C3-4 option will adversely impact air travel. The C3-4 option would intrude into Part 77 airspace, and would also be an obstruction for seaplanes. Those concerns may warrant further evaluation as well.

The FHWA and DOT&PF relied on FAA's 2009 Determination of No Hazard to Air Navigation for the analysis of aviation impacts of Alternative C3-4 in the 2013 Draft SEIS. In October 2013, DOT&PF requested a new Determination of No Hazard to Air Navigation from FAA for Alternative C3-4. On August 15, 2014, FAA provided a Determination of Hazard to Air Navigation. This new information is reflected in Section 4.7.1 of the Final SEIS.

The risk losing the \$96 million drove the Assembly to discuss enhanced ferry service between Revillagigedo and Gravina islands. The Assembly did not embrace ferry service that would include 24-hour daily operations, unless demand warrants such. Moreover, the following specific elements were included in the Assembly's discussion of its vision of improved ferry service:

- Purchase and development of the property adjoining the existing Airport parking area on Revillagigedo Island to provide additional parking and space for improvements.
- Construction of a new Airport terminal on the property adjoining the existing Airport parking area on Revillagigedo Island where departing travelers would check their baggage and check in for flights, and arriving passengers receive their baggage.
- Provide funding for one additional ferry for redundancy.
- 4. Construct one additional ferry ramp on Gravina Island near the existing ramp and one additional ramp on Revillagigedo Island at the property noted in 1 above.
- Establish air-porter-type service between Revillagigedo and Gravina islands, to provide critically needed transit service, particularly for the disabled, elderly, and infirm.
- Provide an endowment with the remaining funds to subsidize ferry operations to keep ferry fares

- Section 2.1.3 of the 2013 Draft SEIS includes "expansion of paved parking areas" at the existing ferry terminal site on Revillagigedo Island as an element common to all ferry alternatives. DOT&PF did not assume property would be purchased for this expansion. This point has been clarified in Section 2.1.3 of the Final SEIS.
- 2. FHWA and DOT&PF considered including a baggage and/or passenger check-in terminal at the existing ferry terminal on Revillagigedo Island when it was suggested as an added element to the ferry alternatives during SEIS scoping. As noted in Section 2.2.2 of the Final SEIS, "Arrangements for baggage and passenger check-in are coordinated by the airlines under FAA regulations, and are not a surface transportation issue"; therefore, this feature is not included with the ferry alternatives.
- 3. The Final SEIS presents a range of ferry alternatives: two with new service at additional locations (G2 and G3), one with additional capacity and redundancy at the existing location (G4), and one with no additional capacity or redundancy until warranted by demand (G4v). Based on demand projections, the preferred alternative, G4v, does not include an additional ferry for redundancy.
- 4. Additional ferry ramps adjacent to the existing ferry ramps are elements of Alternative G4.
- 5. All ferry alternatives include purchase of shuttle vans to carry pedestrians and their baggage from

reasonable.

- the existing ferry terminal on Revillagigedo Island to the airport terminal on Gravina Island.
- 6. Establishment of a "Gravina Access Permanent Fund" was recommended as an added element to the ferry alternatives during SEIS scoping. As noted in Section 2.2.2 of the Final SEIS, establishing "a fund to defray ferry operating costs is outside the scope of this project because it does not pertain to the purpose of and need for the project." This was explained in the July 23, 2009, letter from David Miller, FHWA Alaska Division Administrator, to Dan Bockhorst, Ketchikan Gateway Borough Manager. In that letter, Mr. Miller further explained that such a fund is not eligible for federal assistance. State funding is not available for this purpose.

City of Ketchikan Dated August 9, 2013

While a bridge connecting Revillagigedo Island to Gravina Island has long been a dream of many members of the community, most have come to the realization that it would be cost prohibitive to construct and detrimental to our economically critical cruise ship tourism industry if constructed within the clearance parameters stated in the SEIS. Specifically, sea pilots are concerned about the bridge alternatives, especially Alternative F3, due to the challenges of the larger cruise ships navigating the west channel between Pennock and Gravina. Both bridge alternatives have a vertical clearance of only 200 feet which is the same as the Lions Gate Bridge in Vancouver. It should be noted that the largest ship currently calling in Ketchikan, the Celebrity Solstice, has an air draft of 200 feet and does not call in Vancouver, travelling to Seattle instead. Ships that could enter the Alaskan market in the future include Royal Caribbean's Voyager Class and Oasis Class which have air drafts of 208 feet and 236 feet respectively.

If these larger classes of ships enter the Alaskan market, they would likely skip Ketchikan due to the additional time it would take to retrace their route and go around Gravina upon arrival or departure (depending on their direction). The time in port in Ketchikan for many ships has already decreased over the past 10 years as a result of their calling in Seattle instead of Vancouver due to the increased distance and increased cost of fuel. The Gravina detour would likely add up to two hours to the travel time, which would make a Port such as Prince Rupert, an attractive alternative destination between Juneau and Seattle.

Each time a ship the size of the Celebrity Solstice calls in Ketchikan, the City receives over \$25,000 in direct revenues from Port fees and an estimated \$460,000 in consumer spending in the community (based figures released in 2011 of \$161 per passenger). With 17 calls scheduled for the Solstice this year alone that would total over \$8,000,000 in lost revenues. If four or five similar sized ships would stop calling in Ketchikan you can see that the total lost revenue per year could be staggering.

Alternative F1, which was selected in the 2004 ROD and permitted by the USCG, had the same vertical and horizontal clearances as the SEIS bridge alternatives. Based on updated information regarding large cruise ships that planned to operate in Southeast Alaska during the 2016 tourist season (information provided in the Final SEIS at Table 3-12), Celebrity's Solstice and Royal Caribbean's Explorer of the Seas are the only cruise ships with air draft greater than 200 feet currently operating in Tongass Narrows. A bridge would not preclude large vessels such as these from navigating in Tongass Narrows because they could avoid passing under a bridge by entering and exiting from the same direction. FHWA and DOT&PF cannot speculate what decision the cruise ship companies might make in response to construction of a bridge over Tongass Narrows. SEAPA representatives commenting on the 2013 Draft SEIS (letter from Captain Larry D. Pullin dated July 28, 2013) raised navigation issues related to bridge alternatives and noted that increased operating costs and sailing time (from detours) could result in lost port time and "place Ketchikan at a disadvantage with other Alaskan and nearby Canadian ports." The Cruise Lines International Association - North West & Canada (CLIA-NWC, formerly NWCCA) supported SEAPA's comments in a subsequent communication, not commenting specifically on the 2013 Draft SEIS (personal communication:, Donna Spalding, CLIA-NWC, with Jessica Conquest, HDR; January 23, 2014).

Sections 4.7.2.2 and 4.7.2.3 of the Final SEIS describe the DOT&PF's assessment of impacts of the bridge alternatives on marine navigation. The assessment determined that Alternatives C3-4 and F3 increase the risk of ship groundings and allisions (e.g., ships running into the bridge structure), with larger ships having increased risks, noting that a bridge over Tongass Narrows would introduce a new obstacle for ships to maneuver around. Text has been added to Sections 4.7.2.2 and 4.7.2.3 in the Final SEIS to acknowledge that the increased risk could affect operations and change the length of port calls or reduce port calls from some ships. Section 4.26.3.3 has also been revised for the Final SEIS to acknowledge the potential fiscal impact associated

In evaluating the proposed ferry options the one that makes the most operational sense is Alternative G4, the construction of new facilities adjacent to the existing ferry facilities. In order for this option to provide adequate access to Gravina commensurate with a bridge, the City recommends the following:

- Two ferries should operate during the workday and one ferry should operate overnight instead of only when the airport is open. Although it is not addressed in the sections of the SEIS provided for review, it has been stated by DOT and airport personnel that the FAA may decide not to provide any supplemental funding for ferries in the future if they are allowed to operate when the airport is closed. DOT personnel have, however, also stated that other FHWA funding sources could possibly be found.
- The ferries should be operated with complete State subsidy which would eliminate the toll. This will be critical to encourage both commercial and residential development of Gravina Island, which contains the majority of the relatively flat land available within the Borough.
- Only one additional ferry would need to be constructed instead of two. Subsequently placing all three on a 30-35 year replacement schedule would result in the first replacement coming due in approximately 20 years. Constructing a third ferry would still allow the operation of two ferries during the workday when one of the other ferries was unavailable due to routine or emergency maintenance.
- The construction of a second loading ramp on each side is a key element of this option as it would provide the redundancy necessary to consider the ferry option the operational equivalent of a bridge. Having two loading ramps on each side would allow uninterrupted service when a ramp needed routine or emergency maintenance. This was made extremely evident just this past May when the community had to scramble to improvise vehicle access for ambulances while overnight maintenance was being performed on one of the current loading ramps. In summary, the City of Ketchikan desires 24 -hour ferry access between Revillagigedo Island and Gravina Island commensurate with the access that could be provided by a bridge and it appears that Alternative G4, with the changes recommended above, comes closest to providing this level of access.

with the change in length or reduced number of port calls.

Alternative G4 includes, and the Final SEIS assesses the impacts of, two additional ferry terminals/loading ramps: one on each side of Tongass Narrows adjacent to the existing airport ferry terminals, operating under a schedule that is similar to current operations (see Section 2.1.3). Selection of Alternative G4 would not preclude ferry operations on a 24-hour schedule. The operational costs and environmental impacts associated with Alternative G4 would increase if overnight ferry operations were added. The additional environmental impacts would be minor, related primarily to the increase ferry and vehicle emissions, fuel use, These impacts would be offset if employment. Alternative G4 added only one ferry, instead of two. It is not clear what statements were made by DOT&PF or airport personnel regarding supplemental funding by FAA. Funding from FAA was not anticipated to support construction or operation and maintenance of any elements of the project alternatives in the SEIS. Neither FAA nor FHWA funds can be used for routine maintenance and operations of ferries. FHWA funds could be used for new ferries if they were part of the selected alternative.

During the SEIS scoping process, a request was made for the State to fund the airport ferry system. This option was dismissed from further consideration: as stated in Section 2.2.2 of the Final SEIS, "A fund to defray ferry operating costs is outside the scope of this project because it does not pertain to the purpose of and need for the project."

Southeast Alaska Pilots Association Dated August 2, 2013

The Southeast Alaska Pilots Association (SEAPA) supports economic development in the Ketchikan area, however we have serious concerns for the proposed overwater crossings (the F3 and C3-4 bridges) of Tongass Narrows. The primary concerns are for the degradations to safety of marine navigation and secondary concerns

1., 2., and 4. Numerous navigation studies were performed in development of the 2004 FEIS, which included evaluation of Alternative F3. FHWA and DOT&PF determined that the information provided in those studies was sufficiently representative of the potential navigation impacts of Alternative F3

are for the decreases to the efficiency of maritime transportation by the bridge proposals now under consideration and described in the June 2013 draft SEIS. As one of the primary waterway users that would be significantly impacted by these proposals, SEAPA is quite willing to discuss proposals for safer and more efficient access to Gravina I. from a freedom of navigation perspective. The basis for our Association recommendation against adopting the F3 and C3-4 bridge proposals follows:

- 1. The F3 bridge proposal creates several unsafe conditions that are presently nonexistent by completely changing the linear traffic pattern of major marine traffic in Tongass Narrows. The East and West Channels of Tongass Narrows provide a natural, safe, efficient and effective bifurcation for maritime traffic in the Ketchikan area. This proposal does not adequately address navigation safety of large vessels and tugs and tows and ferries meeting and maneuvering in close proximity to each other. This proposal neglects to identify and state the hazards of introducing significant maneuvering requirements (including very large turns in the proximity of multiple navigation hazards) for the approaches to Ketchikan's harbor for these very large vessels and for tugs with large tows (including significant petroleum barges). There is no examination of safety margins for maneuvering; the challenges to how those turns will be safely executed particularly during the frequent occurrences of limiting environmental factors (e.g. high winds (frequently in excess of 20 knots), large tide and current ranges and reduced visibility).
- 2. The F3 proposal closes the safer East Channel of Tongass Narrows for larger vessels, forcing these vessels to instead share the West Channel with AMHS ferries, tugs and tows, and numerous smaller vessels. The West Channel is currently fully utilized as a traffic separator for Northbound from Southbound traffic at peak times, and forcing the largest ships into the West Channel will create unacceptable hazardous traffic situations in that channel (which currently do not exist with the East Channel use).
- 3. The F3 proposal and previous ten-year-old simulator studies neglect to consider the adverse effects of reduced visibility in rain and fog in the navigation by large vessels transiting under either of the proposed bridge crossings.
- 4. The F3 proposal neglects to consider the adverse effect of the revised traffic patterns in the harbor on the use of the main anchorage area of Ketchikan. 5. Page 4-27 of the F3 proposal misrepresents the economic cost incurred in turning large vessels around Pennock Reef to approach the downtown berths in Ketchikan, and then turning again to head out of the harbor, suggesting that the cost of adding 1.8 miles is only ""adding approximately 3 minutes in running times..."" In fact 30 to 40 additional minutes will be required for each safe transit of each large ship to avoid Pennock Reef (and therefore this time lost to each port call). If a detour around Guard

- evaluated in the 2013 Draft SEIS. For example, Appendix F, Consequences of Various Channel Closures to Large Shipping Technical Memorandum and Appendix G Reconnaissance of Vessel Navigation Requirements Updated Report, of the 2003 DEIS and incorporated by reference into the 2004 FEIS, adequately examined the potential effects of maneuvering in Tongass Narrows to avoid navigating under a bridge and the resulting increase in sailing time. Appendix H, Monte Carlo Navigation Simulation Technical Memorandum; Appendix I, Ketchikan Bridge Project Summary Report, and Appendix J, Real Time Navigation Simulation Study (STAR Center) Technical Memorandum, of the 2003 DEIS and incorporated by reference into the 2004 FEIS evaluated the safety and hazards associated with large ships transiting under a bridge spanning Tongass Narrows. The Simulation Study considered variables associated with wind, tide, and visibility. Section 4.7.2.3.1 of the Final SEIS states that requiring cruise ships to use West Channel "would have an adverse effect on cruise ship operations because it would require additional maneuvering and increased sailing time." Safety margins were not explicitly described; however, safety for large ships transiting West Channel and the potential change in traffic patterns was an identified concern in 2003 DEIS Appendix F (page 4): "The maneuver around Pennock Reef, the passage of West Channel, and the increased traffic through the anchorage and across tender traffic lanes, all have adverse safety implications." Section 4.7.2.3 of the Final SEIS has been revised to acknowledge that the increased risk could affect operations and change the length of port calls or reduce port calls from some ships. Section 4.26.3.3 has also been revised for the Final SEIS to represent the economic cost incurred by additional ship maneuvering with Alternative F3 based on best available information and analysis.
- 3. and 6. The 2003 DEIS Appendix I, Ketchikan Bridge Project Summary Report, and Appendix J, Real Time Navigation Simulation Study (STAR Center) Technical Memorandum, describe how reduced visibility and adverse effects of variable wind speeds would affect navigation under Alternative F3's West Channel bridge and the Alternative C4 bridge, which has similar navigation constraints as Alternative C3-4. The modeling in 2003 DEIS Appendix G, Reconnaissance of Vessel Navigation Requirements Updated Report, accounted for the swept path of the ships. Section 4.7.2.3 has been revised in the Final SEIS to explain that ships larger than those considered in the modeling effort are now transiting Tongass Narrows and with Alternative F3 may need to navigate the opening during lower tides and calm seas, or enter and exit Tongass Narrows from the same direction to avoid crossing under the bridge.
- As stated in the Final SEIS at Section 4.7.2.3.1,
 Alternative F3 would result in a loss of running time

- Island is required, one hour and forty (1:40) minutes will be lost on each port call. This lost time will have to be made up either in reduced port time or the same amounts of time at high fuel consumption speeds.
- 5. Page 4-27 of the F3 proposal misrepresents the economic cost incurred in turning large vessels around Pennock Reef to approach the downtown berths in Ketchikan, and then turning again to head out of the harbor, suggesting that the cost of adding 1.8 miles is only ""adding approximately 3 minutes in running times..."" In fact 30 to 40 additional minutes will be required for each safe transit of each large ship to avoid Pennock Reef (and therefore this time lost to each port call). If a detour around Guard Island is required, one hour and forty (1:40) minutes will be lost on each port call. This lost time will have to be made up either in reduced port time or the same amounts of time at high fuel consumption speeds.
- 6. The F3 and the C3-4 bridge proposals both fail to provide adequate horizontal or vertical clearance for the largest existing ships in conditions of winds over 20 knots, or tidal heights over MHHW. For five (05) of the ships currently calling in Ketchikan the air drafts are 190 feet to 200 feet, and the swept horizontal paths exceed 400 feet at normal operating speeds, leaving an unsafe clearance for those vessels.
- 7. The data provided in Table 3-12 is incorrect, citing waterline beam, where it says ""maximum beam"", for all the vessels in the table. The maximum beam of these large ships is on the order of 50 feet wider than the water line. The swept path calculations derived from these figures are thus incorrect in their entirety.
- 8. The assertion made on page 3-39 of the 2013 SEIS that ""As a result nearly all cruise ships calling at Ketchikan pass under the Lions Gate Bridge and/or the Seymour Narrows Cable"" is incorrect. In fact in 2013, nearly half of the ships calling at Ketchikan go to Seattle via the Straits of Juan de Fuca, bypassing both of those areas.
- 9. The C3 and C3-4 proposals cite the 200 foot by 550 foot opening in both proposals as adequate because they are like the Lions Gate bridge. The comparison is incomplete in that the Lions Gate Bridge Channel width is 1260 feet, or more than twice as wide as either the F3 or C3-4 proposals, and the tidal range is less than the tidal range at Ketchikan, and thus is not a realistic comparison.
- 10. The C3 and F3-4 proposals neglect to consider that on six (06) days each month the high tide in Ketchikan is significantly higher than the datum used for the navigational clearance (15.4 feet for MHHW) and the impact on scheduled port calls and tour business to avoid the bridge on those days.
- 11. Page 3-3 of the June 2013 draft incorrectly states that: ""The largest vessels operating in Tongass Narrows have an air draft of 165 feet, and the average 71,000 gross tons"". In fact 15 out of 27

- averaging 3 minutes for southbound voyages and 18 minutes for northbound voyages, in addition to an additional 30 to 40 minutes for maneuvering in the harbor. The DOT&PF's economic analysis predicted cruise ship operators would increase running speed to make up for the lost time rather than reduce time in port. Section 4.26.3.3 has been revised for the Final SEIS to represent the economic cost incurred by additional ship maneuvering with Alternative F3 based on best available information and analysis.
- FHWA and DOT&PF revised Table 3-12 in the Final SEIS to correct this error.
- The statement of cruise ship port calls south of Ketchikan in Section 3.7.2.1 has been revised in the Final SEIS to more accurately reflect current conditions with the information provided in this comment.
- The Final SEIS compares the navigational vertical opening of the bridge alternatives to Lion's Gate Bridge because it is a limiting factor for cruise ships entering and exiting Vancouver Harbor. The horizontal opening is not limiting for cruise ships.
- 10. The navigational opening for the bridge alternatives was based on extensive modeling. FHWA and DOT&PF recognize that conditions for navigation change with respect to tides and weather, and that scheduled port calls may be interrupted or cancelled based on unfavorable navigation conditions. The Final SEIS provides a comparison of alternatives based on navigation models identified in consultation with USCG.
- 11. The information on the largest vessels in Tongass Narrows in Table 3-12 and the accompanying paragraph have been updated in the Final SEIS to reflect the recent data.
- 12. FHWA and DOT&PF have considered the development of a bridge over Tongass Narrows in the context of potential impacts on navigation, including effects on large cruise ships. FHWA and DOT&PF did not neglect to acknowledge industry trends and increasing numbers of large ships. Table 3-12 has been updated in the Final SEIS to present current information on large cruise ships calling at Ketchikan. FHWA and DOT&PF cannot anticipate the extent of changes in the market that would affect shifting ship size and routing. This SEIS discloses potential impacts of a bridge on navigation based on the best available information and analysis.
- 13. Appendix G, Reconnaissance of Vessel Navigation
 Requirements Report, of the 2003 DEIS and incorporated by reference into the 2004 FEIS examined the risks associated with navigation under the Gravina Access Project bridge alternatives based on statistical analysis and modeling.
- 14. Selection of a bridge alternative would require permitting with the USCG, and the bridge would be designed and operated to meet the requirements of

- (over half) of the ships currently calling in Southeast Alaska, have air drafts over 165 feet, and five (05) have air drafts of 189 feet or more and tonnages of over 100,000 gross tons.
- 12. The C3 and F3-4 proposals neglect to take into consideration the actual 30-year trend towards larger ships and continued projection that even larger ships will be the norm. The two Norwegian Breakaway class ships have been identified for the Alaska cruise market. All of those ships have over 200 feet air draft and have swept path widths in the vicinity of 450 feet. If Ketchikan goes forward with either of the proposed C3 or F3-4 bridges, it will be the only port in the Alaska market with the vertical and horizontal size restrictions of 200 feet by 550 feet.
- 13. The proposals neglect to consider or assess directly relevant events including the 1994 grounding of the New Amsterdam while making a sharp turn in dense fog at Gravina Point, or the allisions of large ships with bridges in Tampa Florida and in San Francisco Bay and the enormous losses that can occur from even a single event.
- 14. The effects of the over water proposals on marine safety are not simply degraded ... they are unsafe and do not provide for the existing or reasonable projections of safe navigation. The disruptions to marine commerce create increased operating costs and place Ketchikan at a disadvantage with other Alaskan and nearby Canadian ports. The consequences for a marine mishap with a bridge over the navigable channel as proposed are unacceptable."

safe navigation in Tongass Narrows. The 2003 DEIS Appendix K, Effects on Cruise Ship Operations, described the change in cruise ship operating costs for the DEIS alternatives, which included Alternative F3. The Final SEIS has been revised to include that information at Section 4.26.3. The FHWA and DOT&PF do not anticipate that Ketchikan would be a less desirable port of call if a bridge were constructed.

Individual Public Comments and Public Hearing Testimony

Some specific comments on details in the Draft SEIS: It appears that the true costs of the bridge options have been understated in many places, thus making it appear that the bridge options are less costly than they really will be. For example, no cost has been put in for additional parking at the airport. Currently, I drive from south of town to the airport ferry parking lot where I leave my car and hop on the ferry to the airport. (If I lived in town, I would take the city bus to the ferry parking lot). Nobody will be able to do that anymore...we'll all be driving to the airport so of course the cost of additional parking lots over there needs to be included (and this is not). Also I believe that the annual maintenance costs for the bridge and road have been understated. Currently, ADOT is unable to keep up with maintenance and repair on existing roads in Ketchikan. To keep a bridge and additional highway free of ice and snow will require additional equipment and workers.

DOT&PF did not identify airport parking facilities as an element that would be necessary to address the purpose and need for the proposed action and, therefore, they are not included in the cost estimates for any alternative. As stated in Section 4.26.4.1.2 of the Final SEIS: "In the 2004 FEIS, all alternatives (bridges and ferries) included a parking structure adjacent to the airport terminal to accommodate anticipated future needs for airport travelers. This feature was removed from the alternatives evaluated in this SEIS because FHWA and DOT&PF determined that future development of parking facilities would occur when warranted and when funding became available. The type and extent of parking facilities at the airport would be determined based on future demand, which is unknown at this time. This funding source likely would be FAA rather than FHWA because parking for airport access is an airport function. DOT&PF considers the future expansion of parking facilities on Gravina Island at the airport as a reasonably foreseeable future action and provides an assessment of impacts in Section 4.27, Cumulative Impacts." Operations and maintenance costs presented in the Final SEIS assume DOT&PF typical maintenance activities, such as snow and ice removal, resurfacing, and other scheduled maintenance

Page 7-17 June 2017

activities. DOT&PF establishes annual budgets for normal maintenance of state highways using a "cost per lane mile."

Bridge option F3 is particularly disturbing to me due to its effect on the Tongass Narrows West Channel. I lived over near there for many years and am familiar with the kelp beds, the eelgrass, the fish and whales in that channel, the boat traffic and the weather and tides. Blasting and dredging that channel (including 184,000 cubic yards of material over 16 acres) would be a terrible environmental action. That channel has unique and environmentally significant intertidal and subtidal habitat which supports aquatic life--not just in the channel, but also beyond. The combination of the dredging and the support pilings would change forever the habitat and water flow.

Environmental consequences resulting from Alternative F3 and all other alternatives, such as impacts to intertidal and subtidal habitat, were evaluated in Chapter 4 of the 2013 Draft SEIS and were considered during the identification of a preferred alternative for the Final SEIS.

The safety of ships, towed barges, cruise ships, small boats is also at risk in that channel. I commuted across there in a small skiff for many years and vividly remember 50-90mph winds, fogs that reduced visibility to nothing, currents and boat wakes, etc. It is a bad idea to purposefully obstruct navigational width and height in that area frequented by large and small vessels. The environmental consequences of adding the ferry terminal at Lewis Point (Option G-2) concerns me due to the intertidal aquatic life in that area (e.g. clams, mussels, cockles)

FHWA and DOT&PF conducted detailed modeling and technical studies in the development of alternatives for the 2004 FEIS (e.g., Appendix G, Reconnaissance of Vessel Navigation Requirements Report) and the refinement of alternatives for the 2013 Draft SEIS (see the 2012 Construction Cost Estimate Report). The results of these studies were considered in the identification of the preferred alternative for the Final SEIS. Selection of a bridge alternative would require permitting with the USCG, and the bridge would be designed and operated to meet the requirements of safe navigation in Tongass Narrows. Impacts to aquatic life from all alternatives were evaluated in Sections 4.15 and 4.25.12 of the 2013 Draft SEIS and considered during the identification of a preferred alternative for the Final SEIS.

4.10.2.1.2 says that the proposed project alternatives would incorporate designs that are expected to reduce the use of single occupant vehicles. The bridge options do just the opposite of this, and your charts show this. That you expect one way vehicle trips to increase up to 4000 or 5000 per day (table 4-27)! In this day and age, transportation planning (especially multimillion dollar planning) should include serious attempts to reduce single occupant travel. Note that adding passenger vans to the improved ferry options does help with this. Bridge alternative F3 would create traffic nightmares through town and at the intersection with Tongass Hwy.

The commenter has identified an inconsistency in the 2013 Draft SEIS. Section 4.10.2.1.2 has been revised in the Final SEIS to more accurately reflect measures that would be implemented to reduce emissions of air pollutants during the long-term use of project facilities. Future traffic conditions under Alternative F3 at South Tongass Highway and through downtown for the afternoon peak hour are represented in Section 4.26.4.3 of the Final SEIS. As noted in that section, the traffic forecast for Alternative F3 conducted for the SEIS was much lower than the forecast presented in the 2004 FEIS (e.g., the 2025 average number of oneway trips across Tongass Narrows via Alternative F3, as presented in the 2004 FEIS, was 5,100 compared with 2,730 trips in 2033, as presented in the Final SEIS). Using the Level of Service calculations from the 2004 FEIS is therefore a very conservative approach to assessing potential impacts of the SEIS alternatives on intersections in the project area. Note that the bridge alternatives in the 2025 forecast present an overall traffic congestion forecast for this intersection similar to that for the No Action Alternative (see Table 4-28 of the Final SEIS).

Section 4.23 Visual impacts--The photo simulations of adding what the bridges would look like from various places are bizarre. It's like someone decided to show what the bridge would look like from over a mile away on a very hazy day. The reality is that these bridges are of a scale that they would very much dominate the visual landscape

The photo simulations of the bridge alternatives were prepared based on best available information from preliminary engineering and design. They are intended to provide a representation of the effect of the bridge structures on the viewshed from key viewpoints. Section 4.23.2 in the 2013 Draft SEIS makes clear that

from many places.

I am disappointed in how the cumulative environmental effects are characterized and minimized. For example, the effects on wetlands and tidal habitat are brushed off by saying that they are just a small part of the wetlands and habitat in the area. This is exactly why the lower 48 has decimated its coastal lands, tidelands, etc.--each project just being a small part. Same for the discussion of vehicle emissions and greenhouse gases, saying that it would only be a small percentage of the GHGs emitted in Alaska.

the bridges would dominate the visual landscape from many viewpoints. This assessment was not changed in the Final SEIS.

FHWA and DOT&PF did not brush off or minimize the assessment of cumulative environmental effects. The potential impacts of the Gravina Access Project alternatives, including impacts to GHGs, wetlands, and tidal habitat, were put into the context of past, present, and reasonably foreseeable future actions in accordance with regulations implementing NEPA (40 CFR 1508.25). Cumulative effects related to vehicle emissions and GHGs are appropriately considered in the context of a wide geographical area: from an airshed monitored for its attainment with the NAAQS to global climate change issues. As demonstrated in the cumulative impacts analysis for air quality, the magnitude of air quality impacts attributed to vehicle emissions from the Gravina Access Project alternatives is indistinguishable in the context of the airshed and global climate change (see Section 4.27.6 of the Final SEIS).

Potential direct and indirect impacts to wetlands and tidal habitat with the project alternatives are fully disclosed in the Final SEIS (see Sections 4.14, 4.15, 4.25, and 4.26). How those impacts contribute to a cumulative effect is not minimized in Section 4.27, rather they are put in the broader context of current and anticipated future conditions of those resources if the proposed project were not implemented.

It's important to recognize that the Ketchikan Gateway Borough operates on behalf of the State of Alaska, the fifth busiest airport in the State of Alaska located on Gravina. Access to that airport is critical to this community. The Ketchikan Gateway Borough is the regional government that encompasses Gravina Island and 60 some hundred square miles in the surrounding territory. It's been in existence for nearly 50 years. So, the Ketchikan Gateway Borough is representing, as a corporation, all the citizens of the greater Ketchikan community. I wanted to submit for the record two documents that have been adopted by the elected officials of the Ketchikan Gateway Borough. The first is Resolution 2295; it's a four-page resolution that was adopted in January of 2011. It includes a number of recitals that are statements of fact by the elected body in support of its position. The position that the Ketchikan Gateway Borough Assembly took at that time, in January of 2011 was to support the two-bridge alternatives that are presently available; the F3 and the C3-4 for alternatives. The rationale is set out carefully in the resolution. The other resolution that I will submit for the record is Resolution 2358. It is a six-page resolution adopted nine months after the Resolution 2295. What is important about the Resolution 2358 is that it expresses growing concern regarding progress with respect to access to Gravina by the community, and that is a major concern in the community.

The reason that the Assembly adopted its resolution in support of the two bridge alternatives is consistent with what you said in terms of the purpose of what is trying to be accomplished here; and that is to provide the most reliable.

The 2009 decision to evaluate tolls as part of the bridge alternatives was made by then DOT&PF Commissioner Leo von Scheben (memorandum dated September 17, 2009, to Gary L. Davis, Southeast Regional Director at Appendix A of the Final SEIS). [Note that tolls were always assumed to be part of the ferry alternatives.] Consistent with the direction provided by Commissioner von Scheben, toll revenue from bridge and ferry alternatives would partially offset construction and operations costs. Over the total life of the project, toll revenue would reduce the costs of bridge alternatives by \$45 million (Alternative F3) to \$56 million (Alternative C3-4). The costs of ferry alternatives would be reduced by as much as \$451 million with toll revenue (e.g., Alternatives G2, G3, and G4). Additional funding sources would need to be identified to cover these costs if no tolls were collected.

efficient, convenient, and cost effective access to the Ketchikan International Airport, again, Alaska's fifth busiest airport, and to promote long term economic development on Gravina Island. So, I will submit those two materials for the record. Again, those two bridge alternatives are clearly the most fiscally responsible, what you said is the target, and that's consistent with the Assembly's objectives. The other point I would stress is that there is opposition to the prospect of any tolls. The Ketchikan Gateway Borough, representing its citizens, wants equal treatment as residents of other communities have with respect to their airports. This is a major airport. I'm unaware of any other airport in Alaska that -- other than Ketchikan, which we have currently a, in effect, a toll in order to get there. So, we are in opposition to any prospect of a toll unless similar arrangements apply to every resident of this state. So, with that, I'll conclude and offer my two materials for the record. Any questions, I'll be glad to try to address those.

I represent the Southeast Alaska Pilots Association, a state recognized organization of marine pilots for the Southeast Alaska region, charged with the safe and efficient navigation of ships in Southeast Alaska. Briefly, my background in making these remarks is I've been practicing pilotage in Ketchikan and throughout Alaska for over 30 years as an Alaska licensed pilot as it relates to the navigation of large vessels under bridges. And I'm also a US Coast Guard licensed pilot of unlimited tonnage vessels in New York Harbor, San Francisco Bay and Puget Sound. I have practiced as a marine pilot, vessels up to 80,000 tons under various bridges in New York Harbor in the early years in my career. I also served 10 years as a reserve officer in the US Navy and have served active duty for training in the pilotage of large navel vessels up to the size of aircraft carrier under the bridges of San Francisco Bay. I represented the Southeast Alaska Pilot's Association and public hearings related to Gravina access as early as 1983. And I have commented and written proposals -- in writing to proposals since then. In summary, Southeast Alaska Pilots have serious concerns about the marine navigational safety and secondarily the navigational efficiency of the bridge proposals now under consideration described in the June 2013 Draft SEIS.

<u>Our association recommends against the F3 and the C3-4 bridge proposals for the following reasons:</u>

One, the F3 bridge proposal completely changes the linear traffic pattern of large vessels in the Tongass Narrows without adequately addressing the navigational safety of large vessels and tugs and tows and ferries meaning a maneuvering in close proximity to each other. This proposal neglects to state the hazards that are introducing so many turns in the approaches to Ketchikan's harbor for very large vessels and how those turns will be safely executed at times of winds are over 20 knots or reduced visibility.

Two, the F3 proposal effectively closes the preferred east channel of Tongass Narrows for larger vessels, forcing these vessels to instead share the west channel with ferries, tugs and tows, and smaller vessels. The west channel has already been fully utilized as a traffic separator from northbound from southbound traffic at peak times. Forcing the largest ships into the west channel will create

See response to Comment 15.

Page 7-20 June 2017

hazardous traffic situations in that channel.

Three, the F3 proposal neglects to consider the adverse effects of reduced visibility in rain and fog as it relates to traffic or navigation by large vessels under either of the bridge crossings.

Four, the F3 proposal neglects to consider the adverse effect of the revised traffic patterns in the harbor on the use of the main anchorage area for a fifth vessel in the anchorage.

Five, page 4-27 of the F3 proposal misrepresents the economic costs incurred in turning large vessels around Pennock Reef to approach the downtown berths in Ketchikan and then turn it again to head out of the harbor, suggesting that the 1.8 miles, quote, unquote, adds approximately three minutes in running times. In fact, 30 to 40 minutes will be lost in each port call by each ship just by going around Pennock Reef. And if a detour around Guard Island is required, one hour and 40 minutes will be lost on each port call. This lost time will have to made up either in reduced port time or the same amounts of time at high fuel consumption speeds.

Number six, the F3 and C3-4 bridge proposals both fail to provide adequate horizontal or vertical clearance for the largest ships in conditions of winds over 20 knots or tidal heights over a mean high or high water. For five of the ships currently calling in Ketchikan, the air drafts are 190 feet to 200 feet and the swept horizontal paths exceed 400 feet at normal operating speeds, leaving an inadequate clearance for those vessels.

Number seven, the math in table 3-12 is incorrect, citing waterline beam, where it says, quote, unquote, maximum beam. For all of the vessels in the table, these maximum depths -- these maximum beams, excuse me, of large vessels are on the order of 50 feet wider than the waterline depth -- width. The swept path calculations thus derived from these figures are incorrect in their entirety.

Number eight, the assertion made on pages 3-39 of the 2013 SEIS say that, quote, as a result, nearly all cruise ships calling in Ketchikan pass under the Lions Gate Bridge and/or the Seymour Narrows Cable, unquote. But this is incorrect. In fact, in 2013, nearly half of the ships calling at Ketchikan go to Seattle via the Straits of Juan De Fuca and pass through neither of those areas.

Number nine, the C4 -- C3 and the C3-4 proposals cite the 200 by 550 foot opening in both proposals. The C3 and C3-4 proposals cite that 200 foot by 550 foot openings in both proposals as adequate because they are like the Lions Gate Bridge. In fact, the Lions Gate Bridge Channel width is 1260 feet, or more than twice as wide as either of these proposals. The tidal range is less than the tidal range of Ketchikan, and thus cannot be realistically compared.

- Reduce bridge cross-section to 40-feet by eliminating extra 8-foot lane.
- The bridges impinge on floatplane landings and takeoffs.
- 3. Consider a combination floating bridge with a slip section on the alignment of Alternative G3. The slip section would allow passage of state ferries and cruise ships and a bridge 100 feet above MLLW

1. Part of the need for the project is "to provide the 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" (Section 1.4 of the Final SEIS). The bridge alternatives would accommodate bicycles and pedestrians in the two 8-foot shoulder lanes and the

Page 7-21 June 2017

would allow passage of most other vessels.

- one 8-foot sidewalk. Keeping pedestrians and bicycles separate from vehicular traffic improves safety and meets current design standards; therefore, the 8-foot shoulder lanes cannot be eliminated from the bridge design.
- Impacts to floatplane operations have been disclosed in the Final SEIS in Sections 4.7.1 and 4.25.5.
- As noted in Sections 2.2.2 and 2.2.3 of the Final SEIS, Alternatives M1 and M2 were moveable bridge options considered by FHWA and DOT&PF and evaluated in a screening process. They were not considered reasonable alternatives because their costs were above the \$305 million threshold. It was also noted in the screening process that moveable bridges would cause unacceptable delays for travelers going across the bridge due to frequent bridge raisings (or in this case moving the slip section) for marine traffic (particularly cruise ships in summer). In this sense, they would fail to meet the need for improved reliability of access. The volume and size the marine traffic through Tongass Narrows would require that the bridge be closed to vehicular traffic during substantial portions of the normal day, resulting in unacceptable delays and overall degradation of access to Gravina Island.

I've spent years living on Gravina since 1956 when my mother started to homestead property at Vallenar Point. Never did my mother ask or expect her government to provide her access to the remote property she chose to live on. Nor have I. For first time visitors a ride on the airport ferry is a good introduction to the water travel so prevalent in SE Alaska. For residents of Ketchikan the disruption caused by a bridge or bridges to existing Tongass Narrows air and water traffic remains as one of several flaws in a fiscally irresponsible idea. I'm very skeptical of the assertion that numerous vehicle trips over bridges and miles of road to and from Ketchikan's airport is cheaper, safer, and more environmentally benign than the short ferry rides we currently have. That being said, I would like to see improved baggage handling for the ferry crossing the Narrows both directions, and perhaps even baggage check-in being done on the Ketchikan side. People throughout the world live on islands or remote places that don't have road access to a major airport. I'm weary of the continued pouring of money into the Gravina Access Project. It's long past time to put this bridge boondoggle to rest and dedicate hard-earned tax dollars to making the airport ferries more user-friendly.

The SEIS documents the myriad environmental impacts associated with the build alternatives and does not assert that they would be environmentally benign. The relative safety of the alternatives is addressed in the Final SEIS relative to navigation (Section 4.7.2), emergency vehicle access (Section 4.3.3), and bikes and pedestrians (Section 4.8). FHWA and DOT&PF did not assert in the SEIS that bridge alternatives would be a safer mode of travel.

FHWA and DOT&PF considered including baggage handling at the existing ferry terminal on Revillagigedo Island when it was suggested as an added element to the ferry alternatives during SEIS scoping. As noted in Section 2.2.2 of the Final SEIS, "Arrangements for baggage and passenger check-in are coordinated by the airlines under FAA regulations, and are not a surface transportation issue"; therefore, this feature is not included with the ferry alternatives. All ferry alternatives would improve baggage handling because they include shuttle vans to carry pedestrians and their baggage from the existing ferry terminal on Revillagigedo Island to the airport terminal on Gravina Island.

The Final SEIS does indicate that bridges would be cheaper than a ferry alternative, from a lifecycle and a total life cost standpoint.

I would like to express my concern about option F3. If this option is selected it would create significant difficulties for the cruise ships visiting Ketchikan. With difficulties in navigating around North Pennock and the West Channel on both north and south bound cruises, the cruise lines may forgo visiting Ketchikan all together. The cruise lines have expressed this during previous comment periods.

The Final SEIS discloses impacts of bridge alternatives to cruise ship operations in Section 4.7.2 and the local economy in Section 4.5.2.

The FHWA and DOT&PF relied on FAA's 2009 Determination of No Hazard to Air Navigation for the analysis of aviation impacts of Alternative C3-4 in the 2013 Draft SEIS. In October 2013, DOT&PF requested

Tourism is the lifeblood of Ketchikan, without their support there will be no need to expand into Gravina Island. Options C3-4 projects a structure greater than 200 feet above MHHW. Such a structure would be necessary for cruise ship traffic though would create a significant safety and navigation impediment to floatplane operations in the harbor. Social and economic conditions have not changed enough to warrant new consideration for this project. The objections other have made are still valid. The people and businesses of Ketchikan did not want the bridge before, and this still remains the case.

a new Determination of No Hazard to Air Navigation from FAA for Alternative C3-4. On August 15, 2014, FAA provided a Determination of Hazard to Air Navigation. This new information is reflected in Section 4.7.1 of the Final SEIS.

Building the bridge will bring about lost jobs and decreased property valves (sic) for all of Ketchikan. This will occur for many reasons a few are as follows: There will be far less cruise ship traffic in all of Alaska, not just Ketchikan if we build this bridge. Ketchikan currently the ideal first or last port of call in Alaska for cruise ships because of its southern location and harbor that requires no back tracking. The schedules are so tight for these ships with required speeds of 18-20 knots for the trips to Vancouver or Victoria then Seattle and back again. If a vessel has to use the west channel it will probably skip Ketchikan or pull out of the Alaska market altogether. I am not sure that I would feel comfortable with a 115,000 gross ton ship like the Diamond Princess in west channel. She has inboard turning propellers and the rudders are NOT directly behind the propellers. Because of this she and her sisters are pigs to handle and the west channel might prove too much for them. There is currently one ship in Alaska bigger (Celebrity Solstice) and I am 100% sure larger ones can be expected by 2015. Of course the swept path of one of these large ships will make the already too small bridge opening seem laughable. The wind coming up Nichols Passage will come over Gravina around blank inlet (swirling off Judy Hill) and hit the top half of these ships and cause a large set with no visible wind on the water in west channel. It will take a full 2 minutes to correct for an unexpected set (assuming a 5 degree per minute turn and a 10 degree drift angle). Also in west channel bank suction can be expected further hampering efforts to keep the ship off the rocks. Do you think a Costa Concordia type event in west channel would be good for Alaska? Because of the aforementioned reasons less cruise ships will mean less jobs for locals making their living off the cruise ships and their passengers. There are the obvious! people, Charter fisherman, guides, cooks, store owners, longshoreman, harbormasters office, tours and taxis. But don't forget the trickle down effect to the rest of the Ketchikan: Teachers, police officers, fire fighters, Medical industry workers, Hardware store employees, suppliers employees, the list goes on to all of us in one way or another. Why not just uses ferries and let our local shipyard build and repair them? Property values will decrease because the economic heath of Ketchikan and all of SE Alaska will be adversely effected. Of course the people who have to live right next to the bridge will have lower property values but that is to be expected. It is the rest of Ketchikan that I am worried about. In closing please do the right thing for Ketchikan and the state of Alaska, don't build the bridge to nowhere!

FHWA and DOT&PF cannot speculate what decision the cruise ship companies might make in response to construction of a bridge over Tongass Narrows. SEAPA representatives commenting on the 2013 Draft SEIS raised navigation concerns related to bridge alternatives and noted that increased operating costs and sailing time (from detours) could result in lost port time and "place Ketchikan at a disadvantage with other Alaskan and nearby Canadian ports." These comments were supported by the Cruise Lines International Association - North West & Canada (CLIA-NWC, formerly NWCCA). There has been no specific comment from the cruise ship industry that states that they would stop visiting the Port of Ketchikan as a result of the selection of either of the bridge alternatives evaluated in the SEIS. FHWA and DOT&PF acknowledge that the addition of a bridge over Tongass Narrows (particularly for Alternative F3) would affect cruise ship navigation by introducing a new obstacle to maneuver around, which could affect operations and change the length of port calls or reduce port calls from some ships (see Section 4.7.2.3.1 of the Final SEIS). FHWA and DOT&PF also acknowledge the safety concerns of cruise ship companies and marine pilots for navigating in West Channel, but determined channel widening would improve navigability of West Channel to a level above the East Channel (see 2013 Draft SEIS Section 4.7.2.3.1). Still, some cruise ship companies might avoid routing some vessels in the West Channel because of the size or handling ability of the vessels, in which case those ships would enter and exit Tongass Narrows from the north or bypass Ketchikan.

If there were a reduction in cruise ship port calls or time in port as a result of Alternative C3-4 or F3, it would affect the local economy. To provide context for the magnitude of that effect, DOT&PF reviewed the economic impact assessment of changes in cruise ship operations conducted for Alternatives C3(b) and D1 in the 2004 FEIS (see Section 4.7.2). These alternatives comprised bridge crossings near the airport with a navigational clearance height of 120 feet, which would restrict more large ships transiting Tongass Narrows than Alternatives C3-4 and F3 with their navigational clearance height of 200 feet. The total reduction in annual cruise-related spending for Alternatives C3(b) and D1 in the 2004 FEIS was approximately \$2.2 million, using 2001 as the base year for spending data. The secondary economic effects of reduced cruise-related spending for those

alternatives were estimated to be (in 2003 dollars): \$2.7 million reduction in gross regional product; \$1.9 million reduction in total labor income, property type income, and indirect business taxes; and loss of 60 jobs. The effects of Alternatives C3-4 and F3 are projected to be less because their larger vertical navigational clearance would not be as restrictive to larger vessel passage as Alternatives C3(b) and D1 from the 2004 FEIS.

The number of local construction jobs anticipated for each alternative is provided in Table 4-18 of the Final SEIS.

I am talking to you as a property owner in the Forest Park area. I am against the Pennock link of the bridge -- portion of the bridge. I own some of the waterfront down there and I'm concerned that it will affect how I can develop my property or if I can develop my property, especially if I wanted to put in, like, a floatplane dock or something. And I'm also concerned about the effect it'll have on my view and my property values. So, I wanted to just speak out and say that I am not in favor of this project and I hope that you decide on some other option. Thank you.

Alternative F3 would require ROW acquisition on Pennock Island, which would preclude development of those acquired properties. Private lots adjacent to the bridge would remain available for development, and any restrictions on that development would remain unchanged; e.g., the bridge would not preclude installation of a floatplane dock on an adjacent property. Existing homes on Pennock Island would be more than 700 feet from the bridge centerline. Anticipated noise levels at the house on Pennock Island nearest the bridge are expected to be 48 dBA during the peak traffic hour under future traffic conditions (see Section 4.26.7.3). This is well below the noise abatement criteria (NAC) threshold of 66 dBA established by the FHWA to identify traffic noise impacts for residential land uses. While the document does disclose that views and noise levels adjacent to the bridge would be affected, the analysis indicates that existing and potential development would not be precluded.

The F3 Alternative provides access to Pennock as well as Gravina. Pennock has many more residents than Gravina and continues to grow. A bridge through Pennock would provide and allow for easy and profitable development. Also, a drawbridge may be an option to allow for more vertical clearance. An alternate route can allow more horizontal clearance at the cost of a slightly longer bridge.

The 2013 Draft SEIS did identify effects of increased access to Pennock Island associated with Alternative F3.

As noted in Sections 2.2.2 and 2.2.3 of the Final SEIS, Alternatives M1 and M2 were moveable bridge options considered by FHWA and DOT&PF and evaluated in a screening process. They were not considered reasonable alternatives because their costs were above the \$305 million threshold. It was also noted in the screening process that moveable bridges (a.k.a. drawbridges) would cause unacceptable delays for travelers going across the bridge due to frequent bridge raisings for marine traffic (particularly cruise ships in summer).

Bridge alternatives with horizontal clearances of 750 feet were eliminated from further consideration during the development of alternatives for the 2004 FEIS because of the high costs associated with the long spans. These bridge alternatives were not revisited in developing alternatives for the SEIS because DOT&PF was instructed by the Governor to find a lower cost alternative relative to Alternative F1.

I am opposed to the current bridge alternatives for the following reasons: The two bridges will negatively impact the safety of cruise ships during extreme tides and currents, high winds or low visibility, and force the ships to make U-turns in order to arrive or depart. One ship-bridge

The impacts of the bridge alternatives to cruise ship navigation are evaluated in the Final SEIS: Section 4.7.2 describes the risks of allisions of ships with bridge piers. Numerous navigation studies were performed in development of the 2004 FEIS, and

accident could block all access by cruise ships, and stop traffic to the airport at the same time. Access to the airport will actually be more difficult when there is heavy snowfall or icing. It will cost additional dollars to plow the route to the airport. It will take more time to drive South of town, cross the bridges, and then drive to the airport then taking the current ferry.

FHWA and DOT&PF determined that the information provided in those studies was sufficiently representative of the potential navigation impacts of Alternatives C3-4 and F3 evaluated in the 2013 Draft SEIS. For example, Appendix F, Consequences of Various Channel Closures to Large Shipping Technical Memorandum, and Appendix G, Reconnaissance of Vessel Navigation Requirements Updated Report, of the 2003 DEIS and incorporated by reference into the 2004 FEIS adequately examined the potential effects of maneuvering in Tongass Narrows to avoid navigating under a bridge and the resulting increase in sailing time. Appendix H, Monte Carlo Navigation Simulation Technical Memorandum; Appendix I, Ketchikan Bridge Project Summary Report, and Appendix J, Real Time Navigation Simulation Study (STAR Center) Technical Memorandum, of the 2003 DEIS and incorporated by reference into the 2004 FEIS adequately evaluated the safety and hazards associated with large ships transiting under a bridge spanning Tongass Narrows. The Simulation Study considered variables for wind, tide, and visibility. Travel time calculations did not account for winter conditions; however, it is reasonable to assume that adverse road conditions from snow and ice would increase travel time, regardless of alternative. Annual operations and maintenance costs presented in the Final SEIS include winter maintenance activities, such as snow removal.

Building a bridge that would close the east channel to ship, ferry and barge traffic would be very short sighted and create a significant navigational hazard. As it stands now the cruise ship Celebrity Solstice requires 61m, over 200 feet of vertical clearance - and these ships are not getting any smaller. I urge that neither bridge option be considered. Between the two bridge options, from the mariner point if view, the C3/4 single high bridge near the airport is a better choice than closing East Pennock Channel permanently to commercial vessel traffic. However 200' of clearance is not enough for the larger ships coming to Alaska.

Alternative F3 would not close the East Channel to ship traffic. As noted in Section 2.1.2.2 of the Final SEIS, "The primary waterway users of the East Channel under Alternative F3 would be tugs and barges, USCG vessels, charter boats, and local private craft." Numerous navigation studies were performed in development of the 2004 FEIS to assess potential navigation restrictions and hazards resulting from bridge alternatives. FHWA and DOT&PF determined that the information provided in those studies was sufficiently representative of the potential navigation impacts of Alternatives C3-4 and F3 evaluated in the Final SEIS (see Section 4.7.2). Section 4.7.2.3 of the Final SEIS has been revised to acknowledge that the increased risk could affect operations and change the length of port calls or reduce port calls from some ships. Section 4.26.3.3 has also been revised for the Final SEIS to represent the economic cost incurred by additional ship maneuvering with Alternative F3, based on best available information and analysis.

FHWA and DOT&PF acknowledge industry trends and increasing numbers of large ships; however, they cannot anticipate changes in the market that would affect ship size and routing. This SEIS discloses potential impacts of a bridge on navigation based on the best available information. FHWA and DOT&PF also considered a tunnel alternative (Alternative T1), but it was eliminated from detailed consideration in Section 2.2 of the Final SEIS because its construction and life cycle costs were well beyond anticipated funding.

Page 7-25 June 2017

Ketchikan and Alaska would be better served by the improved ferry option. I am disappointed that a tunnel option was not considered.	The State's preferred alternative is G4v. FHWA and DOT&PF did consider a tunnel alternative (Alternative T1), but it was eliminated from detailed consideration in the SEIS (see Section 2.2) because its construction costs were well beyond anticipated funding.
Why does the bridge have to be all the way out of town? The bridge should be built across the airport. I want to know where is the morning going to come from, would like to not pay for this bridge taxes.	The SEIS identified six reasonable build alternatives through a screening process (see Final SEIS Section 2.3), including a bridge near the airport. Availability of funding was a consideration in identifying the preferred alternative.
I see no where in your presentation the cost or toll of travel by foot or by oar (sic) to Gravina and back. please confirm	The analysis of ferry alternatives assumed the cost of travel by ferry to be the same as current conditions; i.e., "Toll collection would continue at the existing rate for all ferry routes" with tolls applying to both vehicles and pedestrians (see Final SEIS Section 2.1.3). The current (2016) tolls for pedestrians and vehicles crossing Tongass Narrows on the airport ferry have been added to Section 2.1.3 in the Final SEIS. Tolls considered for travel across a bridge, for vehicles only, were \$2, \$5, and \$16 (see Final SEIS Table 2-1). The DOT&PF did not consider a toll for pedestrians crossing Tongass Narrows on a bridge alternative.

7.3.3 <u>Selection of a Preferred Alternative and Subsequent Agency Consultation</u>

In October 22, 2015, DOT&PF issued a public notice identifying Alternative G4v as the preferred alternative. On March 3, 2016, FWHA joined DOT&PF in announcing Alternative G4v as the preferred alternative and FWHA's intent to prepare a combined Final SEIS and Record of Decision (ROD) pursuant to Section 1319(b) of the MAP-21. Comments were requested by April 7, 2016. Comments could be submitted to DOT&PF through mail, email, fax, or the website. DOT&PF received only one communication with comments on the preferred alternative and the combined Final SEIS/ROD. The communication DOT&PF received was a letter from the Ketchikan Gateway Borough, Office of the Borough Mayor, David Landis. The letter from Mayor Landis expressed the Borough's support for the preferred alternative and endorsement of the Final SEIS/ROD as a combined document.

The FHWA and DOT&PF will continue to coordinate with the Borough as the design of Alternative G4v is advanced. DOT&PF, in collaboration with the Borough, is actively developing other transportation projects in the immediate vicinity of Alternative G4v that are not included in this Final SEIS.

Page 7-26 June 2017