

Juneau Access Improvements Project Final Supplemental Environmental Impact Statement

Appendix JJ Responses to Draft Supplemental Environmental Impact Statement Comments

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Attachment B: Correspondence from and Reponses to Federal and State Agencies, Local Governments, and Tribal Organizations since the Draft SEIS

Attachment C: Correspondence from and Reponses to Organizations since the Draft SEIS

Attachment D: Form Letters and Index of Form Letter Commenters

Acronyms and Abbreviations

AAA American Automobile Association

AASHTO American Association of State Highway Transportation Officials

ACF Alaska Class Ferry

ADA Americans with Disabilities Act

ADEC Alaska Department of Environmental Conservation

ADF&G Alaska Department of Fish and Game

ADT Average Daily Traffic

AEL&P Alaska Electric Light & Power AHI Avalanche Hazard Index

AkPIRG Alaska Public Interest Research Group AMHS Alaska Marine Highway System

AML Alaska Marine Lines

ANILCA Alaska National Interest Lands Conservation Act

BMP Best Management Practice
CBJ City and Borough of Juneau
CCFR Capital City Fire Rescue

CD Compact Disk

CEQ Council on Environmental Quality
CFR Code of Federal Regulations

CO Carbon Monoxide CO₂ Carbon Dioxide

DHS Department of Homeland Security
DMLW Division of Mining, Land, and Water
DNR Alaska Department of Natural Resources

DOT&PF Alaska Department of Transportation and Public Facilities

EFH Essential Fish Habitat

EIS Environmental Impact Statement

EO Executive Order

EPA U.S. Environmental Protection Agency

ESA Endangered Species Act

FAST Fixed, Automated, Anti-icing Technology
FAST Act Fixing America's Surface Transportation Act
FEIS Final Environmental Impact Statement

FFY Federal Fiscal Year

FHWA Federal Highway Administration

FTA Federal Transit Authority

FVF Fast Vehicle Ferry

GMU Game Management Unit HRRR High Risk Rural Road

JAI Juneau Access Improvements
JPD Juneau Police Department
LCC Lynn Canal Conservation
LUD Land Use Designation

MAP-21 Moving Ahead for Progress in the 21st Century Act

MLLW Mean Lower Low Water

MLOPS Mooring and Loading Operations

NAAQS National Ambient Air Quality Standards NEPA National Environmental Policy Act NHPP National Highway Performance Program

NHS National Highway System

NMFS National Marine Fisheries Service

NWS National Weather Service ROD Record of Decision RV Recreational Vehicle

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act

SATP Southeast Alaska Transportation Plan SEACC Southeast Alaska Conservation Council

SEIS Supplemental Environmental Impact Statement

SMAC Skagway Marine Access Commission

SOI Statement(s) of Issue SOLAS Safety of Life at Sea

STIP Statewide Transportation Improvement Program

TGSC Tongass Group of the Sierra Club

TLMP Tongass Land and Resource Management Plan

TSM Transportation System Management TUS Transportation and Utility Systems

UGF Unrestricted General Fund USACE U.S. Army Corps of Engineers

USC United States Code USCG U.S. Coast Guard

USDOT U.S. Department of Transportation

USFS U.S. Forest Service

USFWS U.S. Fish and Wildlife Service

1. Introduction

In 2006, the Federal Highway Administration (FHWA), the lead federal agency for the project, completed its environmental review of the Juneau Access Improvements (JAI) Project in accordance with the National Environmental Policy Act (NEPA) by issuing a Final Environmental Impact Statement (FEIS) and Record of Decision (ROD), selecting the East Lynn Canal Highway to Katzehin with shuttle ferries to Haines and Skagway for design and construction. A 2009 District Court decision ruled that the 2006 FEIS was not valid because it did not consider an alternative that would improve surface transportation in Lynn Canal using existing Alaska Marine Highway System (AMHS) assets. In 2011, a Ninth U.S. Circuit Court of Appeals panel upheld the lower court ruling. In direct response to the court ruling, FHWA determined that a Supplemental Environmental Impact Statement (SEIS) should be prepared for the JAI Project and include an evaluation of an alternative that improves service in Lynn Canal using existing AMHS assets.

On September 14, 2011, the Alaska Department of Transportation and Public Facilities (DOT&PF) announced that it would begin the process with FHWA to complete an SEIS for the JAI Project. The SEIS evaluates an alternative of enhanced service in Lynn Canal using existing AMHS assets (Alternative 1B). The SEIS also updates the evaluation of the reasonable alternatives in the FEIS and addresses changes in applicable laws, regulations, and approvals. FHWA's Notice of Intent to prepare an SEIS was published in the *Federal Register* on January 12, 2012.

1.1 2014 Draft SEIS Comment Period

On September 19, 2014, DOT&PF announced the release of the JAI Project Draft SEIS for review and comment (the public comment period ended November 25, 2014). Copies of the Draft SEIS were made available at the Juneau, Mendenhall, Douglas, Haines, and Skagway public libraries, as well as the State Public Library. Printed copies of the document were also distributed to the cooperating agencies and other interested agencies. Chapter 9 of the Draft SEIS includes a list of federal agencies, State agencies, local governments, and Native organizations that received copies of the document.

Compact disks (CDs) were distributed to interested organizations and individuals that requested to be on the JAI Project mailing list. CDs or hard copies of the Draft SEIS were available by request from the DOT&PF Southeast (now Southcoast) region office. The Draft SEIS and all of the appendices were also available for review or download from the JAI Project website: www.juneauaccess.alaska.gov. Public notices announcing the 2014 Draft SEIS availability, as well as dates of public hearing sessions and locations, were placed in the *Juneau Empire*, *Chilkat Valley News*, and *Skagway News*.

During the review period, public input was solicited and public testimony was recorded at three public hearing sessions held in Juneau on October 14, Haines on October 15, and Skagway on October 23, 2014. An open house session before each public hearing session provided the public an opportunity to review the 2014 Draft SEIS and display boards, ask questions of project staff, and provide oral or written comments. A court reporter was available during the public open house to record private oral testimony. Comments were also submitted by the public,

organizations, and governmental agencies through the JAI Project website or by e-mail, mail, hand delivery, or fax to DOT&PF.

The public review and comment period, initially scheduled to end November 10 (provided a 52-day comment period, exceeding the 45-day minimum), was extended by 15 days (67 days total) to November 25, 2014. The FHWA Division Administrator extended the comment period due to requests from multiple parties. All communications received or postmarked by or on November 25, 2014, were entered into a comment tracking database developed for the JAI Project and analyzed. See Section 2 for a description of the comment analysis process.

1.2 Report Overview

The regulations implementing NEPA require that substantive comments received on a Draft EIS be included in an FEIS. An FEIS includes responses to these comments and may include such things as modification to the alternatives or analyses, or factual corrections. The regulations state that summaries may be attached to the FEIS if the substantive comments are "exceptionally voluminous" and for similar comments to be grouped together and addressed in a single response (40 Code of Federal Regulations [CFR] 1503.4).

This Responses to Draft Supplemental Environmental Impact Statement Comments documents the public and agency comments received on the Draft SEIS during the comment period and the responses to these comments. Section 2 describes the process and methodology used to track and code comments; Section 3 provides a summary of Cooperating Agency coordination; and Section 4 presents a brief overview of the comments, such as the number of communications and comments received, as well as the topics and subtopics of the comments. As allowed under NEPA regulations, similar comments have been summarized in comment groups or grouped comments (called statements of issue [SOIs] in Appendix V of the 2006 FEIS).

Sections 5 and 6 in this report provide indices for the comments. Section 5 provides an index of commenters, alphabetically by last name or organization name, and their associated comment group(s). Section 6 provides an alphabetical list of topics/subtopics and the comment group(s) associated with those topics. The indices in Sections 5 and 6 provide a means for commenters to locate responses associated with their comments in Section 7.

Section 7 includes responses to comments on the Draft SEIS. All comment groups are listed alphabetically by topic in Section 6 (e.g., Air Quality, Alternatives, and Avalanches). FHWA's and DOT&PF's responses immediately follow each comment group summary.

¹ Per American Association of State Highway and Transportation Officials (AASHTO) Practitioner's Handbook 02, Responding to Comments on an Environmental Impact Statement, "Individual vs. Group Responses. Section 1503.4 of the CEQ regulations state that comments should be assessed and considered "individually and collectively." It also states that all substantive comments should be attached to the FEIS, except that summaries may be attached if the substantive comments are "exceptionally voluminous." These regulations allow for similar comments to be "grouped together and addressed in a single response."

Attachment A includes correspondence from and responses to Cooperating Agencies since the Draft SEIS. Attachment B includes correspondence from and responses to local, State, and federal agencies and Tribal entities since the Draft SEIS. Attachment C includes correspondence with detailed comments from organizations since the Draft SEIS, along with embedded responses. Attachment D includes the text of form letters received and an index of form letter commenters, alphabetically by last name or organization name, and their associated comment group(s).

Juneau Access Improvements Project Final SEIS
Appendix JJ – Responses to Draft SEIS Comments

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2. Comment Analysis Process

The analysis of public comments on the Draft SEIS was a multi-stage process that included coding, sorting, and summarizing all public communications received on the Draft SEIS. Each step of the process included multilevel quality reviews (project team, DOT&PF, and FHWA). The process is described in detail below.

2.1 Submission Tracking

All communication submittals (e.g., via website, hearing transcript, form letter, and e-mail) were assigned unique identifying numbers as they were processed or received into the database. The communication type; date the communication was received; and the commenter's name, organization/affiliation, and contact information were documented, either automatically (in the case of website submissions) or by the Project team.

2.2 Coding

After being assigned a numeric identifier, each communication was reviewed to identify the substantive comments within it and record statements of opinion in support of or opposition to the project or a particular alternative (see Table 2-1). Communications could include multiple opinions and multiple comments. Each comment was assigned a unique number, which included the numeric identifier for the communication and a numeric identifier for the comment. This ensured that each comment had a unique numeric description that could be readily referenced back to the communication and commenter. Once comments were identified, they were assigned to a primary topic and subtopic that reflected the content of the comment (see Table 2-2).

For example, a comment that discusses the need for noise monitoring for Steller sea lions during construction could be assigned to the Threatened and Endangered Species topic, and the Mitigation subtopic.

Coding Definitions:

Communication: All methods for submitting comments: mail, e-mail, website, comment form, fax, public testimony at the public hearing, or private testimony to a court reporter at the public open house.

Comments: Statements or questions with a factual basis that addressed the accuracy of the information, offered new information, provided additional data for consideration, or requested clarification.

Opinions: General statements of support or opposition to the project or a particular alternative.

Topic: All comments were coded based on a primary topic area, such as Alternatives, Avalanches, Wildlife, Visual Impacts, Transportation, or other topic.

Group: Similar comments within a topic area were grouped together as a Statement of Issue (SOI) for response.

Table 2-1: Opinions Coding

Opinion Alternatives	Opinion Topics
No Opinion	Air Quality
Support Alternative 1 – No Action	Avalanche
Do Not Support Alternative 1 – No Action	Capacity/Travel Demand
Support Alternative 1B	Climate Change
Do Not Support Alternative 1B	Convenience/Flexibility
Support Alternative 2B	Cultural/Historic
Do Not Support Alternative 2B	Cumulative
Support Alternative 3	Environmental Justice
Do Not Support Alternative 3	Energy
Support Alternative 4A	Hazardous Materials
Do Not Support Alternative 4A	Land Use
Support Alternative 4B	Natural Environment
Do Not Support Alternative 4B	Noise
Support Alternative 4C	None Stated
Do Not Support Alternative 4C	Other
Support Alternative 4D	Recreation
Do Not Support Alternative 4D	Reliability
Support Marine Transportation	Safety
Do Not Support Marine Transportation	Socioeconomics
Support Highway Transportation	State Cost
Do Not Support Highway Transportation	Subsistence
	Sustainability
	T&E
	Travel Time
	User Cost
	Visual Resources
	Walk-on Passengers

Table 2-2: Topics and Subtopics

Topic	Sub Topic	Topic	Sub Topic
Air Quality	General	Land Use	General
	Existing Conditions		Existing Conditions
	Method of Analysis]	TNF Land Use Designations
	Operation/Maintenance Impacts		Method of Analysis
	Mitigation		General Operation/ Maintenance Impacts
Alternatives	General		Recreation Access/Impacts
	Alternative 1 – No Action		Impacts to Old-growth Habitat/Reserves
	Alternative 1B		Mitigation
	Alternative 2B	NEPA	General
	Alternative 3		NEPA Requirements
	Alternative 4A		FHWA Requirements
	Alternative 4B		Other Federal Agencies
	Alternative 4C	Noise	General
	Alternative 4D		Existing Conditions
	General highway alts		Method of Analysis
	General Marine Alternatives		Operation/Maintenance Impacts
	Eliminated Alternatives		Mitigation
	New Alternative Recommended	Public Process	General
	Modification of Alternative Recommended		Public Scoping
	Funding		Public Hearing
Avalanche	General]	Accessibility
	Avalanche Hazards]	Ballots and Resolutions
	Avalanche Mitigation		Comment Period
	Highway Closures		Cooperating Agencies
	Emergency Response]	Other Agency Consultations
Bald Eagles	General		Government to Government
	Regulations	Purpose and Need	General
	Survey Results		Relationship to SATP
	Method of Analysis		Bias
	Operation/Maintenance Impacts		Completeness
	Mitigation		Existing Access

Change Adapting the Climate Change Construction General Land Use Visual	e Project for ange	Section 4(f) Issues Socioeconomic Resources	Transportation Demand Flexibility and Opportunity for Travel Travel Times State Costs User Costs General Basis for Determinations General Existing Conditions Method of Analysis General Operation/ Maintenance Impacts		
Project Impa Change Adapting the Climate Cha Construction General Land Use Visual Historical/A Socioeconor Transportati Water Resou Air Quality	e Project for ange	. ,	Travel Travel Times State Costs User Costs General Basis for Determinations General Existing Conditions Method of Analysis General Operation/		
Change Adapting the Climate Change Construction General Land Use Visual Historical/A Socioeconor Transportati Water Resort Air Quality	e Project for ange	. ,	State Costs User Costs General Basis for Determinations General Existing Conditions Method of Analysis General Operation/		
Climate Cha Construction General Land Use Visual Historical/A Socioeconor Transportati Water Resor Air Quality	ange archaeological mic	. ,	User Costs General Basis for Determinations General Existing Conditions Method of Analysis General Operation/		
Land Use Visual Historical/A Socioeconor Transportati Water Resor Air Quality	mic	. ,	General Basis for Determinations General Existing Conditions Method of Analysis General Operation/		
Visual Historical/A Socioeconor Transportati Water Resor Air Quality	mic	. ,	Basis for Determinations General Existing Conditions Method of Analysis General Operation/		
Historical/A Socioeconor Transportati Water Resor Air Quality	mic	Socioeconomic Resources	General Existing Conditions Method of Analysis General Operation/		
Socioeconor Transportati Water Resor Air Quality	mic	Socioeconomic Resources	Existing Conditions Method of Analysis General Operation/		
Transportati Water Resor	on		Method of Analysis General Operation/		
Water Resort Air Quality			General Operation/		
Air Quality	urces				
Noise			Population/Income/Housing Impacts		
NOISE			Tourism/Economic Impacts		
Wetlands			Community Infrastructure Impacts		
Terrestrial H	Habitat		Quality of Life		
Marine and Habitat/Spec			Safety - Highway/Ferry		
Wildlife inc	luding T&E		Crime		
Mitigation			Mitigation		
Cultural, General		Subsistence	General		
Historical, and Consultation	n with SHPO		Existing Conditions		
Archaeological Resources Consultation	n with Tribes		Method of Analysis		
Existing Con	nditions		Operation/Maintenance Impacts		
Method of A	Analysis		Mitigation		
Operation/N Impacts	Maintenance	Terrestrial Habitat	General		
Mitigation			Existing Conditions		
Cumulative General			Method of Analysis		
Past, Presen Foreseeable	t, Reasonably Actions		Operation/Maintenance Impacts		
Land Use			Habitat Fragmentation/Loss		
Visual			Mitigation		
Historical/A	rchaeological	Threatened and	General		
Economic		Endangered Species	Displacement		
Social			Habitat Fragmentation/Loss		

Topic	Sub Topic	Topic	Sub Topic
	Water Resources		Sea Lions - Existing Conditions
	Air Quality		Sea Lions - Impacts
	Noise		Humpback Whales - Existing Conditions
	Wetlands		Humpback Whales - Impacts
	Terrestrial Habitat		Biological Opinion
	Marine and Freshwater Habitat/Species		Mitigation
	Wildlife including T&E	Transportation	General
Editorial and	General		Method of Analysis
Document Management	Spelling, Grammar, and Punctuation		Transportation Demand
	References		Flexibility and Opportunity for Travel
	Layout		Travel Times
	Maps/Figures	7	State Costs
	Bias		User Costs
Energy	General		AMHS Impacts
	Existing conditions		Ferry Foot Passengers (walk- on passengers)
	Method of Analysis	7	Evacuation
	Operation/Maintenance Impacts		Safety
	Mitigation	Visual Resources	General
Environmental	General		Existing Conditions
Justice	Existing Conditions		Method of Analysis
	Method of Analysis		Operation/Maintenance Impacts
	Operation/Maintenance Impacts		Mitigation
	Mitigation	Water Quality,	General
Essential Fish	General	Hydrology, and Floodplains	Existing Conditions
Habitat- Marine and Freshwater	Existing Conditions	Tioodpianis	Method of Analysis
and Freshwater	Method of Analysis		Operation/Maintenance Impacts
	Operation/Maintenance Impacts		Mitigation
	Habitat Fragmentation/Loss	Wetlands	General
	Mitigation		Existing Conditions

Topic	Sub Topic	Topic	Sub Topic
Fish - Marine	General		Method of Analysis
Fish, Anadromous Fish, and Shellfish	Existing Conditions		Operation/Maintenance Impacts
	Method of Analysis		Mitigation/Compensatory Measures
	Operation/Maintenance Impacts		Section 404 Consultation
	Mitigation	Wild and Scenic Rivers	General
Geology	General	Wildlife	General
	Existing Conditions		Existing Conditions
	Method of Analysis		Method of Analysis
	Operation/Maintenance Impacts		Operation/Maintenance Impacts
	Geologic Hazards as Impacts on Alternatives		Mitigation
	Mitigation		
Hazardous	General		
Materials	Existing Conditions		
	Method of Analysis		
	Operation/Maintenance Impacts		
	Mitigation		

2.3 Development of Comment Groups/Statements of Issue (SOI)

The coded comments in each topic and subtopic area were reviewed to identify similarities among comments. Similar comments in a topic and subtopic area were grouped together and summarized in an SOI (i.e., a comment group summary statement). In some cases, a simple statement sufficiently captured the meaning of all the comments attributed to the comment group. In other cases, multiple statements were needed (identified by letters [e.g., A, B, and C]) to ensure that all facets of the comments were addressed.

2.4 Responding to Comments

Reponses to all comment group summary statements were written by subject matter experts who had worked on the development of the Draft SEIS. See Section 7 for all comment group summaries and associated responses.

3. Cooperating Agency Comment Overview

The preliminary Draft SEIS was provided to Cooperating Agencies—U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), U.S. Coast Guard (USCG), U.S. Forest Service (USFS)—in January 2014. Their comments and FHWA responses on the preliminary Draft SEIS were included in Chapter 7 of the 2014 Draft SEIS and are not included in this document.

A Notice of Availability of the 2014 Draft SEIS for the JAI Project was published in the *Federal Register* on September 19, 2014. Printed copies were distributed to cooperating agencies. EPA, USACE, and USFS provided comments on the Draft SEIS. These communications and FHWA's responses are included in Attachment A.

The Preliminary Final SEIS, along with FHWA's responses to comments on the Draft SEIS, was provided to the Cooperating Agencies for review on August 31, 2017. Of these Cooperating Agencies, only EPA provided a response. This letter is provided in Attachment A. USACE, USCG, and USFS provided no comments on the Preliminary Final SEIS.

4. Public Comment Overview

DOT&PF received a total of 42,214 written and oral submissions during the public review period as well as oral testimony from a total of 118 individuals who attended the three public hearing sessions held in Juneau, Haines, and Skagway. Of these communications, 41,012 were form letters.

Individuals, agencies, or organizations could submit more than one set of comments. Of the 1,202 non-form letter submissions or individual testimony, 36 were duplicates. Approximately 1,429 individuals sent in multiple submissions or submitted written comments in addition to oral testimony. There were also 27 joint submissions, with multiple signatures or multiple people listed in a single submission.

Communications often contained comments and/or opinions addressing more than one issue. For example, a communication may state opposition to one alternative, support for another alternative, and reasons for that choice. A total of 10,749 opinions and 2,207 comments were identified. Comments within each communication were identified and coded as described in Section 2.2. These comments were divided into 258 comment groups based on topic and subtopic (see Section 2.3).

The following figures provide a general overview of the comments received. Figure 4-1 illustrates the geographic distribution of communications received. Figure 4-2 groups all nonform letter comments into broad topic areas. Figure 4-3 groups all comments (including form letters) into broad topic areas. Figure 4-4 breaks down non-form letter comments by mostmentioned topic/subtopic areas. Figure 4-5 shows all comments (including form letters) by mostmentioned topic/subtopic areas.

Figure 4-6 is a comparison of non-form letter² communications in support of individual alternatives. Not all commenters identified a preference for a specific alternative; some indicated a general preference for a road alternative or a marine alternative, or no preference at all. Because these general preferences are of interest to decision makers, as well as the public, they have been identified in addition to the specific alternative preferences.

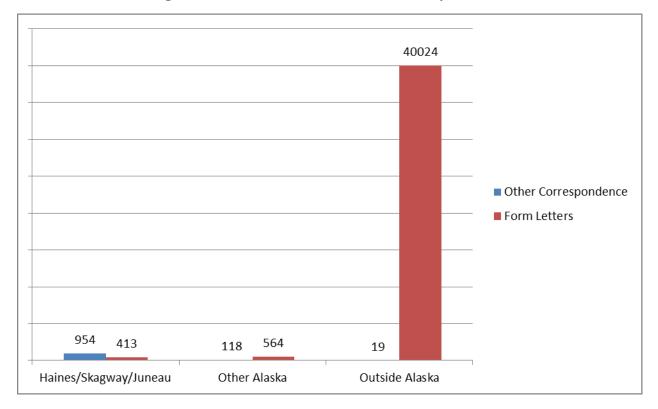


Figure 4-1: Distribution of Communications by Location

Note: This figure includes locations of all commenters (as reported), including form letters. Comments are summarized by geographic location of the submitter. Juneau-Douglas includes the City and Borough of Juneau; Haines includes the surrounding Haines Borough. Most of the comments included under "Other Alaska" were received from the Anchorage Bowl area. It should also be noted that location was self-reported by commenters, and was not a requirement for submitting a communication.

² The form letters are not included as they did not indicate support of a specific alternative, rather support for marine transportation in general.

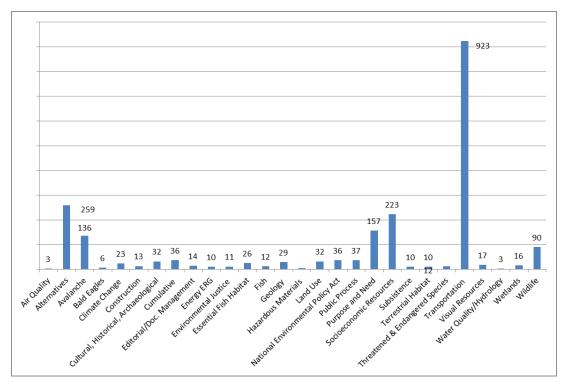


Figure 4-2: Comments Received by Topic Area (without form letters)

Note: This figure identifies issues (topics) raised in comments coded in communications received on the Draft SEIS. This figure includes totals that do not include form letters. It should be noted that not all communications included coded comments.

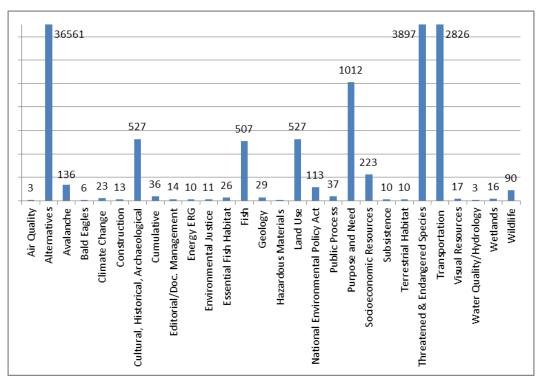


Figure 4-3: Comments Received by Topic Area (all comments)

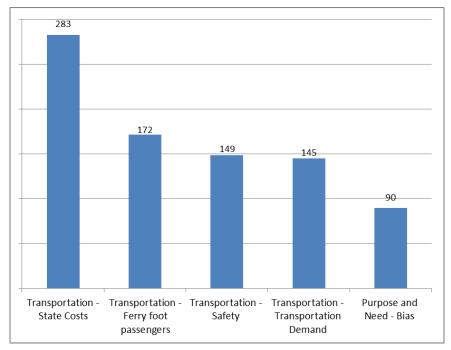


Figure 4-4: Top Five Comment Topic Areas (without form letters)

Note: This figure identifies the top five issues (topics) raised in comments (except form letters) coded in communications received on the Draft SEIS. It includes totals that do not include form letters. It should be noted that not all communications included coded comments.

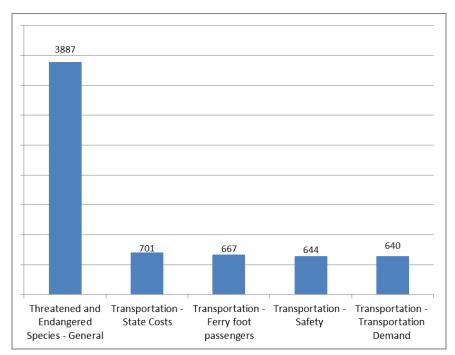


Figure 4-5: Top Five Comment Topic Areas (all comments)

Note: This figure identifies the top five issues (topics) raised in comments (including form letters) coded in communications received on the Draft SEIS. It should be noted that not all communications included coded comments.

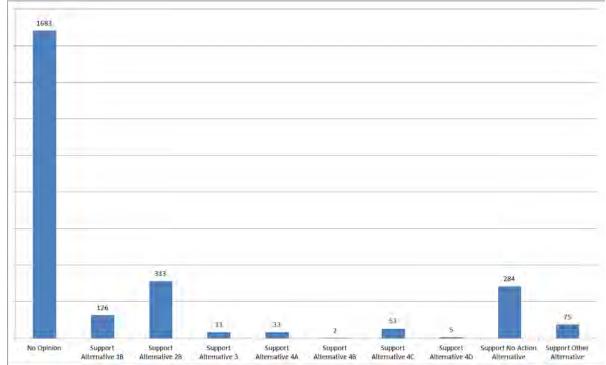


Figure 4-6: Communications Received in Support of Alternatives

Note: This figure includes total communications in which the commenters (non-form letters) indicated support of alternatives. The form letters are not included as they did not indicate support of a specific alternative, rather support for marine transportation in general. It should be noted that not all communications included opinions on alternatives.

4.1 Local, State, and Federal Agencies and Tribal Entities

In addition to the Cooperating Agencies and the public, multiple local, State, and federal agencies as well as Tribal entities submitted comments on the Draft SEIS (see Table 5-1). These entities/organizations included:

- Alaska Department of Fish and Game (ADF&G)
- Alaska Department of Natural Resources (DNR)
- Douglas Indian Association
- Haines Borough
- Municipality of Skagway
- National Marine Fisheries Service (NMFS)
- Sealaska
- Skagway Port Commission

In addition, organizations provided extensive comments on multiple topics regarding the Draft SEIS, including:

- Alaska Public Interest Research Group (AkPIRG)
- Lynn Canal Conservation (LCC)
- Southeast Alaska Conservation Council (SEACC)
- Skagway Marine Access Commission (SMAC)
- Tongass Group of the Sierra Club (TGCS)

These comments are included in the Comment Groups. In addition, FHWA responded individually to these comments (see Attachments B and C).

4.2 Form Letters

The JAI Project Draft SEIS received 41,102 form letters from the following non-governmental organizations:

- SEACC (three versions of this letter were circulated):
 - o Version 1: 360 letters
 - o Version 2: 58 letters
 - o Version 3: 77 letters
- Earthjustice: 36,302 letters
- Care2: 73 letters
- Sierra Club: 257 letters
- Alaska Wilderness League: 3,885 letters

These form letters were entered into the comment database and processed like the non-form letter communications. However, they were processed together by submitting organization (and in the case of SEACC, by letter version). As such, identical opinions and comments were coded only once per organization/letter version. Coded comments were then included in groups by topic/subtopic for response.

The base text from these form letters, an index of form letter commenters (alphabetically by last name), and their associated comment group(s) are included in Attachment D.

5. Index of Commenters and Organizations

This section presents a list of commenters and associated organizations who provided communications on the JAI Project Draft SEIS. It should be noted that complete self-identification was not a requirement for submitting a communication regarding the Draft SEIS. In addition, it should be noted that not all communications contain coded comments (i.e., only statements or questions with a factual basis that addressed the accuracy of the information, offered new information, provided additional data for consideration, or requested clarification were coded as comments); therefore, not all commenters will see a group number associated with their entry.

Commenters (not including those commenters who submitted form letters) can find their names in Table 5-1, and then find the group number(s) and response(s) that are associated with their entry in Section 7. Commenters who submitted comments in association with form letters (see Section 4.2) can find their names and group numbers listed in Attachment D.

Table 5-1: Index of Commenters/Organizations (Non-form Letters)

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Abad	Freddie		Juneau Pioneers Home	Juneau	AK	99803	
Aberle	Thomas			Juneau	AK	99801	
Adams	Bettye			Juneau	AK	99801	
Adams	Glenn			Haines	AK	99827	
Adams	Gus			Douglas	AK	99824	
Adams	Joy			Haines	AK	99827	
Adams	Mike			Juneau	AK	99801	
Ahrens	Rodney			Haines	AK	99827	
Albecker	Elizabeth		Granny's Gallery	Skagway	AK		66, 225, 230, 258, 572
Alborough	James			Haines	AK		
Albrecht	Doug						373
Alexakos	Irene			Haines	AK		66, 676
Allen	Cynthia			Haines	AK	99827	
Allen	Janine			Haines	AK	99827	116
Allen	Mark			Haines	AK	99827	230
Anderson	Blain	Captain	Sound Sailing - S/V BOB	Sitka	AK	99835	116, 541
Anderson	Dale			Juneau	AK		
Anderson	Josh			Juneau	AK	99801	
Andrews	Robert			Craig	AK	99921	19, 116
Annis	William				AK		230, 238, 571
Araujo	Jaeleen	VP General Counsel & Corporate Secretary	Sealaska	Juneau	AK	99801	274, 282
Argenti	Peter			Juneau	AK	99801	
Armstrong	Austin				AK	99801	
Arthur	Sue						
Ashenbrenner	Karl		Mr. Fixit	Juneau	AK	99801	
Atkinson	Paul			Gustavus	AK	99826	
Backes	Gloria			Juneau	AK	99801	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Bailey	Todd			Juneau	AK	99801	230, 570
Baken	Leslie			Ketchikan	AK	99901	
Baker	Bruce			Auke Bay	AK	99821	84, 126, 251, 688
Ballanco	Jean Meaux			Haines	AK	99827	
Balogh	Frank			Douglas	AK	99824	
Balsiger	James	Administrator	National Oceanic and Atmospheric Administration, Alaska Region	Juneau	AK	99802	30, 38, 47, 59, 676
Balstad	Liz			Juneau	AK		
Baluss	Gwen		Juneau Audubon Society	Juneau	AK	99802- 1725	74, 121, 281, 425, 476
Banaszak	Ruth			Juneau	AK	99803	559
Bangs	Peter			Juneau	AK	99801	
Bannerman	Richard			Skagway	AK	99840	475
Barger	Cheryl			Skagway	AK		
Barger	William			Skagway	AK	99840	
Barnard	Jeff			Juneau	AK	99803	
Barnstein	Tom			Juneau	AK	99801	116, 231
Barr	Louis			Auke Bay	AK	99821	258
Barr	Nancy			Auke Bay	AK	99821	
Batchelder	Thomas		International Law & Aviation, LLC	Juneau	AK	99801	
Battaion	Mark			Haines	AK	99827	86, 116
Baxter	Corey	District 8 Representative	International Union of Operating Engineers, Local 302	Juneau	AK	99801	
Baxter	Ronald			Douglas	AK	99824	
Becker	James			Douglas	AK	99824- 0522	559
Beebe	David		Fishing Vessel Jerry O	Petersburg	AK	99833	84, 230, 515
Behnert	Rai			Juneau	AK	99801	350, 388
Behnke	Steve			Juneau	AK		66, 182, 229, 258
Beier	LaVern			Juneau	AK	99802	84, 126, 128, 230
Belardi	Lois			Auke Bay	AK	99821	
Belardi	Rudy						
Belec	Patricia		The Dance Loft	Juneau	AK	99802	
Bell	Elaine			Juneau	AK	99803	
Bell	George		Freeman Bell Machine Shop	Juneau	AK	99801	
Bell	Sharyle			Juneau	Arizon a	99801	
Bennett	Joel			Juneau	AK	99801	
Bennett, Sr.	Jerry			Juneau	AK	99801	
Benson	Laurie			Homer	AK	99603	
Bentley	Jim			Juneau	AK		229, 258
Beran	Paul			Juneau	AK	99801	
Bergmann	Alvin		The Alaskan Fudge Co.	Juneau	AK	99801	
Bergmann	Debra		The Alaskan Fudge Co.	Juneau	AK	99801	
Bergmann	Scott			Juneau	AK	99801	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Bergstrom	Frank	Principal	Amerikanuak, Inc.	Juneau	AK	99802	
Berland	Nancy		5333	Haines	AK	99827	59, 116, 222, 238, 313, 440
Berry	Anissa			Juneau	AK	99801	116, 421, 479
Berry	Mark			Gustavus	AK	99826	
Bethers	Astrid			Auke Bay	AK	99821	
Bethers	Mike			Auke Bay	AK	99821	
Betz	Walter			Haines	AK	99827	66, 229
Bibb	John			Juneau	AK	99801	Í
Birdsall Clifford	Courtenay			Skagway	AK	99840	1, 116, 230
Bishop	Gretchen			Juneau	AK	,,,,,,	116, 231
Bishop	Wendall			Juneau	AK	998016	1
Blank	Lisa			Haines	AK	99827	1
Blank	Patricia			Tranics	THE	77021	116
Blefgen	Linda			Auke Bay	AK	99821	19, 116, 452
Blood	Lori		Southeast Conference	Juneau Juneau	AK	99021	19, 110, 432
Boedefeld	Andy		Conference		AK	99502	230
Boehme	Jo				AK	99801	230
Boehn	Jeff			Juneau	AK	77001	423, 665
Boesser	Cindy			Juneau	AK		116, 450
Boesser	Mark			Juneau	AK	99801	67, 238, 421, 474
Boesser	Mildred			Juneau	AK	99801	667, 238, 421, 474
Boettcher	Deborah			Skagway	AK	99840	,
Boisvert	Sally			Haines	AK	99827	67
Bolton	Sharon		Bolton Data Processing	Skagway	AK	99840	
Bonnett	George		Ĭ	Juneau	AK	99803	
Bookless	Carole			Douglas	AK		50, 177
Borcik	Michael			Haines	AK		
Bornstein	Eva			Juneau	AK	99801	400
Bornstein	Samuel			Juneau	AK	99801	
Boron	Lillian			Haines	AK	99827	424
Boron	Matthew			Haines	AK	99827	192
Borson	Nathan			Gustavus	AK	99826	172
Bosma	Sarah			Juneau	AK	99811	66, 230, 572
Bounds	Suzanne			Willow	AK	99688	00, 230, 372
Bourcy	Tim	Chair	Skagway Port Commission	Skagway	AK	99840	357
Bousson	Dennis			Skagway	AK		258, 296
Boutin	Cathy			Juneau	AK	99801	200, 200
Boutin	Tomas			Juneau	AK	77001	
Bower	Esther			Juneau	AK	99821	36, 42, 66, 67, 84, 86, 116, 222, 230, 258, 282, 392, 415, 452, 474, 494
Bowler	Judy			Juneau	AK	99803	. ,
Bowles	Marlin			Juneau	AK	99801	1, 66, 116, 238, 383
Bowman	Chilton			Juneau	AK	99801	
		1			1		I

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Box	Sheila			Juneau	AK	99801	230, 231, 252, 261, 475
Boyce Boyce	Ann			Haines Haines	AK AK	99827	66, 116, 222 13, 66, 84, 116, 222, 238, 260, 261, 280, 428, 533
Brady	Jeff		The Skagway News Co.	Skagway	AK	99840	
Brakel	Aaron			Douglas	AK	99824	
Brakel	Judy			Gustavus	AK	99826	36, 66, 116, 452
Brand	Don			Juneau	AK	99802	374
Brandon	Heather			Juneau	AK	99801	
Branson Bredeman	Dominic Lawrence		Alaska Tribal Transportation Services Inc.	Juneau Manley Hot Springs	AK AK	99801	
Brenner	Rich			Cordova	AK		
Brewer	Rebecca			Haines	AK	99827	1
Brockmann	Steve		USFWS	Juneau	AK	99801	74, 388, 501, 683
Brodersen	Carl			Juneau	AK		116, 229, 383, 533
Brooks	Christopher			Haines	AK	99827	230
Brooks	Mark			Juneau	AK	99803	
Brooks	Nancy			Juneau	AK	99801	
Brown	Heather A.			Douglas	AK	99824	
Brown Brown	James S. Karen			Douglas	AK AK	99824 99502	193 222, 231,
							501
Brown	Matt Patricia			Juneau Haines	AK AK	99801	19 78, 230, 231, 238, 258, 424, 440, 474, 534, 598
Brown	Russell			Juneau	AK	99801	
Brown	Tina	Board Member	TGSC Inian Islands	Anacortes	WA	98221	29, 37, 38, 63, 66, 79, 86, 116, 159, 208, 222, 229, 230, 231, 251, 258, 260, 279, 313, 348, 350, 383, 388, 404, 421, 452, 496, 511, 527, 541, 627, 654, 682
Brown	Zachary		Institute	Gustavus	AK	99826	116
Brubaker	Simeon		1115111410	Wasilla	AK	99654	
Bruce	David	İ		Juneau	AK	99803	

Brudie	Odin David					Code	116, 229,
	Dovid			Juneau	AK		230, 249, 251, 383, 511, 518, 531, 593
Brummel	Daviu			Soldotna	AK	99669	,
Bryant	Michele			Wasilla	AK	99654	
Bryant	Ted						
Bullock	Donald			Juneau	AK		250
Bunge	Sam			Petersburg	AK	99833	
Burk	Kristina			Juneau	AK	99801	
Burnham	Kim			Skagway	AK		66, 116, 184, 210, 505, 514
Burns	Sharon			Juneau	AK	99801	
Butera	Bob			Anchorage	AK	99508	
Button	Dave	Captain	Eco/Orca Tours	Haines	AK	99827	
Buxton	Cindy			Haines	AK	99827	
Cadiente-Laiti	Andrea		Douglas Indian Association	Juneau	AK	99801	274, 277, 282, 545
Cadmus	Rob			Juneau	AK	99802	533
Calkin	Abigail			Gustavus	AK	99826	
Callahan	Matt						230
Camery	Teri			Juneau	AK	99802	229, 230, 521
Campbell	Vicki			Juneau	AK	99801	
Cannon	Jack			Juneau	AK	99801	191
Caposey	Denise			Skagway	AK		
Capp	Karen			Juneau	AK	99801	222
Cardet-George	Carolyn			Juneau	AK	99801	
Carlson	Keith			Juneau	AK	99801	
Carnes	Wayne			Juneau	AK	99824	230, 251
Carrillo	Ed			Juneau	AK	99801	
Cashen	Steven			Hansville	WA	98340	
Cavagnaro	Ed			Juneau	AK	99801	
Celewycz	Adrian				AK	99821	86
Champol	Matthew			Bellingham	WA	98227	
Chaney	Greg			Juneau	AK		
Chapell	Sara			Haines	AK	99827	1, 2, 451
Chastain	Charlette			Auke Bay	AK	99821	277, 533
Cherian	Tom			Juneau	AK	99801	
Christensen	Karen			Palmer	AK	99645	
Christy	Justin	Grants Accountant	Southeast Alaska Regional Health Consortium	Juneau	AK	99801	
Church	John						86
Clancy	Brent			Juneau	AK	99801	
Clark	Mike			Juneau	AK	99801	
Clark	Philip			Skagway	AK	99840	
Clark	Susan			Juneau	AK	99801	
Clifford	Trevor			Skagway	AK	99840	1, 116, 230
Clough	Helen		River Management Society	Juneau	AK	99801	238, 258, 383
Clutton	William						230, 313, 392
Coate	Emily			Juneau	AK	99801	474
Coffin	Janet			Juneau	AK	99801	
Coghill	Kathy			Douglas	AK	99834	66, 230, 284

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Cokeley	Debera			Juneau	AK	99801	116, 452
Cole	Eric		Eric W. Cole Trucking Inc.	Juneau	AK	99801	
Cole	Lee	Natural Resource Manager	DNR – Division of Mining, Land, and Water (DMLW)	Juneau	AK	99801	
Collins, Jr.	Herman			Juneau	AK	99803	
Collinsworth	Nancy			Juneau	AK	99801	116
Collman	James			Juneau	AK	99801	
Conant	Bruce			Auke Bay	AK		365, 373
Conitz	Jan			Anchorage	AK	99510	67, 116, 208, 222, 392
Connolly	John			Juneau	AK	99801	
Converse	Leanne			Haines	AK	99827	
Conway	David			Juneau	AK	99801- 8770	
Conway	Marla			Juneau	AK	99801	
Cook	Greg						36, 66, 79, 116, 230, 258, 282, 415, 598
Cook	Jeannette			Juneau	AK	99801	
Cook	Richard			Haines	AK	99827	
Cook	Ryan			Haines	AK	99827	
Cook	Tamara						
Cooper	Doreen			Skagway	AK	99840	116, 308
Cooper	Judith			Gustavus	AK	99826	
Cornelius	Gene			Haines	AK		
Cornelius	Michele			Haines	AK		521
Correa	John			Juneau	AK	99801	
Corrigan	T. Kelly		Tenakee Hot Springs Lodge/ All-Season Construction	Douglas	AK	99824	
Corrington	Sherry						258
Cosgrove	Tom			Juneau	AK	99801	
Cox	Kristin			Juneau	AK	99801	
Cox	Thomas			Juneau	AK	99803	
Crabtree	Pat			Douglas	AK	99824	
Craig	Laurie			Juneau	AK	99803	1
Craney	Dustin			D 1	4.77	00024	258
Crapella	Jai			Douglass	AK	99824	116, 230
Craver	Barbara			Juneau	AK	99801	116
Crenshaw Crockett	Ron Deantha	Executive	Alaska Miners	Juneau Anchorage	AK AK	99801 99503	1 192, 193,
Crozier	Mark	Director	Association	Juneau	AK	99801	451 231
Cuadra	Elizabeth			Juneau	AK	99803	1, 13, 67, 301
Culbeck	Courtney						301
Cummins	Jon						
Cummins	Mary						
Currier	Rick			Juneau	AK	99801	499, 511
Custer	Jason	Project Manager	Lynn Canal Transmission Corporation	Ketchikan	AK	99901	2, 46, 451
Dadourian	Laurie		1	Haines	AK	99827	
		•		-	•	•	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Dameron	Frances			Juneau	AK	99801	
Dameron	Logan			Juneau	AK	99801	
D'Andrade	Nina						282
Dane	Samantha						133, 534
Dau	Dickie L.				AK	99821	
Davidsen	Patricia			Juneau	AK	99801	474
Davis	Lin			Juneau	AK		
Davis	Steve			Juneau	AK	99801	
Day	Lucinda			Juneau	AK	99801	229, 258, 350, 392, 452, 453
Day	Matt			Juneau	AK	99801	
De Kennedy	Michelle			Skagway	AK	99840	383
de Leon	Jesusa		NANA Corp	Juneau	AK	99801	
Deach	Emily	Borough Clerk	Municipality of Skagway	Skagway	AK	99840	78, 79, 86, 116, 230, 261, 279, 280, 357, 474, 477, 490, 514, 562
Dean	Shirley			Douglas	AK	99824	69, 130, 230
Dee	Arthur			Juneau	AK	99802	47, 132, 229, 392, 499, 511
Deering	Bob			Juneau	AK		230
Deering	Bob				AK		260
Deising	Rick			Juneau	AK	99802	13, 494
Del Prete	Andrew			Haines	AK	99827	
Delay	Brian			Juneau	AK	99801	229
Della Rosa	Cristina						
Dense	Chas			Juneau	AK	99801	
DeSmet	Mary			Juneau	AK	99801	
DeWitt	Denny	Executive Director	First Things First Alaska Foundation	Juneau	AK	99803	511
DeWitt	Dennis			Juneau	AK	99803	511
Dewitt	Patsy			Juneau	AK	99803	
Dickson	Kay			Douglas	AK	99824	
Diekmann	Gary			Juneau	AK	99801	
Dihle	Luke			Juneau	AK	99801	229
Dihle	Nils and Lynnette			Juneau	AK	99801	
Dihlle	Bjorn			Juneau	AK	99801	7, 86, 225, 229, 258, 505
Dinnan	Karen			Juneau	AK		116, 452, 634
Doctorman	Lindsey		SMAC	Skagway	AK	99840	230, 258, 452, 567, 571, 654, 660, 669
Dominick	Jesse		TEMSCO Helicopters Inc.	Skagway	AK	99840	19, 67
Domke	Loren			Juneau	AK	99801	116, 230, 313, 533
Donig	Jason			Juneau	AK	99802	
Donohoe	Gerald			Juneau	AK	99801	
Donohoe	Sarah			Juneau	AK	99801	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Dorrier	Catharine			Juneau	AK	99801	229, 261, 681
Douthit	Spencer			Haines	AK		374
Draughn	Dorothy			Chugiak	AK	99567	374
Drotos	Dawn			Haines	AK	99827	308, 521, 594, 598
Dudzik	Lorraine			Haines	AK	99827	374, 376
Duis	Robert						1, 116, 192, 193, 222, 238, 252, 282, 366, 373, 455, 499, 541, 571, 623
Dukowitz	Peter			Juneau	AK	99801	284
Dunalp	Sarah			Juneau	AK	99801	7, 66, 116, 191, 229, 231, 249, 368, 452, 475, 476, 521
Dunker	John			Juneau	AK	99801	229, 258, 260, 555, 654
Dunn	Art			Juneau	AK	99801	366, 415
Durand	Judy			Haines	AK	99827	
Dyer	Sheila			Juneau	AK	99801	238, 392
Dzinich, jr	Kurt			Juneau	AK	99801	365, 366
Eager	Gail					,,,,,,	
Early	Mara			Juneau	AK	99801	86
Eckerson	Sandra			Juneau	7111	77001	365, 681
Eddy	Gary			Auke Bay	AK	99821	303,001
Edwardson	Robert	Regional Land Manager	DNR, DMLW	Juneau	AK	99811- 1020	
Egan	Dennis	Senator	AK Legislature			1020	365, 373
Egan Lagerquist	Lisa	Schutor	7 HC Degistature	Juneau	AK	99824	303, 373
Eisele	Shawn			Juneau	AK	99801	86, 116
Elfers	Brad	Owner	Alaska Fly Fishing Goods	Juneau	AK	33801	
Eller	Andrew			Juneau	AK	99801	50, 197, 208, 380, 483
Ely	Thom			Haines	AK	99827	86, 116, 308, 392, 424, 452, 571
Erickson	Gregg	Editor-at-large	Erickson & Associates, Economic Consultants	Bend	OR	99701	313, 415, 528, 529
Erickson	Jim			Hoonah	AK		350
Estes	James				AK	99824	
Etheridge	Don			Juneau	AK	99801	
Evoy	Heather			Ketchikan	AK	99901	
Ewald	Ken			Haines	AK	99827	
Fabrello	Dan			Juneau	AK	99801	
Fagan	Helena			Juneau	AK	99802	
Falk	Mitch		Bullwinkles Pizza	Juneau	AK	99801	
Ferguson	Harry	<u> </u>		Anchorage	AK	99508	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Ferry	Emily			Juneau	AK		230
Fiehler	Vern			Auke Bay	AK	99821	365, 366
Fink	Bob			Skagway	AK	99840	249
Finlay	Bill			Haines	AK	99827	
Fisher	George			Juneau	AK	99801	
Fleek	CJ						
Fleek	Clayton						
Fleek	Sandra						
Fletcher	Nancy			Auke Bay	AK	99821	
Fletcher	Robert			Auke Bay	AK	99821	229
Flint	Julie			Juneau	AK	99801	
Flint	Ron			Juneau	AK	99801	
Fluetsch	Bradley		Alaska Native Brotherhood Grand Camp	Juneau	AK	99801	
Ford	Henry			Juneau	AK	99801	211, 229, 37, 551, 570
Ford	Rachel			Skagway	AK	99840	67, 116, 453, 474
Forsling	Peter			Juneau	AK		
Forsling	Suzanne			Juneau	AK	99801	
Forst	Eric		Red Dog Saloon	Juneau	AK	99801	
Forster	Eric			haines	AK	99827	
Fournier	Gary						230
Francis	Robert						
Frawley	Nancy			Juneau	AK	99801	
Fredenberg	Virgil			Juneau	AK	99801	559
Fredrick	Paul			Juneau	AK	99801	
Frick	Clay			Juneau	AK		230, 66
Fuller	Anne			Juneau	AK	99801	19, 47, 55, 57, 69, 84, 99, 116, 128, 130, 135, 136, 137, 144, 158, 231, 238, 251, 252, 258, 326, 451, 452, 482, 483, 499, 684, 688
Furbish	C. E.			Skagway	AK	99840	66
Furuness	Mary			Juneau	AK		
G	J			1		00000	100
Gabier	Barbara			Juneau	AK	99801	383
Gabier	Welles			Juneau	AK	99801	
Gabriele	Chris			Gustavus	AK	99826	1.50
Gaffaney	Lawrence			Juneau	AK	99801	559
Gard	Richard			Juneau	AK	99801	42, 66
Garland	Gerard			Haines	AK		128, 2, 230, 78
Garmer	Gregory and Mary			Duluth	MN	55812	
Garza	Jodi			Juneau	AK		
Gauthier	Rodney			Juneau	AK		
Geary	Jonathan			Juneau	AK	99801	
Gehring	Loren		Chilkat Engineering	Auke Bay	AK	99821	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Geib	Tim A.			Juneau	AK	99801	
Geiger	Hal			Juneau	AK	99801	
Geise	Lance			Haines	AK	99827	
Geise	Larry			Haines	AK	99827	
Geise	Linda			Haines	AK	99827	
George	Marquam			Juneau	AK	99801	374
Gerke	Brandee			Juneau	AK		598
Gharrett	Jessica			Auke Bay	AK	99821	79, 116, 231, 392, 451, 452
Gibson	Timothy (Tim)			Juneau	AK	99801	
Gilbert	April			Juneau	AK	99801	
Gilbert	Bradley			Juneau	AK	99801	
Gill	Sharon			Juneau	AK	99803	230, 421
Gimarc	Alex			Anchorage	AK		,
Gitkov	John			Juneau	AK	99801	365
Glover	Kate			Juneau	AK	99802	230, 258, 533
Gloviak	Philip			Joliet	IL	60433	
Godkin	Victoria	1	1	Douglas	AK	99801	†
Goldberg	Rob			Haines	AK		1, 5, 19, 116, 163, 229, 258, 383, 541, 630
Goll	Sherrie			Haines	AK	99827	
Gooch	Georgiana			Palmer	AK	99645	
Good	Clay			Juneau	AK	99801	116, 229, 230, 231, 284, 404, 534
Gould	Carolyn			Douglas	AK	99824	
Gould	Glenn						534
Gray	Carol			Juneau	AK	99801	42
Gray	Jonathan			Juneau	AK	99801	66, 192
Gray	Philip			Juneau	AK	99801	42
Green	Harry			Juneau	AK	99801	
Green	Jim			Haines	AK	99827	78, 614
Greenbank	Brenda			Juneau	AK	99801	
Greene	Jonathan			Haines	AK		192
Gregg	Tresham			Haines	AK	99827	
Gregson	Jack			Juneau	AK	99802	366
Gress	David						
Gress	Kristeen			Juneau	AK	99801	
Grieser	Angela			Skagway	AK	99840	
Griffard	Donna			<u> </u>	AK		
Griggs	Mary Frances			Juneau	AK	99803	
Griggs	Robert			Juneau	AK	99801	
Grimm	Robert	Chief Executive Officer	Alaska Power Company	Port Townsend	WA	98368	2, 46, 451
Grossman	Ed						
Gruening	Win			Juneau	AK	99801	
Gruhl	Wade			Skagway	AK	99840	66, 67, 116, 229, 258, 261, 416, 452, 476, 527, 539

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Gundersen	Justin			Juneau	AK	99801	
Gutleben	Philip			Juneau	AK	99801	67, 116, 264, 630, 634
Haas	Dave			Juneau	AK	99801	
Haave	Robert			Anchorage	AK	99508	
Hackbarth	Chris						308, 541
Hagen	John			Haines	AK	99827	211, 499, 525
Hagevig	Rosemary		First Things First	Douglas	AK	99824	
Haight	Russell			Juneau	AK	99801	249, 365, 374
Haight	Suzanne						
Hall Jacobson	Judy			Haines	AK	99827	116
Hamre	David			Anchorage	AK	99511	13, 2, 615, 7
Hanson	Gary			Skagway	AK	99840	251, 345, 436, 474
Harbanuk	Toby			Juneau	AK	99801	451
Harder	Kristine			Haines	AK	99827	
Harmon	Kayla			Juneau	AK	99801	
Harris	Dennis			Juneau	AK	99801	
Harris	Holly		Earthjustice	Juneau	AK	99801	288
Harris	John			Skagway	AK	99840	
Harris	Sandra			Juneau	AK	99801	
Harrison	Gordon				AK	99801	
Harrison	Tamar			Skagway	AK		1, 66, 86
Harrison-Ganberg	Carolyn			Skagway	AK	99840	116, 521
Harrop	Winona			Haines	AK	99827	383 47, 55, 66,
Hart	Karla			Juneau	AK		74, 99, 111, 116, 144, 186, 192, 229, 230, 238, 249, 251, 252, 258, 264, 279, 313, 340, 499, 508, 511, 518, 527, 533, 619, 620
Hart	Kriss			Juneau	AK	99803	474, 570
Harvey	Doug			Juneau	AK	99801	
Harvey	Joan			Juneau	AK	99801	66.220
Hassakamp	Anne Marie			Skagway	AK	99840	66, 229, 258, 279, 383, 450, 474, 514, 521
Hatch	Blain			Juneau	AK	99801	
Hathhorn	Kristin			Haines	AK		84, 229
Hauck	Judith				AK	99801	86, 238
Haven	Heather				AK	99803	13, 59, 178, 186, 511, 546, 547, 571
Haynes	Misty			Juneau	AK	99801	
Hays	Edward			Haines	AK	99827	

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Haywood	Beverly			Douglas	AK	99824	
Heacox	Melanie			Gustavus	AZ	99826	
Heckler	Chris			Juneau	AK	99801	
Hegg	Vivian			Juneau	AK	99801	285, 494
Hekkers	Mike				AK	99801	
Held	Randy			Juneau	AK	99801	
Hennon	Susan			Juneau	AK	99801	
Henricksen	Hans			Skagway	AK	99840	
Henricksen	Kayla			Skagway	AK	99840	
Henricksen	Rhonda			Skagway	AK	99840	1
Henricksen	Thor			Skagway	AK	77010	366
Herren	Cristi			Juneau	AK	99801	116, 230, 345, 380, 642
Heueisen	Joe			Juneau	AK	99801	
Heywood	Elizabeth			Haines	AK	99827	291
Heywood	Erin			Juneau	AK	99803	
Heywood	Thomas		The Babbling Book	Haines	AK	99827	86, 126, 238, 424, 440, 474, 571
Highsmith	Don			Haines	AK	99827	
Hildebrand	Alex			Juneau	AK	99801	
Hill	Jan	Mayor	Haines Borough	Haines	AK	99827	116, 229, 514, 527
Hill	Vernon			Hoonah	AK	99829	
Hinman	Michael			Juneau	AK	99801	116, 261
Hirsh	Jon				AK	99827	
Hoagland	Ryan			Juneau	AK	99801	
Hodges	John			Juneau	AK	99801	
Hoke	Alexander			Juneau	AK	99801	258, 279, 421, 542
Hollander	Lisa			Skagway	AK	99840	.21, 0 .2
Holle	Eric		LCC				2, 7, 13, 14, 19, 37, 47, 64, 67, 78, 116, 121, 159, 163, 183, 222, 229, 231, 238, 251, 252, 258, 279, 296, 308, 313, 315, 322, 325, 329, 330, 345, 348, 364, 380, 383, 39, 410, 421, 424, 452, 474, 518, 527, 533, 539, 562, 570, 593, 598, 604, 660,
Holmes Holmes	J.L. Kathryn			Haines Haines	AK AK	99827 99827	688

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Holmes	Ramona			Haines	AK	99827	
Holst	Carroll			Juneau	AK	99801	
Holzman	Allen			Juneau	AK		1, 2, 7, 84, 161, 230, 452
Home	Scott			Skagway	AK		161
Hood	Dixie			Juneau	AK	99801	86, 225, 383, 552
Hooton	Larry		SEAHOOK LLC	Juneau	AK	99803	
Hoover	Carl						
Hoover	Darlene						
Hoover	Darrell						
Hoover	Kareen						
Horner	Leigh			Haines	AK	99827	258
Hosey	Laura			Juneau	AK	99801	
Hosford	Fred			Skagway	AK	99840	
Hosford	Kathy		Chilkoot Trail Outpost	Skagway	AK	99840	
Hotch	Edward						2, 126
Hotch	Joe						42, 270
Housley	Karen				AK	99821	116
Howell	Don			Auke Bay	AK	99821	110
Huberth	Pete		Forest Industry Consulting	Juneau	AK	99801- 9431	366, 383
Hudson	Dale		Comparing	Juneau	AK	99801	
Hudson	John			Juneau	AK	99801	
Huebschen	Greg			Janeau	7111	77001	288
Hulk	Douglas						200
Hulk	Joan						
Hulse	Lauren			Juneau	AK	99802	116
Hunsaker	Dave			Juneau	AK	99801	116
Hunter	Joshua			Skagway	AK	99840	66, 229, 258, 279, 383, 450, 474, 514, 521
Hurlbut	Dave			Juneau	AK		
Huse	Kelley			Juneau	AK	99801	
Iannolino	Ric		Convergence Consulting	Juneau	AK	99801	
Iden	Tanya						
Ingledue	Don			Juneau	AK	99801	
Ingledue	Pat			Juneau	AK	99801	
Jackson	Ron			Haines	AK	99827	66, 192, 258, 326, 359, 527
Jacobs	Bob						
Jacobs	Bonnie						
Jacobson	Terry			Haines	AK	99827	230
Jaklitsch	Steve			Skagway	AK		
Jebe	Cheryl			Juneau	AK	99801	
Jenkins	Gary			Auke Bay	AK	99821	
Jensen	Carol			Anchorage	AK	99516	
Jensen	Maressa		MJensenWriting	Juneau	AK	99801	186, 392
Jensen	Robert			Haines	AK	99827	
Jensen	Wayne	Chair	Alaska Committee	Juneau	AK	99802	559
Job	David			Juneau	AK		19, 238, 452
		1	1	,			,,

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Johnson	Erik			Juneau	AK	99801	
Johnson	Erik			Palmer	AK	99645	
Johnson	Florence						
Johnson	Ginger			Juneau	AK	99802	
Johnson	Linda			Douglas	AK	99824	260, 511
Johnson	Lindsay			Haines	AK	99827	
Johnson	Mark		Sierra Club	Ketchikan	AK	99901	
Johnson	Nicolae			Juneau	AK	99801	
Johnson	Philip	Regional Environmental Officer - Alaska	DOI Office of the Secretary, Office of Environmental Policy and Compliance	Anchorage	AK	99501	
Johnson	Robert			Douglas	AK	99824	
Joiner	Bill		Joiner Engieering LLC	Skagway	AK	99840	600
Jones	Cliff			Juneau	AK	99801	
Jones	Jesse			Juneau	AK	99801	
Jones	LaRae			Douglas	AK	99824	
Jones	Richard			Juneau	AK	99801	
Jones	Stan			Juneau	AK	99801	
Jones	Stefanie			Juneau	AK	99801	
Jordan	Sam			Juneau	AK	99802	440
Josephson	Brenda			Haines	AK	99827	
Judson	Albert			Juneau	AK	99801	230, 287, 388, 511, 534, 560
Juneau Commission on Aging			Juneau Commission on Aging				86, 383, 552
Jurgeleit	Alec			Anchorage	AK	99507	
Jurgeleit	Anna			Haines	AK	99827	
Jurgeleit	Elizabeth			Haines	AK	99827	
Jurgeleit	Jim			Haines	AK	99827	67, 229, 383
Kadrlik	Francis		Adventures Afloat	Juneau	AK	99801	
Kadrlik	Linda		Adventures Afloat	Juneau	AK	99801	
Kaelke	Michelle			Juneau	AK	99801	2, 230
Kallenberger	Martina						
Kane	Emily			Juneau	AK	99801	258, 451
Kanne	Kaye			Juneau	AK	99802	
Kasberg	Jane		Kasberg Appraisal Services	Juneau	AK	99803	
Kasberg	Mark			Juneau	AK	99801	
Katzeek	Janice			Haines	AK	99827	
Kearney	John			Juneau	AK	99801	
Kelly	Laura			Juneau	AK	99801	
Kemp	Angie				AK	99801	
Kent	Chris		Douglas Island Lodge	Girdwood	AK	99587	230, 258
Kent	Shannon		Louge	Juneau	AK		
Kermoian	Patricia			Janoau	1111		66
Kerr	David			Juneau	AK	99801	100
Kesey	Brent		1	Juneau	AK	77001	+
Kesey	Teresa		1	Juneau	AK		+
Keso	Helene		1		AK	99801	+
Kiehl	_			Juneau	AK	770UI	66 452 511
KICHI	Jesse				1		66, 452, 511

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Kirchhoff	Mark			Juneau	AK	99801	
Kirkpatrick	Ben			Haines	AK		258
Kirtley	Ryan			Juneau	AK	99801	
Kistler	Mark			Haines	AK		13, 19, 116
Klein	Dave			Juneau	AK	99801	
Knapp	Dick			Juneau	AK		
Knight	Rebecca			Petersburg	AK	99833	
Knudsen	Jamie						
Kocsis	Stephen			Juneau	AK	99801	
Koelsch	Karter			Juneau	AK	99801	
Koelsch	Ken			Juneau	AK	99801	
Koken	Fred			Juneau	AK	99803	
Kookesh	Jackie			Juneau	AK	99802	
Korhonen-Penn	Iris			Juneau	AK	Juneau	
Korsmo	Mike			Skagway	AK		116, 230, 477
Korsmo	Paul			Skagway	AK	99840	86, 116, 279, 477,
					A 17	00040	533
Kramer	Abby			Skagway	AK	99840	116
Kramer	Lisa			Juneau	AK	99801	250 156
Kramers Krein	John Alison		University of	Juneau Juneau	AK AK	99801	258, 476
			Alaska Southeast	_		22224	
Kreinheder	Jack			Juneau	AK	99801	
Krenz	Chris			Juneau	AK	20604	2, 230
Kriemelmeyer	Mildred			Waldorf	MD	20601	
Kromarek	Dan						
Kruger	Linda			Juneau	AK	99803	230
Kussart	Don			Juneau	AK	99801	
Kussart	Janet			Juneau	AK		66, 474
La Course	Diane			Haines	AK	99827	258, 345, 562
Lakip	Dan						
Lamb	John			Juneau	AK	99801	681
Lambrecht	Diana			juneau	AK	99801	
Lamken	Nola			Skagway	AK	99840	222, 230, 238, 252, 365, 453, 494, 524, 541
Landis	Christopher			Auke Bay	AK	99821	
Landry	Jen			Gustavus	AK	99826	
Langlois	James			Juneau	AK	99801	
LaPenter	Bridget			Juneau	AK	99802	19, 116, 230
Laperriere	Zach			Sitka	AK	99835	
Lapp	Kelly						
Lapp	Jerry						
Larsen	Mark			Skagway	AK		67, 116, 222, 230
Lasinski	Ferdinand		Alaska Adjustment Bureau LLC	Juneau	AK	99803	230
Laughlin	Nora			Juneau	AK	99802	116, 229, 542
Lavoie	Elizabeth			Skagway	AK	1	1

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Lavoie	Roland			Hood River	OR	97031	66, 72, 116, 183, 229, 230, 238, 252, 258, 260, 311, 313, 322, 427, 429, 476, 533, 536, 540, 638
Leban	Elizabeth						
Leder	Gary			Juneau	AK	99801	
Leder	Juli			Juneau	AK	99801	
Lee	Mindy						453
Lee	Richard			Juneau	AK	99803	
Lee	Tyson			Juneau	AK	99801	
Leibowitz	Beth			Juneau	AK	99802	252
Leighty	Bill	Director	The Leighty Foundation	Juneau	AK	99802	182, 186, 204, 230, 258, 282, 36, 425, 534, 66
Lende	Heather		Lutak Lumber & Supply	Haines	AK	99827	
Levine	Joyce			Juneau	AK	99802	66, 222, 229
Lew	Shawn		Catholic Diocese of Juneau	Juneau	AK	99803	
Lew	Vincent		Catholic Diocese of Juneau	Juneau	AK	99803	
Lewis	Tania			Gustavus	AK	99826	
Lewis	David			Juneau	AK	99801	366, 383
Lieb	Brian			Juneau	AK		
Lindekugel	Buck		SEACC	Juneau	AK	99801	2, 5, 7, 13, 26, 66, 84, 86, 116, 126, 158, 192, 229, 230, 258, 264, 282, 313, 317, 330, 348, 421, 450, 452, 474, 479, 491, 511, 514, 521, 539, 559, 598, 681, 682, 688
Locher	Tom			Juneau	AK	99801	368, 567
Lochman	Kathy			Gustavus	AK	99826	
Loesch	Ron			Petersburg	AK	99833	
Loney	Andrew]	
Loney	Jonathan			Juneau	AK	99801	
Long	Dave		Haines Real Estate	Haines	AK		383
Longenbaugh	Dee		The Observatory Book and Map Shop	Juneau	AK	99801	
				Juneau	AK	99801	230

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Lott	Joann			Juneau	AK	99801	116, 231, 452
Love	Jason		Alaskan Fudge Company of Skagway	Juneau	AK	99801	
Lowden	Merrill			Haines	AK	99827	1, 66, 116, 230, 308, 562
Lowry	David						
Lubin	David			Sitka	AK	99835	
Ludwigsen	Don			Klawock	AK	99925	
Luedke	Trevor			Juneau	AK	99801	183, 452, 453, 688
MacKinnon	John	Executive Director	Associated General Contractors of Alaska	Anchorage	AK	99518	
MacKinnon	Margaret			Juneau	AK	99803	
MacKinnon	Neil			Juneau	AK	99801	571
Macnak	Judith			Juneau	AK		284
Magee	Kelly						
Magnuson	Aaron			Juneau	AK	99803	
Magnuson	Carmen			Juneau	AK	99803	
Maier	Judith			Juneau	AK	99801	
Maki	Edward			Juneau	AK	99801	
Malecha	Patrick			Juneau	AK	99801	
Malseed	Caroline			Juneau	AK	99801	559, 79
Mandeville	Ryan			Skagway	AK	99840	230, 279
Marcey	Jim			Juneau	AK		
Marks	Michael			Haines	AK	99827	
Marquardt	James			Juneau	AK	99803	350
Marshall	Deborah						
Marshall	John			Juneau	AK	99801	366
Martin	Daniel			Tenakee Springs	AK	99841	66
Martin	Josh			Juneau	AK		250
Martin	Vern			Douglas	AK	99824	249
Marx	Elmer			Juneau	AK		
Masonick	Mary Alice			Elgin	IL	60124	
Masonick	Joe			Elgin	IL	60124	67, 84, 116,
Mastrella	Laurie			Haines	AK		230, 452, 474
Mattson	Margaret			Juneau	AK	99801	
Mauldin	Red			Skagway	AK		284
May	Kent			Girdwood	AK	99587	
Mayer	Diane			Juneau	AK		116, 258
Mayer	Tom			Juneau	AK	99801	
McBride	Jenny			Juneau	AK	99801	177, 552
McCabe	Tomson			Juneau	AK	99802	
McCarthy	Kathrin						
McCarthy	Paul			Juneau	AK	99801	
McConahey	Nell			Juneau	AK	99801	
McConnochie	PeggyAnn			Juneau	AK	99801	
McCord	William			Haines	AK	99827	60, 116, 167, 251, 288, 260, 416, 634
McCrummen	Hugh			Juneau	AK	99801	-,
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McDonough	Betty			Juneau	AK	99801	19, 116, 230, 451
McDowell	Mary			Angoon	AK	99820	
McGee	Suzanne			Juneau	AK	99801	
McGill	Becky		Beyond Skagway Tours	Skagway	AK	99840	
McKenry, Sr	Charles			Juneau	AK	99801	
McKibben	Whitney			Juneau	AK	99801	
McKnight	James			Juneau	AK	99801	
McKrill	Edward			Juneau	AK	99801	
McLaughlin	Margaret			Haines	AK	99827	
McLaughlin	Sean			Haines	AK	99827	
McLear	Pat			Juneau	AK		
McNaughton	Ken						
McRea	Mike			Juneau	AR	99803	
McVey	Luann			Douglas	AK	99824	116, 230, 260, 282, 284
Mead	Travis			Juneau	AK	99801	558
Medina	Jerry			Auke Bay	AK	99821	
Medlin	Jessica			Skagway	AK	99840	2
Menke	Kathleen			Haines	AK	99837	66, 229, 383
Menzies	Elaine			Juneau	AK		
Menzies	Malcolm			Juneau	AK	99801	
Merrell	Lucy						231, 249, 452
Mertz	Douglas			Juneau	AK		231
Messerschmidt	Jamie		University of Alaska Southeast	Juneau	AK	99801	
Messerschmidt	Lisa			Juneau	AK	99801	
Messerschmidt	Steven		Aurora Chiropractic Center	Juneau	AK	99801	
Messing	Martin						
Metcalf	Frank			Juneau	AK	99803	
Metcalf	K. James			Juneau	AK	99802	66, 89, 229
Metcalf	Rick			Auke Bay	AK	99821	
Meyer	John			ĺ			
Millea	Esther			Juneau	AK	99801	
Miller	Christopher			Juneau	AK	99801	2, 258, 523
Miller	Freda			Juneau	AK	99801	
Miller	Gary	1		Juneau	AK	99801	366
Miller	Jacob			Juneau	AK	99802	300
Miller	K			Juneau	AK	99891	
Miller	Kathlee			Juneau	AK	99801	392, 452
Miller	Linda			Juneau	AK	99801	116, 230
Miller	Marja	+		Juneau	AIX	77001	110, 230
		+		+	+		+
Miller	Marc			Tumos:-	A IZ	99801	388
Miller	Mark			Juneau	AK	99801	
Miller	Mike			Juneau	AK		86, 163, 189, 230, 541
Miller	Rosa		Auk Kwan	Juneau	AK	99801	277, 282
Miller	Timothy		Miller Construction Co., Ltd	Juneau	AK	99803	<i>y</i>
Mitchell	Duff	VP and Business Manager	Juneau Hydropower, Inc.	Juneau	AK	99801	2, 46, 192, 451

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Mitchell	Grey						
Mjos	Brita			Anchorage	AK	99508	84
Moleski	Christine			Juneau	AK	99803	
Monagle	Kari						
Monagle	Pat						
Moniak	Richard			Juneau	AK	99801	79, 116, 238, 258, 295, 383, 474, 555, 598, 686
Moore	Allyn		Cemerlang Financial Services LLC	Juneau	AK	99801	
Moore	Martha			Juneau	AK	99801	116, 201
Moran	John			Juneau	AK	99801	365
Morehouse	Keston			Juneau	AK	99801	
Morehouse	Megan			Haines	AK	99827	
Morgenthaler	Rob			Juneau	AK	99801	282
Morphet	Thomas		Chilkat Valley News	Haines	AK	99827	514, 541
Morrell	Doy Michelle			Juneau	AK	99801	
Morris	Mark			Juneau	AK	99801	
Morris	Tammy			Juneau	AK	99801	
Moseley	Carolyn			Haines	AK	99827	66, 78
Motyka	Roman			Juneau	AK	99801	1, 2, 5, 7, 13, 14, 19, 66, 116, 161, 178, 229, 238, 258, 261, 280, 479, 491, 644
Mountain Market		The	Mountain	Haines	AK		
and Cafe		Management	Corporation	Tranics	AK		
Mulford	Barbara			Haines	AK	99827- 1122	
Muller	Conrad			Juneau	AK	99801	
Mulligan	Mathew			Douglas	AK	99824	78, 229, 388, 452
Munoz	Cathy	State Representative, District 31	State	Juneau	AK	99801	
Murphy	Laura			Haines	AK	99827	
Murray	Lorraine						222, 452, 453
Museth	Melissa			Juneau	AK	99801	116, 451, 452
Nankervis	Jerry			Juneau	AK		
Nason	Sherry			Haines	AK	99827	116
Nave	Tom						
Neary	Iris			Juneau	AK	99801	
Neary	John			Juneau	AK		453, 687
Nelson	Andrea			Haines	AK	99827	89, 547
Nelson	Eric				1		
Nelson	Gretchen			Anchorage	AK	99508	
Nelson	Paul			Haines	AK	99827	
Nelson	Pete		Harv's Tiny Cabins	Auke Bay	AK	99821	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Neyhart	Julie			Juneau	AK	99801	
Neyhart	Peter			Juneau	AK	99801	
Niemi	Martin & Christine			Douglas	AK	99824	301
Nigro	Jorden			Juneau	AK	99801	66, 86, 116
Noble	Steve			Anchorage	AK	99516	
Nord	Elfrida			Juneau	AK		116.266
Norheim	Kraig			Petersburg	AK	99833	116, 366, 383
Norton	John			Haines	AK	99827	67
Nowak	John			Haines	AK	99827	67, 116, 137, 424, 452, 474, 598
Nowak	Lynn			Haines	AK	99827	67, 116, 137, 424, 452, 474, 598
Nydam	Barry			Juneau	AK	99801	452
Nye	Marcia			Juneau	AK	99801	
Obrien, Jr.	John and Audrey			Juneau	AK	99803	
O'Daniel	John						250, 366, 526
O'Donnell	Shawn			Anchorage	AK	99504	
O'Keefe	Joan						230, 238
Olsen	Karen			Juneau	AK	99801	
Olson	Paul	President	Greater Southeast Alaska Conservation Community	Sitka	AK	99835	7, 19, 24, 55, 84, 116, 121, 124, 126, 176, 177, 229, 238, 251, 258, 284, 322, 405, 415, 440, 453, 515, 533, 541, 633, 688
Olsson	Trever			Haines	AK		
O'Malley	Joseph			Juneau	AK	99802	
O'Riley	Brian			Haines	AK	99827	5, 159, 231, 383
Orlando	Joseph			Haines	AK		
OS	K			Juneau	AK	99801	
Osborn	Marjorie			Auke Bay	AK	99821	1, 86, 126, 231, 238, 260, 541
Osborne	Arthur			Juneau	AK	99801	
Osborne	John			Juneau	AK	99801	
Osborne	Linnea			Juneau	AK	99801	450
Owens	Shelley			Juneau	AK	99801	452
Palmateer Palmersten	Brian Sam			Juneau Skagway	AK AK	99801	116, 258,
						00040	452
Papke Pappas	Daniel Angie			Skagway Haines	AK AK	99840 99827	116, 521 238, 284,
Pardee	_			Haines	AK	77021	440
raiuce	Terrance			патпеѕ	AK	1	<u> </u>

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Parker	Geoffrey	Attorney at Law	SMAC	Anchorage	AK	99502	317, 318, 421
Parker	Lee			Juneau	AK	99801	116, 231
Parks	David			Haines	AK	99827	424, 511
Pascoe	Jane		Chilkat Valley News	Haines	AK	99827	1, 308
Patterson	Mark S.			Juneau	AK	99801	
Patterson	Susan			Juneau	AK	99801	
Paul	Thomas			Juneau	AK	99801	230, 258
Paulick	William		Juneau Brass & Winds	Juneau	AK	99801	458
Pavitt	Ellen			Juneau	AK	99801	
Penisten	Edmund			Juneau	AK	99801- 1012	373
Perkins	Rick			Juneau	AK	99801	
Peters	Kaye			Juneau	AK	99801	
Peterson	Christopher			Juneau	AK	99801	
Phillips	Don			Haines	AK	99827	
Phillips	Richard			Haines	AK	99826	
Pillifant	Frankie			Juneau	AK	99801	
Plosay	Jim			Juneau	AK	99803- 2871	
Plucker	Robert			Haines	AK		
Pohl	Catherine			Juneau	AK	99802	84, 86, 501, 534
Poinsette	Derek			Haines	AK	99827	84, 159, 383
Pointer	Maria			Haines	AK		78, 554
Poor	George		Capital City Fire Rescue (CCFR)	Juneau	AK	99803	407, 604
Power	Byrne			Haines	AK	99827	
Quirk	William						290
Rabung	Sam			Juneau	AK	99801	116
Rafferty	Carrol						
Rafferty	Joe			Juneau	AK		
Ramonda	Marc			Douglas	AK	99824	36, 231
Ramsey	Scott			Haines	AK		86, 116, 598
Randall	Sueann			Juneau	AK		
Rasmussen	Phyllis			Juneau	AK	99801	287
Reichert	Paul			Skagway	AK	99840	
Reid	Dale			Juneau	AK	99803	
Reiswig	Jon	Doctor	Salmon Creek Medical Clinic &	Juneau	AK	99801	
		200101	Osteoporosis Imaging	Juneau			
Rhea	Kathleen			Juneau	AK	99801	230
Richard	Ryan			Delta Junction	AK	99737	
Richardson	Jonathan			Haines	AK	99827	
Richert	Samantha			Skagway	AK	99840	116
Ricker	Michael			Juneau	AK	99801	
Rider	Brad			Gustavus	AK	99826	
Riederer	Jean						
Riederer	Mark			Juneau	AK	99801	
Ringer	Ramona			Juneau	AK	99801	
Risley	Al			Juneau	AK	99801	
Robert	Blessy			Juneau	AK	99801	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
D 1:1 1	77 . 1.						66, 116,
Robichaud	Heidi						229, 258, 416
Rodgveller	Cara			Juneau	AK		110
Roemmich	Cathie			Juneau	AK	99801	
Rogers	Jim			Juneau	AK	99801	451, 499
Rogers	Marie			Juneau	AK	99801	451, 499
Rorick	Mark	Chair	TGSC	Juneau	AK	99801	29, 37, 38, 63, 66, 79, 86, 116, 159, 208, 222, 229, 230, 231, 251, 258, 260, 279, 313, 348, 350, 383, 388, 404, 421, 452, 496, 511, 527, 541, 627, 654, 682
Rorick	Patricia	Treasurer	TGSC	Juneau	AK	99801	29, 37, 38, 63, 66, 79, 86, 116, 159, 208, 222, 229, 230, 231, 251, 258, 260, 279, 313, 348, 350, 383, 388, 404, 421, 452, 496, 511, 527, 541, 627, 654, 682
Rose	Leigh Ann	Retirement & Benefits Technician II	Department of Administration	Juneau	AK	99811	
Rosen	Ira			Juneau	AK	99801	1, 116, 238, 258, 440, 452
Rosenberger	Gary		Foodland Inc.	Juneau	AK	99801	
Ross	Theresa			Juneau	AK	99801	
Rountree	Richard		1	Juneau	AK	99803	1
Rountree	Sheryl		1	Juneau	AK	99803	
Roust	Chris		1	Juneau	AK	99801	ļ
Roxburgh	John		1	-	1	0000:	ļ
Roys	Robert			Juneau	AK	99801	
Rue	Sally and Frank			Juneau	AK	99801- 7924	86, 116
Ruedrich	Randy						
Rulle	Gail			Milwaukee	WI		230
Rupprecht	Kortney			Skagway	AK	99840	
Russo	Ken			Skagway	AK		284
Sage	Phyllis			Haines	AK	99827	514
Sager	Denise	1		Skagway	AK	1	1

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Sager	Jim			Skagway	AK		229
Sahl	Keith			Juneau	AK	99802	
Sandor	John						
Sanford	Merrill			Juneau	AK	99801	
Sanford	Patricia			Juneau	AK	99801	
Sanford	Ralph			Juneau	AK	99801	366
Sanvik	Douglas			Juneau	AK	99802	116
Sauer	Jeff			Juneau	AK		313
Sauerteig	Robert			Juneau	AK	99801	
Saunders	Sarah		AkPIRG	Anchorage	AK	99501	7, 24, 25, 27, 37, 42, 59, 61, 63, 64, 65, 69, 72, 84, 99, 116, 150, 161, 168, 192, 229, 258, 279, 313, 322, 330, 345, 348, 350, 388, 425, 476, 491, 496, 533, 539, 544, 545, 570, 627, 645, 682, 683
Savell	Samia			Juneau	AK	99801	229
Schaefer	Mark	Mayor	Municipality of Skagway	Skagway	AK	<i>yy</i> 001	78, 79, 86, 116, 229, 230, 279, 474
Schalkowski	Jessica			Juneau	AK	99801	
Schanz Messing	Kathleen			Juneau	AK	99801	
Schapp	Christopher			Juneau	AK	99801	
Schelle	Kurt			Auke Bay	AZ	99821- 0364	
Schmiege	Bret			Juneau	AK	99801	
Schmitz	Fred			Juneau	AK	99801	
Schnabel	Debra			Haines	AK		494
Schnabel	Erma			Haines	AK	99827	
Schnabel	John			Haines	AK	99827	
Schnabel	Roger			Haines	AK	99827	
Schonenbach	Ron			Juneau	AK	99801	13, 284, 421, 541
Schrader	Carl						258
Schultz	Charles			Juneau	AK	99801	
Schultz	Dan			Haines	AK		1, 66, 116, 230, 258, 284
Schultz	Donna			Juneau	AK	99801	229, 474
Schultz	Janice			Juneau	AK	99801	227, 171
Schultz	Kristen			Juneau	AK	77001	
Schultz	Larry			Juneau	AK	99801	+
Schultz	Mark		Larry's Quality Heating & Plumbing	Juneau	AK	99801	
Schultz	Nicki		Ĭ	Juneau	AK	99801	
Schwartz	Thomas			Juneau	AK	99801	116, 266

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Schwoerer	Tobias			Anchorage	AK	99507	230
Scime	Tami			Skagway	AK	99840	
Scott	David			Auke Bay	AK	99821	
Scovill	Teena						
Selby	Dena						
Sewall	Fletcher			Juneau	AK	99801	
Shattuck	Allen						
Shattuck	Rick			Juneau	AK	99801	
Shaw	Brandon			Juneau	AK	99803	
Shaw	Albert			Juneau	AK	99801	
Shaw	Michael			Juneau	AK	99801	
Shaw	Mindy			Juneau	AK	99801	
Shedd	John				AK	99824	116, 231
Sheldon	Burl			Haines	AK	99827	84, 116, 380, 533
Sica	Laurie			Juneau	AK	99802	
Sidney	James			Juneau	AK	99801	
Sidney	Jeremy		BIG Repairs	Juneau	AK	99801	
Sidney	JoAnn		Swampy Acres	Juneau	AK	99801	559
Silk	Robin		1,7	Juneau	AK	99801	
Simmons	Cathy			Juneau	AK		
Simonson	Angela				AK	99801	
Simpson	Paulette			Douglas	AK	99824	
Sivertsen	Rick			Juneau	AK	99803	392, 453
Slater	Adrian			Juneau	AK	99801	3,2, 133
Slater	Sally			Juneau	AK	99801	
Slotuick	Kate			Juneau	AK	99801	116
Smetzer	Jerry			Juneau	AK	77001	365, 383
Smith	Allison			Juneau	AK	99801	230
Smith	Audrey			Haines	AK	99827	230
Smith	Beth			Skagway	AK	77021	
Smith	Carlton		The Carlton Smith Company	Juneau	AK	99801	94, 511
Smith	Carole		Sinti Company	Juneau	AK	99803	
Smith	Charlie			Juneau	AK	77003	
Smith	Graham		Priority Healthcare, LLC	Juneau	7111		
Smith	Jack		Whiterock Nursery	Haines	AK	99827	
Smith	Jeff		1	Anchorage	AK		
Smith	Joseph			Juneau	AK	99803	
Smith	Joyce			Juneau	AK	99801	
Smith	Lawren			Juneau	AK	99803	
Smith	Mary			Juneau	AK	99801	
Smith	Paula			Juneau	AK	1	
Smith	Phyllis			juneau	AK	99801	
Smith	Roger			Juneau	AK	99801	
Smith	Sam			Juneau	AK	99801	
Smith	Stephen			Haines	AK		189, 326
Smith	Todd			Juneau	AK	99803	105, 520
Smith	Wayne		WS Trucking and Excavation LLC	Juneau	AK	99803	
	William		LACUTURE LLC	Juneau	AK	99801	
Solberg	** 1111G111			Juneau	AK	99801	89
Solberg Sonin	Iohn			Juneau	4 3.13	1 //001	07
Sonin	John Boh				ΔK	99801	
Sonin Spath	Bob			Juneau	AK AK	99801	
Sonin Spath Spengler	Bob Larri			Juneau Juneau	AK	99801	
Sonin Spath	Bob			Juneau			

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
St. Clair	Gina			Haines	AK	99827	19, 116, 452, 514
Stansbury	Colleen			Gustavus	AK	99826	230
Staska	Connie			Haines	AK	99827	86
Staska	Ray			Haines	AK	99827	86
Stats	Laura			Juneau	AK	99801	116, 183, 230
Steele	Laura						230
Steele	Richard			Douglas	AK	99824	282
Steinman	Scott			Juneau	AK	99801	251
Stell	Roberta						229, 230, 313, 533, 665
Stephens	Emily			Haines	AK	998272	37, 400
Stephens	Jeremy			Haines	AK		251, 298, 630
Stevenson and Hopson	Dave and Elaine			Juneau	AK	99801	249
Stewart	Tom			Auke Bay	AK	99821	
Stey	Martha			Juneau	AK	99801	
Stichert	Neil			Juneau	AK	99801	116, 192, 501
Stickler	Curtis			Juneau	AK	99803	301
Stigen	Gary			Haines	AK	99827	
Stoltz	Brian			Anchorage	AK	99516	
Story	Michael			Juneau	AK	99801	
Strand	Tim			Whitefish	MT	59937	377
Strandtmann	Russell			Juneau	AK	99801	511
Strong	Pauline			Juneau	AK	99801	311
Sturrock	Mike			Juneau	AK	99801	
Sturrock	Mike	Project Manager	North Pacific Erectors, Inc.	Douglas	AK	99824	
Suewing	Euming		Ziectors, me.				
Suewing	Kerrie						
Sullivan	James			Douglas	AK		66, 308, 539
Sullivan	Kaye			Bouglas			00,000,000
Sullivan	Ross			Skagway	AK	99840	
Summers	David			Juneau	AK	99801	366
Sundberg	Eileen			Auke Bay	AK	99821	
Surdyk	Shelby			Skagway	AK		225, 230
Sutton	Travis			Juneau	AK	99801	220, 250
Swift	Paul			Haines	AK	99827	13, 66, 84, 116, 222, 238, 260, 261, 280, 428, 533,
Taff-Roy	Diane			Juneau	AK	99801	
Tappe	Cindy			Juneau	AK	99801	
Tate	Chastine			Haines	AK	99827	
Taylor	Bob			Juneau	AK	99801	
Taylor	Denise			Skagway	AK	99840	
Taylor	Gordon			Juneau	AK	99801	
Taylor	Marilyn T.			Haines	AK	99827	86, 229
Taylor	Patrick						
Taylor	Paul			Skagway	AK	99840	
Taylor	Tiana	Administrative Assistant; Activities Director	Haines High School				1, 238, 424

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Tenney	Bruce			Juneau	AK	99801	
Tenney	Mary Jane			Juneau	AK	99801	
Thole	Cory			Skagway	AK		66, 116, 230, 260, 452
Thole	Mary			Skagway	AK	99840	230
Thomas	Brittney			Skagway	AK	99840	116, 238
Thomas	Scott			Juneau	AK	99801	
Thompson	James			Juneau	AK	99801	229, 501
Thompson	Matthew			Juneau	AK	99801	126
Timothy	Jackie	Southeast Regional Supervisor	Alaska Department of Fish and Game (ADF&G)				40, 87, 126, 128, 149, 417, 430, 483
Tolles	Judith			Haines	AK	99827	
Tolles	Richmond			Haines	AK	99827	
Tomaro	Paul			Juneau	AK	99801	477
Triplette	Jim						
Tronrud	John			Skagway	AK	99840	
Trucano	Nadine			Juneau	AK	99802	2, 231
Tucker	Lois					99801	
Tullis	Harry			Juneau	AK	99801	
Tullis	Timi			Juneau	AK	99801	229
Tuyaman	Carol			Haines	AK		
Tyler	Wes		Icy Straits Lumber	Hoonah	AK	99829	
Tyson	Elizabeth			Skagway	AK		78, 116, 205, 222, 534
Uchytil	Carl			Juneau	AK	99801	
VandeCastle	MaryAnn			Juneau	AK	99802	
VAndor	Ed			Juneau	AK	99801	440
VanHorn	David			Skagway	AK		
Vick	Jody						
Vignola	Evelyna			Haines	AK	99827- 0864	238, 279
Vinson	Eleanor			Juneau	AK	99801	
Vinson	Rayme			Juneau	AK	99801	
Voss	Jerry			Juneau	AK	99801	67, 383, 421, 474, 628
Voth	David			Haines	AK	99827	
Wacker	William				AK	99827	159, 229, 258, 438, 475
Wagner	Tim			Juneau	AK	99801	
Wagner	Tom			Juneau	AK	99801	
Wald	Michael	Co-owner	Arctic Wild				116, 126
Waller	Joanie			Juneau	AK	99801	116, 225, 230, 252, 368, 400, 452, 534, 681
Wallers	Ann			Haines	AK	99827	
Walsh	Murray			Juneau	AK	98126	
Walsh	Shellie						
Walters	Kathryn			Juneau	AK	99801	452
Ward	Doris			Haines	AK		
Ward	Rhonda				_		

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Waring	Margo			Juneau	AK	99801	258, 452, 494
Warner	Sandy			Juneau	AK	99802	231, 452
Waterman	Nancy			Juneau	AK	99802	47, 116, 147, 227, 301, 501, 546
Watson	Scott						
Weber	Bruce			Skagway	AK	99840	116, 258
Weber	Dan						
Weed	Tom						
Weigel	Beth			Juneau	AK	99801	550
Welton	Robert			Juneau	AK	99802	
Welty	Drew			Anchorage	AK	99517	229
Wenner	Jack			Haines	AK	99827	230, 284, 350, 366
Werner	Dave			Haines	AK		
Wertheimer	Alex and Peggy			Juneau	AK	99801	66, 116, 284, 494, 598
West	Larry			Juneau	AK	99802	229, 230, 260, 514
Weyhrauch	Bruce			Juneau	AK	99801	
Whisenant	mike		Wingnut Auto Salon	Juneau	AK	99801	
White	Debbie			Juneau	AK	99801	423
White	John			Haines	AK		66
White	Russell			Haines	AK	99827	163, 258, 67, 7
Whitman	Matt			Haines	AK	99827	, .
Wiebold	Karinne			Juneau	AK	99801	
Wiener	William				LA	71101	116
Wilbur	Lynn			Sitka	AK	99835	231
Wiley	Randy			Juneau	AK	99801	_
Wilke	Mark			Juneau	AK	99801	
Williams	Benjamin			Douglas	AK	99824	
Williams	Charlie			Juneau	AK	99801	
Williams	Gordon			Angoon	AK	99820	7, 19, 78, 86, 116, 229, 231, 258, 373
Williams	Jim			Juneau	AK	99801	368
Williams	John		Juneau Real Estate	Juneau	AK	99801	
Williams	Michael			Juneau	AK	99801	
Williams	Sandy		Citizens Pro- Road	Douglas	AK		383, 402, 421, 559, 571
Williams	Sheri						
Williams	Susanne			Douglas	AK	99824	559
Williams	Tom			Juneau	AK	99801	559
Williams	Wallace			Douglas	AK	99824	402, 559
Willis	Emily						19, 230
Willson	Sara			Auke Bay	AK	99821	2, 116, 258, 452
Wilmot	Richard			Juneau	AK	99803	
Wilmoth	Jeremiah			Wasilla	AK	99687	
Wilson	Alan			Juneau	AK	99801	

Last Name	First Name	Title	Organization	City	State	Zip Code	Group ID
Wilson	Jeffrey		Wilson Engineering	Juneau	AK	997801	229, 230
Wilson	Karen			Juneau	AK	99801	
Wirak	Elizabeth			Haines	AK	99827	547
Wistrand	Paul			Juneau	AK	99801	
Woizeschke	Nancy			Juneau	AK	99801	
Wolf	Steven			Juneau	AK	99801	19, 159, 474
Wolfe	James			Anchorage	AK	99521	230, 541
Wolfe	Ronald		SeaWolfe Forestry LLC	Juneau	AK	99801	
Womack	Ardyne			Juneau	AK		
Wood	Charles			Petersburg	AK	99833	
Wood	Jonathon			Juneau	AK	99802	1, 2, 78, 116
Woodbury	Raymond						
Workman	Michelle			Juneau	AK	99801	
Worsham	Dan			Douglas	AK	99824	
Wrentmore	Jan	President	SMAC	Skagway	AK	99840	66, 79, 86, 116, 182, 229, 230, 258, 279, 296, 313, 317, 322, 345, 383, 476, 527, 533, 562, 627, 682
Wright	Brenda			Juneau	AK	99801	
Wright	Glenn		University of Alaska Southeast	Juneau	AK	99801	
Wright	Karen						
Yarnell	Ronald			Fairbanks	AK	99709	
Yee	Michael			Skagway	AK	99840	66, 284
Young	Rollin			Juneau	AK	99801	
Zahn	Mary			Juneau	AK	99801	
Zeiger	Mark		Yeldagalga Publications, LLC	Haines	AK	99827	
Zenger	Adam		State of Alaska DOT&PF	Juneau	AK	99803	
Zimmerman	Melany		Taku Environmental	Haines	AK	99827	230
Zukas	Robert			Juneau	AK	99802	
<u> </u>	Roger						

6. Index of Topics/Subtopics

This section presents a list of topics and subtopics coded in comments from all communications received on the JAI Project Draft SEIS. All coded comments were assigned a topic and subtopic. This assignment facilitated organizing comments into comment groups for response. See Table 6-1.

Readers can find the topic/subtopic of interest (e.g., Air Quality/Method of Analysis, Alternatives/Alternative 1B, or Avalanche/Avalanche Hazards) and then look up the group number(s) and response(s) that are associated with that entry in Section 7.

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7. Responses to Draft SEIS Comments by Topic

This section presents comment groups and associated responses by topic. Entries in this section are organized alphabetically by topic and subtopic, and then group number.

Commenters can find their names in Section 5, and then look up the group number(s) and response(s) that are associated with their entry in this section. In addition, readers can find a topic/subtopic in Section 6, and then look up the group number and responses associated with that entry in this section.

7.1 Air Quality

Group 167

Topic/Subtopic: Air Quality/Method of Analysis

Group Comment Text

A) The Draft SEIS did not evaluate air quality effects, including spatial and temporal identification factors; listed targeted pollutants; method of monitoring; and a table of locations, dates/times, and sampling methods.

B) The analysis did not establish a baseline from which to compare alternatives.

Group Comment Response

A) The evaluation of air quality effects in the Draft SEIS was of appropriate scope and scale relative to the anticipated impacts of the proposed alternatives. Previous studies of air quality impacts associated with the project alternatives, including modeling of carbon monoxide emissions, were reviewed and updated to reflect new regulatory requirements and revised traffic volumes in the 2014 Update to Appendix T - Air Quality Modeling Memorandum found in Appendix Z of the Draft SEIS. The analysis used available data, input from agencies, and reasonable assumptions to evaluate air quality effects.

B) The characterization of the existing conditions, or baseline, was provided in Section 3.2.5 of the Draft SEIS. The region where the project is located has been designated an air quality attainment area or unclassifiable. Section 3.2.5 outlined a description of the pollutants and National Ambient Air Quality Standards (NAAQS; Table 3-2). As stated in Section 3.2.5, air quality within the corridor of the proposed alternatives was estimated to be very good based on input from the Alaska Department of Environmental Conservation (ADEC) and due to the absence of air pollution sources. Pollutant levels were estimated to be well below the NAAQS, even at the more urban port locations of Auke Bay, Haines, and Skagway. This determination was supported by data accumulated for the Kensington Gold Project, which showed background concentrations of air pollutants were significantly below NAAQS (see Section 3.2.5.3). This is a suitable assessment of baseline air quality from which to compare potential impacts of the alternatives.

Group 168

Topic/Subtopic: Air Quality/Method of Analysis

Group Comment Text

A) The air quality analysis in the Draft SEIS was inadequate because it relied on the modeling done in 2004 for Alternative 2, which is no longer being considered, and did not include a shuttle ferry between Haines and Skagway. The air quality analysis suggested that marine vessel emissions at Haines, Skagway, Katzehin, and Auke Bay did not need to be evaluated because Juneau, a much larger port facility, did not have exceedances of carbon monoxide (CO). It did not account for more ferry operations and fuel consumption under Alternative 2B, which would result in greater emissions of CO, carbon dioxide (CO₂), nitrogen oxides, sulfur oxides, and particulate matter.

- B) An analysis of ferry emissions should be conducted to explain how air quality in the Haines, Skagway, and Katzehin areas will be affected, taking into consideration the relatively low dispersion of airborne pollutants in the project area. Increased marine vessel emissions in the Skagway area is of particular concern because the Port of Skagway serves ferries, cruise ships, and freight in one facility.
- C) A decrease in air quality in the Haines, Skagway, and Katzehin areas could potentially be harmful to residents' health, reduce visibility, and deter tourists from visiting. FHWA and DOT&PF should conduct new air quality modeling for each alternative to better inform the decision makers about potential environmental and human health consequences.

Group Comment Response

- A) The Draft SEIS relied on the modeled vehicle emissions for Alternative 2 from the 2004 analysis because the traffic projections of that alternative were higher than, but comparable to, the 2014 projections for Alternative 2B. DOT&PF conducted additional air quality analysis to determine the effects of ferry and marine vessel emissions on air quality in the general study area and at ferry terminals associated with each alternative. The Final SEIS included the effects of ferry emissions in the evaluation of air quality for all alternatives.
- B) The Ferry Vessel Air Quality Analysis (see Attachment 1 to the 2017 Update to Appendix T Air Quality Modeling Memorandum in Appendix Z of the Final SEIS) considered how air quality in the Haines-Skagway-Katzehin area would be affected by the alternatives. The analysis identified that the largest increases of air pollutants in Skagway would be 3 percent greater than existing conditions for CO, 6 percent greater for nitrogen dioxide, and 2 percent greater for particulate matter (Alternatives 2B and 4A), without accounting for project ferry activity displacing any existing vessel traffic. Because the percent change under any alternative would have be low and because the air quality in the area is generally good, dispersion modeling was not conducted.

Environmental Protection Agency (EPA) regulations indicate that dispersion modeling has least uncertainty in areas with good long-term data and relatively flat terrain: "Areas subject to major topographic influences experience meteorological complexities that are extremely difficult to simulate. Although models are available for such circumstances, they are frequently site-specific and resource intensive." The project area is an attainment area for air quality, and the emissions for ferry vessel traffic would be below the EPA *de*

minimis levels; therefore, general conformity does not apply. Given good existing conditions and low projected increases, dispersion modeling is not warranted. The Final SEIS evaluated the potential cumulative effects of ferry vessel emissions on air quality in Skagway, where it would contribute to the emissions associated with existing marine vessel activity at the port.

C) Changes to air quality that would have resulted from the project alternatives have been updated to include emissions associated with ferry vessels. These emissions were compared to existing emissions for rural areas, such as Haines, to ascertain the net change with each alternative. An updated discussion of air quality for each alternative as it relates to human health consequences has been provided in the Final SEIS. The analysis demonstrates that no harm to human health or the environment would result from project-related emissions.

7.2 Alternatives

Group 345

Topic/Subtopic: Alternatives/Alternative 1B

Group Comment Text

Comments received on the Draft SEIS offered the following possible changes to Alternative 1B:

- A) Deploying the *M/V Malaspina* on the Juneau-Skagway run is not an efficient use of assets (e.g., mainliners with their large crews and 24 hours per day/7 days per week crewing requirements are very expensive to operate and have more capacity than is needed); however, the *M/V Malaspina* could run between Skagway and Haines daily as a true day boat.
- B) The *M/V Malaspina* cannot operate 7 days per week; it can only operate 6 days per week since 1 day is needed for drills and testing. Therefore, Alternative 1B should be modified.
- C) The ferries could profitably accommodate more cars per day during summer tourist season than stated for Alternative 1B (e.g., more runs or more ferries).
- D) DOT&PF should consider a real/better Transportation System Management (TSM) alternative and/or consider revising Alternative 1B to use the *M/V Fairweather* on a twice-daily Haines-Juneau route; use one Alaska Class Ferry (ACF) for the Skagway-Juneau route; and use the other ACF (or perhaps a different, more optimal vessel) for the Haines-Skagway route.
- E) DOT&PF should modify Alternative 1B to eliminate mainliner connections north of Auke Bay because the new ACF vessels are more cost effective.

Group Comment Response

As a general response to the comments in this group, an SEIS prepared under NEPA is meant to analyze a range of reasonable alternatives representing the full spectrum of alternatives. While there are practically an infinite number of possibilities for alternatives,

it is not necessary to evaluate them all. The Court ruling on the previous EIS required an alternative based on more efficient use of existing assets. Alternative 1B was created in response and was evaluated as a competing alternative to solve the problems expressed in the purpose and need statement in Chapter 1. It is not necessary to examine every permutation of every option. That said, DOT&PF and FHWA examined suggestions to "optimize" Alternative 1B, and a discussion of the results are included in Appendix CC, Development of Alternative 1B – Enhanced Service with Existing Alaska Marine Highway (AMHS) Assets, of the Draft and Final SEIS and Appendix II, Alternative 1B Optimized and Alternative 5 Evaluation, of the Final SEIS.

- A) The *M/V Malaspina* was placed on the Juneau-Skagway run primarily because the ACF cannot make the 12.3-hour run with a 12-hour day crew. A contributing complication is that the ACF side loads from a door close to the stern of the vessel. In Auke Bay, the vehicles would be stern loaded and facing forward. Off-loading in Skagway would be time consuming (i.e., backing vehicles out and up the ramp until enough room can be created to turn vehicles around on board).
- B) It is incorrect to state that the *M/V Malaspina* cannot operate 7 days per week due to 1 day needed for drills and testing. The *M/V Malaspina* can, and often does, run 7 days per week. In Lynn Canal, it typically does not run on days it would compete directly with a through mainliner.
- C) Alternative 1B was mandated by the Court to only use existing AMHS assets. This new alternative accounted for changes that had occurred to the "existing assets" in the AMHS fleet since the 2006 Final EIS, the capabilities of the vessels in the fleet, and the needs and mission of the fleet to the numerous communities served by AMHS. DOT&PF determined that given the speed of the vessels, additional runs per day are not feasible. Absent the construction of new ferries, an increase in capacity in Lynn Canal substantially greater than that provided in Alternative 1B would require a reduction in service outside of Lynn Canal. In other words, adding more ferries means other communities in the system would get less service.
- D) DOT&PF and FHWA examined commenter suggestions to improve Alternative 1B, and discussion of the results were included in Appendix CC, *Development of Alternative 1B Enhanced Service with Existing Alaska Marine Highway (AMHS) Assets*, of the Draft SEIS. DOT&PF considered using the *Fast Vehicle Ferry (FVF) Fairweather*; however, it is one of two ferries in the AMHS fleet that is capable of providing same-time-of-day service to Sitka (the other ferry is the *FVF Chenega*, which is in indefinite layup status). Same day service to/from Sitka is provided less than 7 days per week, which leaves the *FVF Fairweather* potentially available for several Lynn Canal weekly sailings. This would be a small increase in capacity and frequency, and would not eliminate the need for another Lynn Canal dedicated vessel. Using the *FVF Fairweather* on a twice-daily Haines-Juneau route was not considered reasonable.

The ACF cannot be reasonably scheduled for the Auke Bay-Skagway route using the existing ferry terminals because it cannot make this trip and comply with United States Coast Guard (USCG) crew rest requirements. As Alternative 1B was expected to enhance service using existing AMHS assets without major initial capital expenditures, using the

ACF on the Auke Bay-Skagway route was not considered reasonable because it would require capital improvements to the Skagway Ferry Terminals.

DOT&PF and FHWA fully disclosed the thought process and evaluation process for Alternative 1B in the Draft SEIS. Appendix CC of the Draft and Final SEIS describes all the efforts undertaken to develop Alternative 1B, and documents the data and analysis relied on to create a reasonable alternative solving the transportation problems in the corridor using only existing assets.

E) Elimination of "through" mainliners was considered during the development of Alternative 1B. The mainliners were included in Alternative 1B, as well as other alternatives that provided a primarily marine solution, for many reasons, such as increasing frequency (number of trips per week) and providing additional capacity in Lynn Canal in keeping with the purpose and need for the Project. Discontinuing mainline service would have multiple challenges.

First, the Day Boat ACF could not make a daily Auke Bay-Skagway run and meet USCG crew work/rest requirements. Second, it would create congestion issues at Auke Bay. To fully unload, transfer, and then load northbound and southbound connecting travelers from the mainline vessel, the mainliner ferry must remain docked in Auke Bay long enough for each of the three proposed Lynn Canal ferries to come and go. Unfortunately, Auke Bay has limited berth space and vehicle staging areas. The staging area is insufficiently sized and configured to accommodate all disembarking and embarking vehicles. The vehicle staging area was not designed to handle the volume of transferring vehicles expected with the large mainliners unloading and loading in a limited space. Eliminating the mainliners in Alternative 1B would result in vehicle congestion and delay.

Thirdly, vessel capacity in Lynn Canal might prevent some travelers from reaching their final destination via a direct ferry connection. Vehicles traveling through Juneau in either direction on mainliners would be required to transfer vessels at Auke Bay. Mainline vessels hold between 88 and 134 vehicles, while Day Boat ACFs hold 53. When local traffic is added, capacity would be taxed even more. Travelers might have had to use the Haines-Skagway shuttle and travel via Haines or Skagway to reach their final destination, potentially increasing their travel time and costs. Therefore, discontinuing mainliner service in Lynn Canal was not considered to be a reasonable component of Alternative 1B.

Group 348

Topic/Subtopic: Alternatives/Alternative 1B

Group Comment Text

A) Alternative 1B does not withstand scrutiny in the context of designing marine options that best meet purpose and need "while not inflating costs." Reducing fares by 20 percent and adding staff for the call center does not reflect the intent of this alternative. These measures would only add cost and have not proven effective in the past.

B) The Draft SEIS does not include a system-wide analysis of traffic, fares, needs, and capacity that is necessary to optimize the use of the existing ferry system assets.

- C) Results of the fare study should be incorporated into the Draft SEIS analysis.
- D) The Draft SEIS fails to explain why the *M/V Taku*, *Matanuska*, and *Kennicott* are required elsewhere in the AMHS. None of the descriptions of vessels used in Southeast Alaska provide information concerning relative need or demand on the routes each serve. The discussion of rerouting existing ferries lacks the rigor necessary to explore a reasonable version of Alternative 1B, and results in almost insignificant differences between Alternative 1 No Action and Alternative 1B.
- E) Alternative 1B fails the Court's mandate to "rigorously explore an alternative aimed at providing improved and more efficient ferry service."
- F) Alternative 1B was presented to DOT&PF's marine consultant as-is; therefore, they did not look for or evaluate a better option. If the State were to make a good faith effort to comply with the Court order, it would have asked its consultant to configure a true TSM alternative.

Group Comment Response

- A) DOT&PF and FHWA considered fare reductions and enhancements in the call center because the 2006 lawsuit suggested those very kinds of improvements were needed to help maximize ridership. These considerations were evaluated and included as components of Alternative 1B in the Draft SEIS only to the extent they made the alternative more competitive.
- B) The purpose and need for the Project is not to maximize the efficiency of the AMHS operations system-wide. That said, the Draft SEIS did not fail to address the comparative needs and capabilities of the vessels across the AMHS system. Appendix CC, *Development of Alternative 1B Enhanced Service with Existing Alaska Marine Highway (AMHS)*Assets, explains how Alternative 1B was developed and described why certain vessels are needed on certain routes. DOT&PF established as a goal that the new alternative would need to meet the purpose and need in Lynn Canal but not by substantially diminishing service elsewhere in the system. As explained in Appendix CC, DOT&PF considered technical capabilities of the vessels, vessel size, operating conditions, and the effect on the AMHS mission (i.e., whether a vessel could be moved or shared with other routes such that it could provide Lynn Canal service while also maintaining the level of service committed to the other communities).

In part, certain vessels were rejected as being reasonable for Lynn Canal service because it was found that reassigning these vessels to Lynn Canal would be at the expense of reduced service elsewhere. To this extent, DOT&PF considered demand and capacity on the other routes in the system. As explained in Appendix CC of the Draft SEIS, 7 of the 11 existing AMHS ferries are not suitable for use in Lynn Canal because relocating/diverting the ferry to Lynn Canal would jeopardize the AMHS mission, including impacts on demand, level of service, and schedule considerations.

DOT&PF evaluated every vessel in its fleet to try to identify those that could reasonably be relocated or share service within Lynn Canal. It is important to note that DOT&PF and AMHS professionals regularly evaluate the demand, capacity, and efficiency of the overall

system. Schedule changes are made, based on a system analysis of demand and community needs. In particular, because the operation and maintenance of the AMHS system is funded out of the State's general fund, there is great scrutiny and pressure to optimize the efficiency of the service and minimize the costs. The planning that is undertaken, as well as annual schedule and funding discussions, occurs with much involvement from the public and elected officials. DOT&PF contends that this regular planning process, operational funding scrutiny, and annual scheduling process results in a system that is already highly optimized. Despite this, DOT&PF took a hard look at each of the vessels in the fleet and identified and disclosed the reasons vessels were or were not reasonable to consider for Lynn Canal Service. DOT&PF then identified a reasonable "system management" alternative and fully evaluated it in the Draft SEIS.

- C) The AMHS Tariff Analysis was completed in January 2015 and was made publicly available on the AMHS website. The fare study examined AMHS tariff rates and tariff rates for similar ferry systems. The study looked at changes in fares made since the previous rate study was completed in 2008. It also looked for anomalies on routes of similar length within the AMHS system. It considered the development and implementation of a changes in tariff policy with the goal of creating a fair and equitable tariff structure. The study did not analyze demand or service to identify inefficiencies. DOT&PF and FHWA reviewed the study and concluded that the analysis and recommendations do not impact the methodology used for the SEIS.
- D) As is explained in Appendix CC, Development of Alternative 1B Enhanced Service with Existing Alaska Marine Highway (AMHS) Assets, vessels built for specific functions cannot be relocated to Lynn Canal without jeopardizing AMHS's mission/function that those vessels are providing in other parts of the system. The analysis considered M/Vs Taku, Matanuska, and Kennicott for use in Lynn Canal. As explained in Appendix CC, of the three vessels, the M/V Kennicott was specifically designed and commissioned to safely make the ocean-going crossing of the Gulf of Alaska. This is a potentially dangerous endeavor and requires a ship built for such a function and sea conditions. Regardless of the demand or capacity on that vessel, moving it to serve Lynn Canal would mean cross gulf trips would not be served. This is an unsafe, impractical, and unreasonable proposal. Reassigning the M/V Kennicott to Lynn Canal would eliminate the cross-gulf service, leaving Yakutat without surface access. Yakutat has no road connection, while other communities on the cross-gulf route have road access.

DOT&PF and FHWA considered the *M/V Taku* during development of Alternative 1B for the 2014 Draft SEIS. Since that time, due to funding levels and the condition of the vessel, AMHS sold the *M/V Taku*.

Per the Court's direction, the SEIS must evaluate an alternative that relies on existing ferry assets and terminals without new construction. Upgrading an existing AMHS ferry to be Safety of Life at Sea (SOLAS) compliant would be a major capital investment, inconsistent with the Court's direction. The *M/V Matanuska* is SOLAS compliant, which its sister ship the *M/V Malaspina* is not. Using the *M/V Matanuska* in Lynn Canal makes it unavailable for runs that require a SOLAS-compliant vessel. It also would leave AMHS unable to meet the schedule and demand to Prince Rupert as AMHS has no other SOLAS-compliant replacement with sufficient range and capacity. As sister ships, they have very similar

operating costs, speeds, etc. In other words, there would be no advantage in considering the *M/V Matanuska* over the *M/V Malaspina* in terms of costs, speeds, etc. DOT&PF and FHWA explained these reasons in Appendix CC.

E) DOT&PF and AMHS staff developed a new alternative based on direction from the Court, shared a draft of that alternative with the public during a new scoping effort, took input on the new alternative, and revised that alternative based on the scoping comments received. Alternative 1B complies with NEPA and the Court's order. Development of the new alternative accounted for changes that had occurred to the "existing assets" in the AMHS fleet since the 2006 Record of Decision (ROD), the capabilities of the vessels in the fleet, and the needs and mission of the fleet to the numerous communities served by AMHS. DOT&PF and FHWA fully disclosed the thought process and evaluation in the Draft SEIS.

Appendix CC, *Development of Alternative 1B – Enhanced Service with Existing Alaska Marine Highway (AMHS) Assets*, of the Draft SEIS described the efforts undertaken to develop Alternative 1B, and documented the data and analysis used to create as reasonable an alternative as possible toward solving the transportation problems in the corridor using only existing assets. AMHS and other DOT&PF professionals, who have years of optimization experience, developed Alternative 1B. They were able to develop a system management alternative that made improvements over and above Alternative 1 – No Action. DOT&PF identified and evaluated Alternative 1B as a competing NEPA alternative in the SEIS. Alternative 1B uses existing assets, and results in an increase in AMHS service in Lynn Canal that would not have required a reduction in service outside Lynn Canal.

F) AMHS and other DOT&PF professionals, who have years of optimization experience, developed Alternative 1B. They were able to develop a system management alternative that made improvements over and above Alternative 1 – No Action without jeopardizing service elsewhere. AMHS staff have considerably more experience with running and optimizing the existing AMHS service than Coastwise Corporation. Coastwise Corporation is a naval architecture and marine engineering firm primarily offering vessel design, marine structural and systems analysis, and port engineering services.

Group 474

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text

- A) The SEIS proposal for the Katzehin Ferry Terminal does not include sufficient support facilities. The terminal is remote and should be staffed for operations, maintenance, and security. The terminal will need electrical power, restrooms, shelter and heat for stranded travelers, accommodations for staff, food and water, communications, fuel, and parking.
- B) What support facilities will be available at the Katzehin Ferry Terminal?
- C) Will the Katzehin Ferry Terminal be Americans with Disabilities Act (ADA) compliant?

- D) The SEIS needs to provide detail about logistics associated with the Katzehin Ferry Terminal (e.g., location of the terminal, plans for stranded passengers, security, maintenance, staffing, parking, staging of vehicles, communication, utilities, ticketing, etc.).
- E) Will the Department of Homeland Security (DHS) and USCG approve the plan for the terminal?
- F) Will travelers be required to pay for tickets with a credit card, something not all travelers have? How will ticket payments be secured if cash is accepted, and how will ticketing machines be serviced if they break down?

Group Comment Response

- A) The Katzehin Ferry Terminal includes the support facilities necessary to meet AMHS operational requirements, including a heated shelter with rest rooms for the public. There would not be public communication service provided. Staffing the Katzehin Ferry Terminal was a consideration. However, staffing of this remote terminal site is not necessary for ferry operations of the terminal and adds unnecessary operational expense. Shuttle docking and managing traffic loading/unloading would have been accomplished by the shuttle crew.
- B) Public support facilities include a heated terminal building with waiting area and public restrooms.
- C) All terminal public facilities would have been constructed to current ADA accessibility requirements.
- D) The purpose of the SEIS is to evaluate the proposed project's environmental impacts to meet the requirements of NEPA. To the extent operational details are known at this time (e.g., the availability of public restrooms, terminal staffing and public communication), they are identified in the Final SEIS (see Section 3.5 of the 2017 Update to Appendix D Technical Alignment Report in Appendix Z and alternative descriptions in Chapter 2 of the Final SEIS). However, operational details (e.g., security, ticketing, vehicle staging, and specific plans for stranded passengers) are developed during the final design phase of the project. Terminal configuration (e.g., location and general site plan, including structures and parking) are included in the 2017 Update to Appendix D Technical Alignment Report in Appendix Z of the Final SEIS. Facility maintenance is performed by DOT&PF and not an operational detail developed during project design and construction.
- E) Staffing the proposed remote terminal sites was considered. However, staffing the remote terminal sites is not necessary for the operations of the terminal and adds unnecessary operational expense. Security for vessel operations is the responsibility of the shuttle crew. DHS and USCG do not require a separate security plan for unmanned terminals. The security for unmanned terminals is covered by the individual vessel security plans that are approved by the USCG. Receiving approval for vessel security plans for vessels servicing Haines, Skagway, and Katzehin is not anticipated to be an issue. AMHS currently has several unmanned terminals in service.

F) Means of payment and its necessary support is an operational detail that would have been determined during the final design of the ferry terminal. Considerations include payment on board, payment at a kiosk, and payment one way only at Haines and Skagway.

Group 475

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text

What is the logic behind building a ferry terminal 90 miles from downtown Juneau—making travel more expensive, time consuming, and dangerous—when current ferry service is safer and more economical?

Group Comment Response

Chapter 1, in general, and Section 1.4, more specifically, provides the purpose and need for the project. The project is intended to provide greater capacity to meet transportation demand, provide greater flexibility and improve opportunity for travel, reduce travel time between communities, and reduce State and user costs. As described in the Draft SEIS, Alternative 2B accomplished this combination of objectives better than the other alternatives

Both marine ferry vessels and highways have engineering standards designed for safety and efficiency of operation, and the road and marine portions of each alternative would meet current standards for safety. Current ferry service is not more economical than a road for most users. Travel time under Alternative 2B would be improved, and the short connecting ferry link would operate much more frequently.

The road alternatives (2B and 3) represent a shift in the way transportation would be provided in the corridor—away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles provide most of the transportation (with shorter-distanced, publicly-owned shuttle ferries providing links connecting the roadways). The road would not "dead-end." It would function much like the one-way Anton Anderson Tunnel that connects the Seward Highway to Whittier in Southcentral Alaska, where there would be a relatively short wait, a modest payment, and then a relatively quick passage before getting back onto a standard two-lane highway.

Maintenance of the new road would be by DOT&PF from State transportation funds (there would not be maintenance costs for the cities in the region). Table 2-26 in Chapter 2 (Alternatives) of the Draft SEIS and various tables in Chapters 2 and 4 of the Final SEIS summarize operating and maintenance costs, user costs, capacities, ferry sailing frequencies, and other measures. While the cost to the State would rise overall, the cost per vehicle served would drop dramatically.

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text

A) The Draft SEIS lacks an explanation of the criteria that selected Alternative 2B as the preferred alternative (e.g., costs, need/demand, impacts, etc.).

- B) The Draft SEIS did not incorporate modifications to alternatives that would have made them more practicable.
- C) Why are Alternatives 2B and 3 the only alternatives not burdened with the cost of mainliners?

- A) Section 2.5, Identification of the Preferred Alternative, explains the identification of the preferred alternative. As a supplemental EIS, the Draft SEIS referenced the 2006 ROD for additional information. DOT&PF and FHWA reviewed the previous information, and the updated information in the Draft SEIS, and reconfirmed Alternative 2B as the preferred alternative in that document. Table ES-1 of the Draft SEIS presented a comparison of the criteria underlying the decision. As presented in the table, Alternative 2B accommodates the highest demand, provides the greatest capacity, has the shortest travel times, provides the greatest frequency of service, has the lowest cost per vehicle transported, and has the second lowest operations and maintenance costs of any of the build alternatives. The decision in the Draft SEIS balanced these benefits, taking into consideration the impacts described throughout the document and appendices.
- B) The Draft SEIS did not make drastic changes to the reasonable alternatives identified in the 2006 FEIS. However, each alternative was evaluated by considering the most current available information, and some alternatives were adjusted to reflect new information. For example, many alternatives included the two soon-to-be-available ACFs. Additionally, forecasted demand levels also changed, leading to changes in vessel designs and sailing frequencies. In making these modifications, DOT&PF refined the alternatives to make them better in terms of resolving the problems identified in Chapter 1, Purpose and Need. In addition, the Draft SEIS explained that Alternative 2B included minor re-alignments as a result of consultation with resource agencies to attempt to minimize environmental impacts.
- C) DOT&PF kept mainliner service in the alternatives that provide a primarily marine solution for several reasons. First, it provides additional capacity and frequency, which is necessary to help achieve the purpose and need for the Project. Second, for vehicles and passengers that are already on the mainline vessel, needing to disembark in Auke Bay and drive across the dock and board another AMHS vessel would add considerable delay and travel time to their trip with minimal to no speed advantage on the vessel to which they are transferring. For Alternatives 2B and 3, the improved travel speed those travelers would have realized by driving, and the relatively short wait and loading time of the drive through loading and unloading service of the short shuttle trip, would have made it advantageous for them to disembark at Auke Bay. Moreover, Alternatives 2B and 3 do not have the disadvantages associated with more limited capacity and frequency that the non-road

alternatives have. Note, Alternatives 1B and 4C capacities were analyzed to consider the removal of mainliner service in Lynn Canal. See Alternatives 1B Optimized and 5 under Appendix II, *Alternative 1B Optimized and Alternative 5 Evaluation*.

Group 477

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

- A) Given the historic traffic between Haines and Skagway, the proposed shuttle appears to not provide adequate capacity. In particular, it would be inadequate for transporting Recreational Vehicles (RVs).
- B) The shuttle will be taken out of service in winter, and there is no direct connection between Skagway and Haines.

Group Comment Response:

- A) The Haines-Skagway shuttle is sized to meet the projected induced traffic resulting from improved service in addition to existing traffic levels. The sizing of the shuttle was addressed in Chapter 4 and Appendix GG, 2017 Updated Marine Segments Technical Report.
- B) Alternative 2B would not have direct service between Haines and Skagway during winter. Traveling between the two communities, the traveler would have ridden a ferry to the Katzehin Ferry Terminal and catch a second ferry to their destination. During winter, only two of the three vessels would have operated at one time. One vessel would have serviced Skagway-Katzehin and the second vessel would have serviced Haines-Katzehin. This is due to 1) reduced traffic demand and 2) the need to perform annual maintenance. Each winter, each of the three vessels would have been serviced while the remaining two would have continued to operate. Even with just two vessels operational in winter, there would have been multiple trips per day versus the few trips per week currently provided.

Group 479

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

- A) Why has the proposed plan been divided into a two-phase construction schedule?
- B) Is it is possible that the second phase might never be completed?

- A) Anticipated construction duration for Alternative 2B is 6 years. The Draft SEIS did not present a construction phasing plan for Alternative 2B.
- B) FHWA approval of a Financial Plan detailing full funding for the JAI Project would be required before initial construction was implemented. DOT&PF's ability and commitment to completing the entire project would be documented in the Project Management Plan and the Financial Plan.

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

- A) Having the Day Boat ACFs running constantly between Haines and Skagway is inefficient. They will run empty, especially in winter.
- B) For Alternative 2B, DOT&PF should reconsider dropping the direct Haines-Skagway ferry in winter. An efficient, nonstop service between Haines and Skagway is needed.
- C) Will the mainliners still go up Lynn Canal, or will all sailings stop at Auke Bay?

Group Comment Response:

- A) The design of the Day Boat ACFs is completely outside the purview of the JAI Project. That decision was made previously, and the ships are under construction. The question for the JAI Project is whether to use them and if so, how best to use them to meet the purpose and need for the project. The Draft and Final SEIS present different options for their use in the alternatives. The frequency proposed for the ferries under these alternatives was designed based on the anticipated demand and need to improve travel flexibility. The frequency was planned with costs and demand as a consideration, which is why the schedule was proposed to be reduced during winter.
- B) During winter, only two of the three vessels would have been operating at one time. One vessel would have served Skagway-Katzehin, and one vessel would have served Haines-Katzehin. This is due to 1) reduced traffic, and 2) the need to perform annual vessel maintenance. Even with just the two vessels operational in winter, there would have been multiple trips per day versus the few trips per week currently provided.
- C) Under Alternatives 2B and 3, the northern terminus of the mainliners would have been Auke Bay/Juneau. Mainliners would not have continued in Lynn Canal. Alternatives 1B, 4A, 4B, 4C, and 4D would have maintained ferry service, including mainliner service, from Juneau northward.

Group 642

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

How can Alternative 2B transport 742 cars per day on the ferry under the same assumptions and criteria used for Alternative 1 - No Action and Alternative 1B?

Group Comment Response:

Alternatives 1 (No Action), 1B, and 2B all use the same Day Boat ACFs. Using a Day Boat ACF, and leaving from Auke Bay, only one round trip can be made per day. This limits the amount of capacity and travel frequency that can be accommodated under Alternatives 1 and 1B. Alternative 2B, which leaves from Katzehin has a much shorter run to Haines or Skagway. Under Alternative 2B, the Day Boat ACFs are able to make eight round trips per day on the Katzehin-Haines run and six round trips on the Katzehin-Skagway run. This shorter run allows more capacity and frequency of travel, accounting for the difference.

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

Commenters identified concerns regarding geologic hazards in the design of Alternative 2B (e.g., bridges, shoulders, and culverts).

Group Comment Response:

The 2017 Update to Appendix D - Technical Alignment Report in Appendix Z of the Final SEIS includes a discussion regarding the geologic hazards and hazard mitigation for Alternative 2B. The report also includes a tabulated summary of proposed bridges, tunnels, snow sheds, and highway lengths. The costs related to proposed structures for each road alternative are reflected in Attachment E to the 2017 Update to Appendix D - Technical Alignment Report. Chapter 4 of the Final SEIS has been updated to include additional relevant information from the updated Appendix D.

Group 686

Topic/Subtopic: Alternatives/Alternative 2B

Group Comment Text:

Without separate moorings for the two shuttle ferries at the Katzehin Ferry Terminal, there is the possibility of forcing one vessel to wait in the channel due to departure delays of the other vessel caused by loading/unloading or mechanical problems.

Group Comment Response:

While there is the possibility of a vessel having to stand by in Lynn Canal, the possibility would be mitigated by delaying departures and adjusting travel speed.

Group 350

Topic/Subtopic: Alternatives/Alternative 3

Group Comment Text:

- A) Why did FHWA and DOT&PF dismiss Alternative 3?
- B) Alternative 3 was not analyzed sufficiently for a comparison of alternatives (e.g., safety, avalanche, geologic hazards, etc.) in the Draft SEIS.
- C) Alternatives 2B and 3 were not treated equally in the Draft SEIS (i.e., logistical problems were discussed for Alternative 3 but the same problems were not discussed for Alternative 2B).
- D) The Draft SEIS ignored the *Haines Borough Comprehensive Plan*, which states that the road should be built on the west side of Lynn Canal.
- E) Alternative 3 makes more sense for the future of the multi-modal transportation system being developed by DOT&PF.

- A) Alternative 3 was not dismissed; it was developed and analyzed to a similar level as the other alternatives. It was carried forward as a reasonable alternative for full analysis in the Draft and Final SEIS. It was not identified in the Draft SEIS as the preferred alternative for reasons described in Section 2.5, Identification of the Preferred Alternative, and Section ES-7, Executive Summary, of that document. This explanation has been revised in the Final SEIS (see Section 2.5). Table ES-1 shows side-by-side comparison of Alternatives 2B and 3 and other alternatives. While it shows higher construction costs, it indicates better transportation performance by Alternative 2B than Alternative 3 or the other alternatives.
- B) All the reasonable alternatives evaluated in detail in the Draft and Final SEIS were developed to a sufficient level of detail to evaluate and compare potential impacts on area resources. Alternative 2B had advanced to detailed design and permitting after it was selected in the 2006 ROD, and DOT&PF initiated some of the mitigation proposals, which resulted in additional collection of data for resources in the project area. For these reasons, there is more information on the resources potentially affected by Alternative 2B than for the other alternatives. The amount of information on any one topic for an alternative represents the amount of information available and its relevance to the impact statement.
- C) The Draft and Final SEIS treat alternatives equally. The "logistics" question is related to the Clean Water Act and the Draft Section 404(b)(1) Analysis (see Appendix Z, *Update to Appendix X Draft 404/10 Permit Application and Draft 404(b)(1) Analysis)*. It is not part of NEPA requirements; rather, it is provided for U.S. Army Corps of Engineers (USACE) consideration in its decision related to a Section 404 wetlands permit for the JAI Project.
- D) The Draft and Final SEIS do not ignore the *Haines Borough Comprehensive Plan* (see Sections 3.1.1.4 and Consistency with Land Use and Management Plans sections under each alternative in Chapter 4 [e.g., Sections 4.3.1.2, 4.4.1.2, etc.]). The *Haines Borough Comprehensive Plan* (2012) does not legislate a requirement regarding the JAI Project. It cites a Haines Borough resolution that favored improved ferry service. It makes reference to a preference for a west-side road over an east-side road, if there must be a road. There are no goals and objectives related to the road but there are several related to maintaining and enhancing ferry service.
- E) The suggestions made by the commenter are not consistent with the planning that has been completed by DOT&PF in the Southeast Alaska Transportation Plan (SATP). The adopted plan (2004) does not recommend a multimodal solution with a ferry terminal at Point Couverden or a road link along the west side of Lynn Canal south of William Henry Bay. Similarly, the 2014 draft SATP update also did not recommend such a concept. The SEIS evaluates consistency with adopted plans.

Topic/Subtopic: Alternatives/Alternative 3

Group Comment Text:

In the event of a catastrophic failure of the road under Alternative 3, DOT&PF needs an emergency ferry service plan between Juneau and Haines.

Group Comment Response:

Catastrophic failure of the road as an engineered structure is not considered likely. Only a severe earthquake might have such an effect. A road on either the west side (Alternative 3) or east side (Alternative 2B) of Lynn Canal could temporarily be closed due to a severe automobile crash, extraordinary winter conditions, avalanche (purposefully or naturally triggered), or rockfall. As discussed in the SEIS, day boat ferries (or other vessels in the AMHS fleet) would be deployed to provide service in Lynn Canal if the road were temporarily closed. The SEIS addresses this topic under the "Transportation" heading and under the "Travel Flexibility and Opportunity" subheading for each alternative in Chapter 4.

Group 365

Topic/Subtopic: Alternatives/Eliminated Alternatives

Group Comment Text:

A) FHWA and DOT&PF should consider a road to Atlin, British Columbia, along the Taku River as an alternative to provide access to Juneau. This road could link to the Canadian highway, providing access to the rest of Alaska or the Lower 48 states.

B) This road could increase access for mining and result in impacts to fish and fish habitat.

- A) Section 2.2.1 of the Draft SEIS addressed a Taku River Valley Highway alternative. It was considered but found to not be reasonable based on consultation with the Government of British Columbia. As stated in the Draft SEIS, it also would not address the purpose and need elements related to improving transportation in the Lynn Canal corridor. In other words, even if the Government of British Columbia had been receptive to the project, a Taku corridor would not satisfy the project purpose and need of the JAI Project.
- B) The purpose of this project is not to increase access for mining in the Taku River region. Fish impacts in that area are not the subject of this SEIS because no alternatives carried forward for full evaluation in the SEIS would enter the Taku River region.

Topic/Subtopic: Alternatives/Eliminated Alternatives

Group Comment Text:

- A) DOT&PF should reconsider building a road from Haines to Skagway either as a standalone road or in conjunction with a road from Juneau to Skagway. If a road was built between Haines and Skagway, it would eliminate a ferry and its associated terminal.
- B) DOT&PF should build the road from Katzehin to Skagway and connect with the Klondike Highway.
- C) DOT&PF should consider building a bridge across Lynn Canal from Katzehin to Haines.
- D) Has DOT&PF thought about creating a hard link road by going up the Katzehin River and then cutting through one of the northern side streams, connecting to the road between Skagway and Whitehorse?

- A) The Draft and Final SEIS addressed a Haines-Skagway Intertie Alternative in Section 2.2.3 as part of a broader road and ferry alternative. DOT&PF and FHWA found the Haines-Skagway segment of road to be very expensive; the Haines/Skagway road connection does little to address the project purpose of providing access to/from Juneau. While there could be advantages of a road between Haines and Skagway in terms of reducing ferry operations in northern Lynn Canal, it is not needed to address this project's purpose and need.
- B) A road connecting Juneau and Skagway is discussed in Section 2.2.9 of the SEIS as an alternative determined not reasonable by the FHWA in the 2006 SEIS. The road into Skagway impacts the Skagway and White Pass National Historic Landmark. Section 4(f) of the U.S. Department of Transportation Act forbids use of National Historic Landmarks and certain other protected lands for Federal-aid funded transportation projects when other feasible and prudent alternatives are available.
- C) Section 2.2.4 of the Draft and Final SEIS discuss an alternative called East Lynn Canal Highway with Bridge to Haines. The extraordinary costs of a very long bridge over very deep water with a need to pass large vessels (e.g., cruise ships) on a regular basis meant extremely high costs. The alternative was found unreasonable primarily on the basis of cost.
- D) A surface road route northward up a Katzehin River tributary and connecting to the Klondike Highway north of Skagway would not be feasible because the valleys in question are narrow and steep sided and terminate in high peaks and icefields, with a crossing in excess of 6,000 feet elevation. The best case scenario would be a tunnel beginning at about 2,500 feet in elevation under the peaks and icefields and more than 5 miles long. Grade, snowpack, unavoidable glaciers, and/or extraordinary costs of building and operating a tunnel resulted in a professional judgment regarding technical feasibility, cost, and a common sense approach to this route (screening criterion I) that indicated this route would

not be a reasonable alternative.

Group 368

Topic/Subtopic: Alternatives/Eliminated Alternatives

Group Comment Text:

DOT&PF should consider alternatives to roads and ferries, including a railroad and a means to increase affordability of in-state air transportation.

Group Comment Response:

Section 2.2.9 of the Draft and Final SEIS address multiple alternatives, including rail alternatives, and reasons these alternatives were determined not reasonable. The purpose and need of this project relates specifically to surface transportation in the Lynn Canal Corridor, and air service from Lynn Canal communities to other points would not address these needs.

Group 377

Topic/Subtopic: Alternatives/Funding

Group Comment Text:

The State should create a Permanent Fund for the existing ferry system that provides a rebate to ferry users.



Group Comment Response:

The proposal within this comment is creative but is not a transportation alternative and would not satisfy the project purpose and need (see Chapter 1, specifically Section 1.4). While a proposed Permanent Fund or "endowment" for the ferry could theoretically be used to reduce costs for users, it would not satisfy the other elements of the project purpose and need. A key element of the project purpose and need is to better satisfy demand for access. A Permanent Fund would not provide additional capacity to help meet travel demand in the corridor. Similarly, it would not provide flexibility or improve opportunity to travel, reduce travel time, or reduce costs to the State—in fact, it would appear to add costs to administer a new program and to establish the base principal—all of which are important components of the project purpose and need.

Group 421

Topic/Subtopic: Alternatives/Funding

Group Comment Text:

- A) The SEIS needs to explain the funding sources for the project.
- B) The project is not fully funded and is at risk of not being completed. How is DOT&PF planning to fully fund the project?
- C) The funding plan in the Draft SEIS is unrealistic because equity bonus funds are no longer available (the term has expired).

- D) How can FHWA obligate National Highway Performance Program (NHPP) funding for the project since:
- (1) The project is not on the National Highway System (NHS);
- (2) The State must first cooperate with local and regional officials;
- (3) The project is not consistent with the State's asset management plan for the NHS, nor does it meet the goals for the SATP; and
- (4) The project is not fully funded in the Statewide Transportation Improvement Program (STIP); therefore, the project is segmented.
- E) Will the Lynn Canal portion of AMHS ferry service under Alternative 2B still be eligible for federal transit funds?
- F) Commenters expressed general concern for the availability of future Federal-aid funds to pay for this project.
- G) The project intends to only construct a road to Kensington Mine.
- H) Shakwak funds cannot be used on this project.

- A) The funding sources for a build alternative are explained at the end of Chapter 2 in the Draft SEIS, and the Final SEIS explains that no funding is necessary because Alternative 1 No Action was selected.
- B) If a build alternative had been selected, it would have been fully funded with a mix of federal transportation dollars administered by FHWA and State matching funds. This is identified in the relevant Statewide Transportation Program (STIP). (See http://dot.alaska.gov/stwdplng/cip/stip/index.shtml for full details on the STIP.) The ratio of federal to State funds is approximately 9:1. State match funds are identified annually in the State's capital budget. These funds are unrestricted general funds (UGF).
- C) The 2011 and 2013 Equity Bonus Funding identified in the Draft SEIS was available at the time the Draft SEIS was released, but now is no longer available to this project. Those funds had to be used within a certain period or else they would be lost. Those funds have been used on other projects.
- D) All build alternatives can use NHPP dollars because:
- (1) The current surface transportation system in northern Lynn Canal is eligible for NHPP funding. New roads as proposed under Alternatives 2B and 3 can be designated as NHS intermodal connectors and would thus be eligible to receive NHPP funds. Approval of a modification to the NHS system is independent of an FHWA Final SEIS/ROD. An NHS modification would have occurred prior to requesting construction funding.

- (2) In the process of modifying the NHS system, DOT&PF would have cooperated with local community officials.
- (3) DOT&PF plans to submit an asset management plan to FHWA. DOT&PF and FHWA disagree with the commenter's suggestion that the project is not consistent with the goals of the state's Long Range Transportation Plan. The SATP is an element of the Statewide Plan and it includes the JAI Project. The goal language cited by the commenter is still "preliminary" and has not been adopted. Nonetheless, it is consistent with the purpose and need for the JAI Project. Like the goal language, the alternatives under consideration seek to develop new capacity to meet demand. Similarly, consideration of State costs and the return on investment are defined in Chapter 2 of the Draft SEIS. Alternative 2B, the preferred alternative in the Draft SEIS, was found to best satisfy the overall corridor demand at the lowest cost per trip—in other words, it had the best return on investment. Finally, efficiency is an important consideration and need for the project. As documented in Chapter 2 of the Draft SEIS, the current system is not efficient, characterized by long travel times and high user costs. Alternative 2B performs best at in terms of efficiency, making the most improvement over current travel times and trip costs.
- (4) Currently, there are no funds shown in the STIP, since the preferred alternative has been changed to Alternative 1 No Action; however, during the period between the release of the 2014 Draft SEIS and prior to the change of the preferred alternative to Alternative 1 No Action, the completion of the design phase was shown in the 2016–2019 STIP. The funding for construction was after Federal Fiscal Year (FFY) 2019. A build alternative would have been constructed in stages, which is not segmentation. The initial construction stage would have occurred after the time frame presented in the current STIP (after 2019). Showing the intent to fully fund the JAI Project in the years beyond the current STIP shows intent by DOT&PF to fund the project in its entirety and was accepted by FHWA. (See http://dot.alaska.gov/stwdplng/cip/stip/index.shtml for full details on the STIP.)
- E) The Federal Transit Administration (FTA) Section 5309 New Starts program was an annual allocation to the State of Alaska for the AMHS under Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU) and was discontinued under Moving Ahead for Progress in the 21st Century Act (MAP-21).

Under MAP-21 and continued under the Fixing America's Surface Transportation (FAST) Act, FTA made available Section 5307 Urbanized Area Formula Grant program funds in support of the Discretionary (competitive selection) Passenger Ferry Grant program. The AMHS does not qualify for urbanized area funds.

AMHS is potentially eligible for 5311 Rural Transit Formula funds for non-urbanized areas. This is a small program, approximately \$8 million annually, and AMHS's participation in this program would generate little funding for the AMHS program and would divert federal funds away from rural community transit systems that depend on these funds for continued operation. As such, AMHS has not competed for 5311 funding due to the limited amount of funds available to the State of Alaska.

F) On December 4, 2015, the FAST Act, a 5-year transportation bill that will provide stability in federal funding over the life of the bill, was signed into law. The FAST Act

slightly increased annual highway funding for Alaska.

- G) The suggestion that FHWA or DOT&PF intend to build a road only to Kensington Mine is unfounded and not supported by any information in the Draft and Final SEIS.
- H) The Draft SEIS does not identify Shakwak funds as a potential source of funding for the project.

Group 436

Topic/Subtopic: Alternatives/Funding

Group Comment Text:

To obtain federal funding, the DHS and USCG must approve the planning action.

Group Comment Response:

Approval of project components or actions by DHS would not be required to obtain FHWA funding. USCG involvement/approval in advance of receiving FHWA construction funding would only be required in the event that a permit for a bridge over navigable U.S. waters is required. USCG bridge permits would be obtained during final design if a build alternative were selected.

Receiving FHWA funding would not be contingent on the USCG review/approval of AMHS vessel security plans.

Group 458

Topic/Subtopic: Alternatives/Funding

Group Comment Text:

DOT&PF should consider using military engineering units, such as the Seabees, as a way to reduce construction costs.

Group Comment Response:

The Metlakatla road project referenced in the comment was undertaken as a training program for multiple branches of the military, including the Navy's Construction Battalion (CB, or Seabees) in the early 2000s, and was not a normal construction program. Seabees typically work on military projects or goodwill projects overseas. While any government effort may be possible at the direction of the Congress, this has not occurred on the JAI Project and is considered unlikely. The JAI Project would proceed as a typical construction project funded by FHWA if a build alternative were selected.

Topic/Subtopic: Alternatives/General

Group Comment Text:

The Draft SEIS did not incorporate established infrastructure of State roads.

Group Comment Response:

The Draft SEIS did consider and incorporate the established State road infrastructure into the alternatives to the extent the infrastructure was a component of the alternative. In each of the alternatives, existing roads are used to connect to the alternatives. In some instances, improvements or extensions of the existing road infrastructure are proposed. Details of the alternatives, including information on how existing road and ferry infrastructure have been incorporated, can be found in Chapter 2 of the Draft and Final SEIS.

Group 645

Topic/Subtopic: Alternatives/General

Group Comment Text:

A) DOT&PF should analyze each alternative's ability to improve surface transportation relative to Alternative 1 - No Action.

B) The extent to which each alternative meets demand should be given less weight due to the inexact science of traffic projections.

Group Comment Response:

A) The Draft SEIS analyzed each alternative's ability to meet the project purpose and need, allowing for a comparison of each alternative against Alternative 1 – No Action. All reasonable alternatives satisfy the purpose and need to varying degrees. Some alternatives, however, do this better than others. Making a decision based primarily on comparing alternatives to Alternative 1 – No Action provides limited information (as any increase in travel would qualify as an increase in capacity). Doing better than Alternative 1 – No Action is not the overall purpose of the JAI Project. The overall purpose is meeting the demand for travel

The unconstrained traffic model represents the number of trips desired to be made by the traveling public. Only by evaluating alternatives against this measure, can FHWA determine how well an alternative does in meeting the purpose and need. Comparing alternatives to the unconstrained travel demand not only identifies how well the alternatives meet demand, but also identifies the number of trips not occurring due to operational and logistical constraints. The comparison can be made directly in Table ES-1 of the Executive Summary, where each alternative is characterized quantitatively with 12 purpose and need factors. Figure ES-1 presents the travel demand and capacity associated with each alternative in a chart that allows comparison of each alternative relative to Alternative 1 – No Action. The chart also allows comparison of the alternatives to the unconstrained demand.

B) All traffic demand models attempt to predict future demand based on assumptions and data available in the present. To the extent that they are predicting a future, unknown

condition, all demand models have uncertainty. The demand model used for the JAI Project was developed based on empirical data derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. The modeling was developed by travel modelers at Fehr & Peers. This firm was specifically identified and hired for its expertise in the travel modeling field, and the approach and results were peer reviewed by an independent university professor with expertise in travel modeling and travel behavior prior to the results being accepted for use in the Draft SEIS. No particular weight was given to any element of the project purpose and need. In making its decision for the Draft SEIS, FHWA examined how each of the alternatives meets each of the elements of the overall purpose and need for the project. FHWA balanced that information with the potential impacts to the natural and human environment to identify a preferred alternative. Identification of the preferred alternative in the Draft SEIS was addressed in Section 2.5, which indicates that DOT&PF and FHWA considered multiple factors.

Group 357

Topic/Subtopic: Alternatives/General Marine Alternatives

Group Comment Text:

It is imperative that any proposed modifications of the Skagway Ferry Float be coordinated with the Municipality of Skagway to ensure compatibility with the Municipality's uses. The Municipality should be consulted in the design, replacement, and implementation process of any additional infrastructure or changes to the existing facility to allow for the docking of the proposed shuttle ferries.

Group Comment Response:

If an alternative is selected that requires modifications to the Skagway Ferry Terminal floating dock, DOT&PF has committed to coordinating changes to the floating dock with the Municipality of Skagway during design.

Group 359

Topic/Subtopic: Alternatives/General Marine Alternatives

Group Comment Text:

DOT&PF should not use the existing ferry system as a baseline for comparison of alternatives. The ferry system has been poorly managed (e.g., ships were used past their useful lives, schedules and fares were not established to provide more ridership and revenue, etc.).

Group Comment Response:

NEPA requires consideration and evaluation of a No Action Alternative. The No Action Alternative is intended to serve as a baseline of existing conditions and trends to compare against the other ("build" or "action") alternatives. Making changes suggested by the commenter (management changes, schedule changes, fare changes) would not constitute a "No Action Alternative."

Topic/Subtopic: Alternatives/General Marine Alternatives

Group Comment Text:

Alternatives 4A and 4B did not receive a fair evaluation in the Draft SEIS analysis. These alternatives were penalized with the purchase of new ferries. The other alternatives do not include the construction cost of the Day Boat ACFs, prejudicing the decision away from selecting either of these fast ferry alternatives.

Group Comment Response:

Alternatives 4A and 4B received full and fair evaluation in the SEIS. The process required by NEPA and associated regulations is to evaluate a range of alternatives. In this case, there are alternatives that include a large road component and small ferry component, used existing ferry assets only, and mixed existing (or already programmed) and new ferry assets. In this case, the Day Boat ACFs had already been programmed (i.e., a decision had already been made to fund them) separately from the JAI Project, while the fast vehicle ferries (FVFs) under Alternatives 4A and 4B were proposed as a part of this project only (i.e., they are not programmed) and therefore would have needed to be funded by this project. This is no different than the aspects of other alternatives (e.g., road or docking facilities) that would have needed capital improvements to make them functional. These are realities that the Draft and Final SEIS draws into focus by presenting information on each alternative.

Group 383

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

DOT&PF should modify the ferry service proposed in the alternatives presented in the Draft SEIS. Changes could include:

- A) DOT&PF should optimize/improve vessel deployment, routing, and scheduling, taking into consideration capacity and demand (e.g., discontinuing service to Washington State).
- B) DOT&PF should replace aging ferries with new ferries.
- C) DOT&PF should add public transportation from Juneau to the Auke Bay Terminal and from Auke Bay Terminal to the airport.
- D) DOT&PF should optimize/modify Day Boat ACF vessel design.
- E) DOT&PF should remove mainliner service in Lynn Canal for the marine alternatives.

Group Comment Response:

General Response: A number of comments suggested general modifications to the ferry schedule, vessel designs, or routing that do not address the specific purpose and need identified for Juneau access in Lynn Canal and are outside the scope of this project. Specific responses follow below:

- A) Wholesale changes to the AMHS ferry system are beyond the scope for this project. Alternative 1B does provide enhanced ferry service with existing assets primarily by increasing capacity and frequency of service through the deployment and routing of vessels in Lynn Canal. Vessel selection for use in Alternative 1B was done with the intent not to diminish service elsewhere in the system. Optimizing AMHS deployment and scheduling throughout the system are AMHS operational decisions. AMHS schedules are published in draft twice per year and comments are considered before schedules, including what vessels are assigned to a given route, are finalized. AMHS is continually making changes to vessel deployment based on budget, amount of demand, and vessel availability.
- B) As mentioned above, the replacement of aging ferries does not address the project's purpose and need. The issue is relevant to AMHS long range planning addressed in the SATP. The SATP is in the process of being updated—these comments have been forwarded to the SATP planner.
- C) As mentioned above, providing public transportation between the Auke Bay Terminal, downtown Juneau, and the Juneau Airport does not address the purpose and need for this project. In addition, providing public bus service is not a State responsibility and therefore is not an element that can be added to JAI Project alternatives.
- D) The two Day Boat ACFs are under construction at the time of this Final SEIS. The plan to construct two bow door Day Boat ACFs without crew quarters was made independent of the JAI Project SEIS. The State concluded the cost savings of 12-hour, no crew quarter vessels outweighed the greater versatility the crew quarters would provide. Because design and construction of the ACFs were previously approved through an independent decision, the JAI Project SEIS has incorporated them "as is" into the project alternatives to the extent reasonable. The two Day Boat ACFs are incorporated into all alternatives except Alternatives 4A and 4B. A consideration in incorporating the Day Boat ACFs is that the vessel cannot make the Auke Bay-Skagway-Haines-Auke Bay loop in 12 hours.
- E) AMHS intends to continue providing direct uninterrupted service between Haines-Skagway and Prince Rupert-Bellingham. This operational decision applies to marine Alternatives 1 (No Action), 1B, and 4A through 4D. The mainliner service in Lynn Canal provides additional necessary capacity (to best meet the purpose and need) for the marine alternatives and provides uninterrupted service for passengers passing through Juneau. Note the Skagway Marine Access Commission (SMAC) suggested two alternatives that they refer to as "Alternatives 1B optimized" and "Alternative 5;" both of which would remove mainliner service from Lynn Canal. See Appendix II, *Alternative 1B Optimized and Alternative 5 Evaluation*, of the Final SEIS for discussion.

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

- A) DOT&PF should consider relocating the ferry terminal at William Henry Bay to Boat Harbor
- B) Ferry alternatives should be modified to avoid constructing a ferry terminal in Berners Bay, possibly continuing to use the Auke Bay terminal.
- C) DOT&PF should consider building the ferry terminal at Cascade Point or other sites along the Juneau road system.

Group Comment Response:

- A) Relocating the ferry terminal south from William Henry Bay to Boat Harbor consists of an additional 8 to 10 miles of road construction and extensive site work at Boat Harbor. This work results in an increase to project cost and environmental impacts, such as waters of the U.S. and terrestrial habitat.
- B) Eliminating the ferry terminal in Berners Bay and continuing to operate from Auke Bay:
- (1) Eliminates Alternatives 4B and 4D from consideration, and
- (2) Significantly reduces the capacity of Alternative 3.

The distance from Auke Bay to William Henry Bay (31 nautical miles) is over two and a half times the distance between Sawmill Cove and William Henry Bay (12 nautical miles). This increase in ferry travel time results in a reduction of four to two winter round trips and six to four summer round trips. The increase in travel time and reduced capacity would result in additional cost to the user and adds net operating cost to the State.

C) Sites along the road system south of Berners Bay were dismissed during alternative screening due to basin characteristics and exposure to the weather. If the selected Final SEIS preferred alternative would have involved a ferry terminal in Berners Bay, DOT&PF would have investigated the suitability and availability of siting the ferry terminal at Cascade Point

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

Suggested changes to Alternative 2B include:

- A) DOT&PF should provide ferry service in Lynn Canal in winter to keep travelers safe.
- B) DOT&PF should consider a summer-only road.
- C) DOT&PF should consider putting the ferry terminal south of the Katzehin River, eliminating the need to build a bridge.

Group Comment Response:

Regulations under NEPA indicate that an EIS must cover a full range of reasonable alternatives, but an EIS is not required to address every possible option or alteration within a virtually infinite number of possibilities. The alternatives were designed to best meet engineering objectives and environmental considerations.

- A) Section 2.3.3 of the Draft and Final SEIS state that ferries would be available to provide transportation in winter from Auke Bay to Haines-Skagway when needed because of road closures. For the Final SEIS, similar language has been added for Alternative 3 (Section 2.3.4), although winter closures are anticipated to be somewhat less likely under Alternative 3.
- B) DOT&PF examined the maintenance issues and risk associated with avalanches and included avalanche risk mitigation in its design and in its operating plan for Alternatives 2B and 3. With mitigation, including the ability to employ ferries if the road is closed for avalanche maintenance work or other weather-related issues, DOT&PF believes it will be less expensive and would serve the traveling public better (more frequency, and less time and cost of travel) to maintain the road year round rather than offer a summer-only road.
- C) Engineers sited the Katzehin Ferry Terminal considering such factors as depth of water off-shore at all tide levels, ability to protect the mooring area from heavy seas, terrain on-shore suitable for the road approach and for parking and circulation, and running time of the ferry. A ferry terminal directly south of the Katzehin River was considered but determined not practicable. Considerations included:
- (1) The prevalent storm wind and wave direction is from the southeast. The shoreline south of Katzehin is completely exposed to the southeast;
- (2) The five fathom contour extends more than one mile off shore south of the river. To construct a terminal would require extensive dredging initially and maintenance dredging periodically due to the continuing deposition of glacier silt from the Katzehin River; and
- (3) The upland terrain is steep. As the ferry terminal is currently sited, the delta uplands provide protection from the weather and a degree of protection from the constant deposition of glacier silt.

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

- A) DOT&PF should consider SMAC's proposed optimization of Alternative 1B.
- B) This information can be used to improve Alternatives 4A, 4B, 4C, and 4D.

Group Comment Response:

- A) DOT&PF considered SMAC's proposed Alternative 1B optimized; an analysis of the alternative was developed and can be found in Appendix II, *Alternative 1B Optimized and Alternative 5 Evaluation*, of the Final SEIS. The proposed alternative would have been very similar to Alternative 1B. The analysis identified three primary inadequacies of the proposed variation: 1) given the USCG single crew 12 hour work limitation, AMHS would not schedule the Day Boat ACF on the Auke Bay-Skagway link; 2) by removing the mainliners from Lynn Canal, typically there would not be sufficient capacity to manage same day traffic; and 3) there is insufficient berth space and vehicle staging areas in Auke Bay to have the mainline vessels in port while accommodating all the transferring vehicles without vessel and vehicle congestion and delays. Based on these considerations, FHWA and DOT&PF have determined that this variation is not reasonable.
- B) The primary component of the proposed Alternative 1B optimized that would be relevant to Alternatives 4A through 4D, would be turning the mainliners around at Auke Bay. This concept was reviewed and rejected since the capacity provided by the mainliners is required to meet the projected traffic demand for Alternatives 4A through 4D in Lynn Canal.

Group 628

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

DOT&PF should consider redeveloping the Juneau Ferry Terminal to be a parking structure. Currently, the State makes no money on parking, and the parking lot is always full.

Group Comment Response:

This proposed alternative, modifying the Juneau Ferry Terminal and generating revenue from a parking structure, does not address the purpose and need of the project.

Topic/Subtopic: Alternatives/Modification of Alternative Recommended

Group Comment Text:

DOT&PF should consider SMAC's proposed Alternative 5.

Group Comment Response:

DOT&PF considered SMAC's proposed Alternative 5; an analysis of the alternative was developed and can be found in Appendix II, *Alternative 1B Optimized and Alternative 5 Evaluation*, as well as Section 2.4.2, All Day Boat ACF Alternative, in the Final SEIS. FHWA and DOT&PF determined that Alternative 5 is a variation of existing alternatives and therefore would be an unnecessary addition to the range of reasonable alternatives. It would attract fewer trips than Alternative 1B, provide similar capacity to Haines (and less to Skagway), and would have similar travel time as other alternatives studied (Alternatives 1 (No Action), 1B, and 4C). It falls within the range of capital and operational costs of the other alternatives. In addition, discontinuing mainline ferry service under this alternative could create capacity issues, preventing some travelers from reaching their final destination via a direct ferry connection. This could increase travel time and user costs. In summary, it is not unique enough to constitute consideration outside the alternatives already considered, and analysis to date confirms it is inferior to these alternatives.

Group 373

Topic/Subtopic: Alternatives/New Alternative Recommended

Group Comment Text:

- A) Has DOT&PF researched alternate routes on the west side of Lynn Canal?
- B) The Draft SEIS should consider a west side alternative consisting of a terminal in Saint James Bay with ferries originating from Auke Bay.

Group Comment Response:

Regulations for implementing NEPA require that a full range of reasonable alternatives be considered; however, the regulations do not require an examination of every permutation or possibility when there is a virtually infinite number of possibilities.

- A) The alternatives were developed to try and address the purpose and need identified in the JAI Project SEIS. Alternative 3, located on the west side, represents a realistic, feasible road alignment that took into account engineering and environmental consideration in attempting to meet the project purpose and need. Some of the suggestions in this comment group, such as those that suggest access to Gustavus and Sitka, would not address the purpose and need of this project, but would be entirely different projects with different purpose and need statements.
- B) During the project reconnaissance effort, engineers examined the best way to create alternatives that would have function well and identified the ferry terminal locations based on such factors as depth of water, protection from large waves, ability to protect the mooring, terrain on shore for the approach roads, parking, circulation, and the operational needs of the ferry, including the length of the ferry run. A ferry route from Auke Bay

Terminal to St. James Bay would be much longer than the route identified for Alternative 3 (Berners Bay to William Henry Bay), which would result in longer travel times, higher user costs, and less frequency in sailings. In combination, these impacts would reduce the traffic demand the West Lynn Canal Highway would generate.

Group 374

Topic/Subtopic: Alternatives/New Alternative Recommended

Group Comment Text:

- A) Is there a more creative approach to transportation access that is less intrusive and destructive to the environment?
- B) DOT&PF should consider different designs than what was presented in the Draft SEIS:
- (1) A floating road;
- (2) Extended tunneling through the mountains; and
- (3) Surface road the full length of Lynn Canal.

- A) DOT&PF and FHWA undertook an exhaustive and thorough alternative development process. Alternatives were developed, shared with the public during scoping, and revised based on public comments. Alternatives that were not feasible or had unacceptable impacts were eliminated. Reasonable alternatives were refined and the environmental impacts evaluated. That evaluation process further refined the alternatives to avoid and minimize impacts.
- B) A number of design concepts were suggested and are either not reasonable or not feasible, and would have extraordinary costs well beyond the realm of the alternatives under consideration.
- (1) Floating bridges would be the longest in the world and would not be feasible from an engineering perspective. A floating bridge would be a structure in excess of 50 miles long. For a short stretch, such a structure may be possible, especially in places with very high traffic volumes. Lynn Canal would neither be short nor would have high traffic volumes. Section 2.2.9 of the Draft SEIS addressed a potential floating bridge of only 7,000 feet from Katzehin River to Haines and found it cost prohibitive. Among the issues would be anchoring to withstand all tidal, wind, and wave conditions, and design issues would include providing for access by boats across the structure at many points, including at least one passage for large cruise ships.
- (2) Tunnels similarly may make sense for relatively short segments but not over long distances. Tunnels are very expensive to build, many time greater than road construction. Long tunnels over a few hundred feet require mechanical ventilation, escape routes for fire, safe houses with dedicated air supply, and other extraordinary maintenance and operation costs. Tunnel boring machines exist to bore tunnels through principally loose soils, not rock. Rock tunneling requires blasting.

(3) A standard road extending from Katzehin River to the northern end of Lynn Canal corridor at Skagway is achievable without tunnels and was represented among reasonable alternatives in the original EIS. However, it was determined that natural areas that are part of Skagway's National Historic Landmark are protected under Section 4(f), which prohibits use of such lands when other prudent and feasible alternatives exist. Section 2.2.9 of the Draft SEIS addressed multiple alternatives considered and found not to be reasonable.

Group 380

Topic/Subtopic: Alternatives/New Alternative Recommended

Group Comment Text:

- A) The AMHS should be managed to maximize revenues in northern Lynn Canal and should focus on improving the economics of the unprofitable areas of the system.
- B) The SEIS should evaluate an alternative that incorporates an Inter-island Ferry Authority (IFA) style business plan (a non-profit community collaborative), private industry, or public-private partnership to improve ferry service and reduce State costs.

Group Comment Response:

A) Some of the comments in this group of comments address system-wide operational costs for the AMHS. While this is an important topic, the JAI Project is about access to and from Juneau and making that component of the NHS function better and at lower cost to the users and to the State. The federal action under consideration is funding for capital construction (note: no funding is necessary with selection of Alternative 1 – No Action as the preferred alternative). The federal portion of project funding would not cover maintenance and operations costs. The resulting maintenance and operation costs of any selected alternative would be impacts to the State of Alaska, to be covered by a combination of fares and appropriations from the General Fund. System-wide reductions in State cost could be a benefit of the project, but system-wide reduction in cost is not the purpose of the JAI project.

There is a misconception that in the past, the Lynn Canal Service covered its costs and generated excess revenue that helped to subsidize other less profitable runs in the system. While traffic and revenue studies indicate higher demand in Lynn Canal, and therefore higher revenues, the current ferry system in Lynn Canal still requires a substantial State subsidy. While Lynn Canal service came somewhat closer to covering its costs in the past than some other routes, it still requires State funds each year to subsidize that service. The Draft and Final SEIS address this topic, with discussion of both statewide and Lynn Canal costs. For example, Section 1.4.4 of the Draft SEIS described the costs, revenues, and subsidy necessary to run the AMHS system.

B) The AMHS link between Juneau and Haines-Skagway connects the NHS in northern Lynn Canal. Due to the importance of this link, DOT&PF has historically held the position that the link needed to be State owned and operated.

7.3 Avalanche

Group 13

Topic/Subtopic: Avalanche/Avalanche Hazards

Group Comment Text:

Commenters characterized the assessment of avalanche risk as inadequate or poorly explained in the Draft SEIS. Some questioned the calculations and applicability of an Avalanche Hazard Index (AHI). These comments can be summarized as follows:

- A) The risk evaluation is inadequate.
- B) The AHI is not the appropriate tool for characterizing the avalanche hazard for this project because the quality and amount of data being used does not meet the standards of AHI applicability. Periods of record and frequency of observation are too short. Comparisons to other roads (e.g., Rogers Pass and Seward Highway) may not be valid.
- C) Factors and assumptions used in developing AHI and calculations of mitigated AHI should be clearly explained.
- D) The analysis does not address avalanche hazard associated with cars trapped by an avalanche and in the path of other (unreleased) avalanches (Waiting AHI). Such an analysis should consider the remoteness of the highway and lack of communication infrastructure, which would make response times over an hour and include avalanche detection systems.
- E) The Draft SEIS did not describe the consequence of being caught in an avalanche. There will likely be fatalities.
- F) How will construction personnel and road clearing crews stay safe? The SEIS should account for the number of avalanche fatalities of travelers and highway operators. This could be calculated as part of the Waiting AHI.
- G) The SEIS should explain that Alternative 2B would dismantle a safe, reliable ferry service and replace it with a road where human error, malfunctioning weather stations, and/or rapidly changing weather conditions could cause human fatalities from avalanches.
- H) How would the AHI account for the risks associated with paths having multiple start zones?
- I) Calculations of "Encounter Probability" should include the Q Factor, which accounts for the consequences of a particular vehicle getting hit by an avalanche.
- J) The analysis should have been subject to a peer review.
- K) The analysis should include a review and discussion of close calls with mitigated AHI over 40.
- L) Was only one vehicle type used for computation of AHI levels?

- M) There are no provisions in the AHI calculations for annual avalanche debris volumes.
- N) The SEIS needs to include worst case analysis of the potential impacts from plunging avalanches and the encounter probability of such.

Group Comment Response:

- A) The level of specificity for risk evaluation of the 2013 Update to Appendix J Snow Avalanche Report is more than adequate for EIS-level evaluation, and the experience of the authors and reviewers is backed up by the resumes that are now included in the 2017 Update to Appendix J Snow Avalanche Report. Please refer to that appendix for the details of the studies done.
- B) The 2013 Update to Appendix J Snow Avalanche Report, Section 6 Avalanche Mitigation includes using AHI, the most widely accepted industry standard for comparison, with other highways and with AHI target values that are accepted within the industry. It also analyzes the effectiveness of avalanche programs and compares Alaskan highway avalanche risk with other common risks. These discussions cover worst cases, and the analyses can be done on a factual, data-driven basis, without speculation.

Historical records longer than a few years are usually not available for Alaska projects, so the best available data must be used. The period of study was prepared by professionals in the field of avalanche study and is adequate for EIS-level evaluation. For information on how representative the years studied were, and on corrections applied, please refer to the 2017 Update to Appendix J – Snow Avalanche Report, Sections 12.2 Appendix 2: AHI Data Collection and Reliability and .12.3 Appendix 3: AHI Input Data Analysis, and the raw data and calculation spreadsheets available online in pdf format at www.juneauaccess.alaska.gov.

Figure 2, from Section 3.1 Avalanche Hazard of the 2017 Update to Appendix J – Snow Avalanche Report shows that the unmitigated AHI for the East Lynn route is less than one-third that of the Rogers Pass or Little Cottonwood Highways. Each of the highways compared has its own unique circumstances. The only objective way to compare them is to simply list their values without prejudicial comment. All these highways are operated with acceptable records. It is accurate to describe it as in the middle of this range, and it is well-supported by the figures in the table and by the accompanying discussion.

Highway Methods	Unmitigated AHI	Daily Observations & Forecasts	Forecasting, Closure, & Explosives	Structural Mitigation	Special Explosives
Little Cottonwood, UT	1045	X	X		X
Rogers Pass, BC	1004	X	X	X	X
Red Mtn. Pass, CO	335	X	X	X	
* Seward Highway, AK (Anchorage-Seward, old alignment)	331	X	X	Х	
East Lynn, AK	288	X	X	X	
* Seward Highway, AK (Anchorage-Girdwood, old alignment)	188	X	X	X	
Coal Bank/Molas, CO	108	X	X		

Highway Methods	Unmitigated AHI	Daily Observations & Forecasts	Forecasting, Closure, & Explosives	Structural Mitigation	Special Explosives
West Lynn, AK	101	X	X	X	
Berthoud Pass, CO	93	X	X		
Coquihalla, BC	90	X	X	X	X
Loveland Pass, CO	80	X	X		
Wolf Creek Pass, CO	54	X	X	X	
Silverton-Gladstone, CO	49	X	X		
Teton Pass, WY	47	X	X		X
Lizard Head Pass, CO	39	X	X		
I-70 Tunnel Approaches, CO	27	X	X	X	
Thane Road, AK	21		X	X	

Both Rogers Pass and the East Lynn Canal routes use snowsheds to drop their AHI substantially—to 167 in the case of East Lynn Canal, and to 214 in the case of Rogers Pass, with mitigation to further lower those numbers to acceptable levels. These similarities suggest that there is good basis for comparison.

The statement that the original route of the Seward Highway had such a great potential for mass casualties is not supported by its unmitigated AHI of 331 from Anchorage to Seward and 188 from Anchorage to Girdwood, unless the avalanche mitigation program was ineffective or nonexistent. The AHI figures, calculated from DOT&PF records, would appear a more accurate basis for comparison than an anecdotal statement unsupported by evidence, even one attributed to a distinguished and acknowledged expert in the field.

Editing the list of highways compared reduces objectivity, and can be used to reach any predetermined conclusion. A broad-based sample was used to minimize bias.

The Chugach Range's avalanche climate is very different from that of Southeast Alaska. While Lynn Canal's mountains are higher, steeper, and wetter; they are also warmer and have more-frequent high-friction snow or bare ground conditions that limit runout distances. The comparison is based on actual avalanche activity in both locations.

Mitigation measures for the proposed Alternative 2B include snowsheds, preventive closures with shuttle ferries as an alternative, and fixed exploders, none of which are used on the Seward Highway.

- C) The raw data and calculation spreadsheets are available in pdf format online at www.juneauaccess.alaska.gov. For information on how representative the years studied were, and one correction applied, please refer to the 2017 Update to Appendix J, Snow Avalanche Report, Section 12.2 Appendix 2: AHI Data Collection and Reliability and Section 12.3 Appendix 3: AHI Input Data Analysis.
- D) For Waiting and Moving AHI figures, please refer to the raw data and calculation spreadsheets available online in pdf format at www.juneauaccess.alaska.gov.

The calculation of the Waiting AHI was not actually based on a waiting period. All paths with multiple starting zones or in groups where they are close to other paths were instead assigned increased probabilities of secondary avalanches, as detailed in the calculation spreadsheets.

It is optional rather than standard practice to include Waiting AHI figures in published reports, particularly at the EIS level.

A traffic speed of 40 miles per hour (64 kilometers per hour) was used as a storm conditions traffic speed for AHI calculations. With a relatively low winter traffic count of 460 vehicles per day, even if all those vehicles traveled during an 8-hour period and response took 2 hours, the queue length of less than 1.2 miles (2 kilometers) is not sufficient to put travelers at risk from paths in other groups.

Stopping distance is not used in queue length; that error has been edited out. Please refer to the *2017 Update to Appendix J, Snow Avalanche Report*, Section 12 Appendix 1: Avalanche Hazard Index (AHI) Calculation for details of the AHI calculation.

Avalanche detection systems were among the many mitigation options considered but rejected early in the analysis. Detection systems sound like a good idea, and would be if they were more reliable, but in their present state of development, they fail to detect some slides, and produce too many false alarms. They did not make the first cut of EIS-level budgeting and evaluation.

- E) The Draft SEIS addresses avalanches in Chapter 4 in the eighth section under each alternative (e.g., Section 4.3.8.2 for Alternative 2B). While avalanche risk and hazard are addressed in the Draft SEIS, the text was revised to clarify that avalanche hazard includes the risks of property damage, injury, and death. However, the SEIS addresses how to mitigate these risks by forecasting, road closures, use of explosives, bridges, snow sheds, etc.
- F) The 2013 Update to Appendix J Snow Avalanche Report, Section 6.4 Operational Avalanche Risk Management Program, outlines the considerations for developing worker risk reduction programs for construction and operations. Section 12.4 Appendix 4: Highway Closures, Section 13 Appendix 5: Transportation Avalanche Danger Scale, and Section 13.1 Appendix 6: Highway Closure and Operation Criteria, outline the need for operational worker risk reduction programs, contain examples of the material in such operational plans, and clearly state that "These guidelines are a sample of the kind of material that is part of a project-specific operational avalanche plan and are not a substitute for such a detailed plan. A project-specific plan is required under Alaska case law for worker safety before construction or operation of an avalanche-exposed facility may proceed." A project-specific operational avalanche plan would have been developed during final design should a build alternative be selected.

Section 6.2 AHI Values and Risk to Travelers and Workers compared public and worker deaths on high-AHI highways and noted that "The higher risk to highway workers underscores the need for strict adherence to the avalanche program and risk management protocols presented in this study, particularly when reopening the highway after avalanches have occurred." While development of an operations plan would be required during final design phase if a build alterative was selected, key concerns and typical risk mitigation measures detailed in Section 6.4 Operational Avalanche Risk Management Program include forecasting, closures, allowing debris removal only with the approval of the

avalanche forecaster, and specific provisions for clearing debris. Sample protocols with specifics for risk reduction at various avalanche danger levels are provided in Appendix 6: Highway Closure and Operation Criteria.

There is not an accepted method for calculating absolute risk of avalanche deaths on transportation corridors. The established standard for evaluating risk is comparison of Avalanche Hazard Indices, as is presented in the 2013 Update to Appendix J, Snow Avalanche Report. The standard practice for avalanche mitigation work is that all multiple starting zones are dealt with before anyone is allowed into their runout zones; therefore, multiple starting zones do not represent an increased risk to workers or the traveling public. Risk management for maintenance crews is part of an operations plan, which is not done until the design and pre-operations stage, but the program outlined in Section 6.4.6, Highway Operations Procedures, nonetheless stated that "No avalanche debris should be cleared without approval from the on-duty avalanche specialist. The specialist should consider visibility, presence of residual snow in avalanche starting zones, terrain hazards, availability of spotters and equipment and other risk factors. No avalanche debris should be cleared when visibility is poor due to darkness or conditions such as fog."

- G) The existing AMHS system has had no fatalities since 1975, making the road alternatives appear to be less safe than the ferry alternatives. While the AMHS is safe, it does have the potential for catastrophic incidents due to the high number of people on a ferry and the hazards of ocean travel in Alaska's environment. Ferry incidents tend to occur less frequently, but if they do they can be severe, which makes it difficult to compare the safety of highway and ferry alternatives. While travel in private vehicles tends to be less safe than some other modes of travel, Americans routinely select that mode of travel because of the advantages of convenience, cost, and travel time. Alternatives 2B and 3 would create a transportation system in Lynn Canal that provides these same advantages, but that also comes with a safety risk inherent in private automobile travel. Each mode of modern transportation is designed and operated to current standards to protect human health and safety to the extent possible. The "Avalanches" sections of the Draft SEIS describe how this would be accomplished for this project, including construction of snowsheds and berms, explosives, forecasting, and road closures. For Alternative 2B, the mitigated AHI score would be 28, down from an unmitigated score of 288. This is achieved through an Avalanche Management Program that allows for a safe traveling road system.
- H) All paths with multiple starting zones or in groups where they are close to other paths were assigned increased probabilities of secondary avalanches. Please refer to the 2017 Update to Appendix J Snow Avalanche Report, Section 12 Appendix 1: Avalanche Hazard Index (AHI) Calculation for updated details of the AHI calculation.

For further details, please refer to the raw data and calculation spreadsheets available online in pdf format at www.juneauaccess.alaska.gov.

I) While it is possible to calculate societal cost values for economic losses, injury, and death as suggested, using a "Q factor" for the economic losses, using the numbers thus obtained would be of questionable accuracy. There is an international group working on the problem of assigning risk of death, but there is no accepted, accurate method for

calculating probability of avalanche death on transportation corridors or the number of vehicles impacted. Additionally, calculations for financial loss have not been applied widely enough for comparison with other highways.

The encounter probability term as calculated for the AHI is an oversimplified calculation. Using it as a basis for calculation of potential deaths does not result in numbers that agree with actual highway avalanche death records, as noted in Hendrikx and Owens 2008, "Modified avalanche risk equations to account for waiting traffic on avalanche prone roads," in *Cold Regions Science and Technology* 51 (2008) 214–218. This document quotes Peter Scherer, the originator of the AHI method: "Furthermore, while the individual and collective risk enumerated in deaths year–1 may still seem high, Schaerer (1989) noted that the theoretical frequency of encounters has been found to be far greater than the observed number, providing the example of Rogers Pass, where the expected encounter frequency was calculated at 0.3 vehicles year–1 for a 25 year period, but no encounters actually occurred during this period."

The one method of assessing risk on transportation corridors that has a historical record of being a useful working basis for comparison of one route to another is the AHI, without the addition of socioeconomic factors. It is the most widely-used, most-accepted, and thus has the greatest comparative value, of all methods.

The 2013 Update to Appendix J – Snow Avalanche Report, 6.2.1 Risk Management Analysis of Three Very High AHI Highways, provides a detailed comparison of death rates on highways with similar AHIs.

J) The 2013 Update to Appendix J, Snow Avalanche Report was peer reviewed. Please refer to the 2017 Update to Appendix J – Snow Avalanche Report, Section 13.11 Appendix 16 Peer Review, for details.

Resumes for those who worked on and reviewed the study have been added to the 2017 *Update to Appendix J – Snow Avalanche Report* as Section 13.12, Appendix 17, Resumes. These resumes demonstrate that the authors and peer reviewers have extensive real life experience with avalanche control programs.

- K) Figures are not generally or consistently kept for close calls on avalanche incidents. There is not enough quality data available for comparison or analysis. Death rates are still the most reliable figures available. The 2017 Update to Appendix J Snow Avalanche Report, Section 6.2.1 Risk Management Analysis of Three Very High AHI Highways, provides a detailed comparison of death rates on highways with similar AHIs.
- L) Vehicle types were not used in most of the highways compared, so no shape factor was used. Shape factor is more useful for railroad than for highway work.
- M) While it is true that calculation of debris volumes is not normally a part of the AHI calculation, a method was developed to plug an estimation method into that spreadsheet. Please refer to the AHI calculation spreadsheets available online in pdf format at www.juneauaccess.alaska.gov.

N) Worst case scenarios are addressed throughout Appendix J-Snow Avalanche Report by using actual avalanche occurrence and weather data comparison with operating avalanche programs, and are further addressed in Section 4.1, Avalanche Event Variability. The AHI calculations included an increased risk factor for plunging avalanches, which was applied to vehicles that might be carried into the water, as detailed in the $2017 \ Update \ to \ Appendix \ J-Snow \ Avalanche \ Report$, Appendix 1: Avalanche Hazard Index (AHI) Calculation.

Group 14

Topic/Subtopic: Avalanche/Avalanche Hazards

Group Comment Text:

The 2014 Draft SEIS, 2013 Update to Appendix J – Snow Avalanche Report, should be revised as follows:

- A) Discuss wet snow climax avalanches, which occur in the spring.
- B) Provide the period of record for regional snowfall amounts.
- C) Consider microclimates and how they affect snowfall.
- D) Why did the Draft SEIS use sea level snowfall data at the Juneau International Airport?
- E) Discuss why there are lower snowfall estimates north of Berners Bay given the recorded snowfall records at the Haines Airport.
- F) Address seemingly problematic forecasting for avalanche programs.

Group Comment Response:

The 2013 Update to Appendix J – Snow Avalanche Report, Section 5 Regional Snowfall, stated that these are estimates based on limited data. As with all projects in Alaska, the available weather data is regional rather than project-specific, and period of record is variable and usually not very long, as climate records go. Different data sets over different periods inevitably yield a range of values, and quality of the data is variable.

This is why avalanche hazard evaluation and program design are based on actual observed and recorded avalanche activity; not on snowfall estimates or weather records. No greater level of accuracy is available or necessary for avalanche evaluation at the EIS level. In addition, further weather measurements are not needed for the final design, construction, and operations phases.

- A) Please refer to the raw data and calculation spreadsheets available online in pdf format at www.juneauaccess.alaska.gov. All avalanches, including those in late spring and wet snow, were recorded and factored into the calculations. There was nothing about any particular type of avalanche that merited separate discussion.
- B) In the Draft SEIS, the weather figures were not updated from the original 2005 studies. These figures were updated in the Final SEIS with what is currently available online, including their periods of record, from the Juneau office of the National Weather Service:

Juneau International Airport (1981 to 2010): 87 inches (2.2 meters)

Lena Point (1983 to 2015): 80 inches (2.0 meters)

Tee Harbor area (station no longer exists): 145 inches (3.7 meters)

Haines downtown (2000-2015): 165 inches (4.2 meters)

Haines Airport (1972-2013; no longer records snowfall): 133 inches (3.4 meters)

Haines Highway, Pleasant Camp (2001-2015): 236 inches (6.0 meters)

Skagway Airport (1965 to 2010; no longer records snowfall): 49 inches (1.2 meters)

Skagway (harbor; no longer records snowfall): 37 inches (0.9 meters)

Skagway Power (downtown; 2001-2015): 52 inches (1.3 meters)

The estimates presented in the original 2005 study are unchanged by the new data, and the estimated average snowfall at starting zone elevations along the East Lynn Canal route from Berners Bay to the Katzehin River can be best described as ranging from about 150 inches (3.8 meters) to 210 inches (5.3 meters). This is less than 200 inches (5.1 meters) overall average. The figure for all of Lynn Canal, from Berners Bay to Skagway, is useful as regional climate information along the entire route, including those portions served by ferries.

A paragraph was added to clarify the rough nature of the snowfall estimates: "Snowfall is not calculated into avalanche hazard evaluation or used to develop mitigation measures. Avalanche studies are based on hard data from actual avalanche occurrences, rather than indirect calculation from snowfall figures. Snowfall for Alaska projects must always be estimated from the records that are available in the region. These observations are usually incomplete, and taken over a relatively short period of record, so the snowfall estimates are necessarily rough estimates only."

- C) The microclimatic zones as identified were considered and observed consistently over a six-year period of aerial avalanche observations. The estimates of microclimatic variability along Lynn Canal were based on aerial observations, consistent with ballpark estimation (i.e., enough snow to cover and smooth topography, enough snow to cover but still show the topography, and not enough to consistently cover the topography). Haines is a higher-snowfall microclimate due to the frequent presence of the Arctic front there, while upper Lynn Canal as it heads into Taiya Inlet is much drier.
- D) The Juneau Airport weather record is the only long-term historical record in the region. Snowfall there was chosen by lifetime National Weather Service climatologist Robert A. Kanan as the most useful parameter for evaluating long-term climate trends and distinguishing between the warm and cold periods, which correlate strongly with the frequency of large avalanches.
- E) Haines Airport snowfall is not indicative of snowfall on the east side of Lynn Canal. Snowfall on the east side of Lynn Canal is markedly different from that on the west side. Based on aerial observations of snowcover, there is a marked decrease in snowfall north of Yeldagalga Creek, and another decrease up Taiya Inlet.

F) Operational avalanche programs in coastal Alaska always face difficult forecasting conditions, but operate successfully on Alaska highways—at the Alyeska and Eaglecrest ski areas, Kensington Mine, Alaska Electric Light and Power, the Alaska Railroad, and the White Pass and Yukon Route. Forecasters use all available data, including weather models, to supplement National Weather Service products and produce custom forecasts.

Group 2

Topic/Subtopic: Avalanche/Avalanche Mitigation

Group Comment Text:

- A) The avalanche control methods described in the Draft SEIS will be difficult to implement because:
- (1) It relies on helicopter use, which may be impractical during winter storm conditions (i.e., snow builds up during stormy weather when low ceilings and high winds make it difficult to fly helicopters);
- (2) The maritime weather conditions could cause ice build-up on blaster boxes and weather stations, making them inoperable;
- (3) The number of masts and blaster boxes required is unprecedented anywhere in the world;
- (4) Using howitzers to trigger deep slab avalanches of 10 feet (3 meters) or greater have a success rate of just over 50 percent; and
- (5) The State has never preemptively closed a road due to avalanche danger, so this cannot be a mitigation strategy.
- B) A detailed avalanche control plan should be developed, consistent with Alaska Statute 19.05.030(7) wherein DOT&PF is tasked to "develop and implement an avalanche control plan to protect persons who use public highways."
- C) The analysis should include who would perform avalanche control work and who would pay for avalanche control and winter maintenance.
- D) The analysis should note that avalanche frequency actually increases with explosives mitigation.
- E) The analysis should use Power Law data from the Chugach Range.
- F) Avalanche mitigation should be part of the requirements for federal approval and funding.
- G) Alternative 2B should include infrastructure to accommodate a highway information management system that can identify hazards in real time (e.g., cameras, communications, electronic-real time avalanche warning signs) and notify highway response teams (e.g., maintenance and emergency responders) of pending or actual avalanches. Including them

in the infrastructure now will save time, money, and effort later or after the fact.

- H) The range scatter effects of shooting at long distances should be included.
- I) Section 3.7.3 of the Draft SEIS mentioned "expensive howitzer" ammunition; is this correct?
- J) The analysis should include how avalanche control devices would be powered.

- A) (1) The effects of bad weather on helicopter use were anticipated, which is why remote exploders were proposed to reduce reliance on helicopter flight limitations due to bad weather and darkness. Remote exploders can be loaded and serviced between storms during daylight hours.
- (2) Rime ice buildup is common to all weather stations and avalanche mitigation systems used at altitude in coastal Alaska. All programs in the region operate successfully despite rime buildup affecting such high-elevation installations as weather instruments and remote exploders. Rime ice buildup was factored into all risk, closure, and budget estimates.
- (3) DOT&PF recognizes that there are many mast and blaster boxes planned for this project—an estimated 27 blaster boxes. As an example, the KSM Project (KSM Mining Project) in British Columbia plans to use approximately 84 gas exploders as is outlined in their *Active Avalanche Management Plan* by Alpine Solutions Avalanche Services. As with any other avalanche mitigation program in the world, it is designed to reduce the risk in the area. With proper installation and testing, the quantity of exploders should not make any difference in operations, beyond achieving economies of scale. The remote exploders used would not be limited to just one type, but would draw from those most suited to each site. As noted in the Draft SEIS, *2013 Update to Appendix J Snow Avalanche Report*, Section 3.5 Explosive Delivery, "Blaster boxes are one of several special explosive delivery methods using a fixed, remotely-operated installation. They are evaluated here as a representative sample of the fixed installation methods currently available."
- (4) The effectiveness of all avalanche mitigation programs was calculated based on the proven and documented records of other highway avalanche programs. No explosive works on deep snow instability. A program that waits until 10 feet (3 meters) of snow accumulates before blasting is not doing its job; blasting must be frequent if it is to be effective. As a general rule, forecasters would be preparing to blast with a storm accumulation of 30 50 centimeters.
- (5) Preemptive closures have been used on Alaska highways. Examples include the Klondike Highway out of Skagway in the winter of 2015-16, and the Seward Highway on two occasions in the last five years—January 10 and February 20, 2012. DOT&PF avalanche staff indicate that there were earlier uses of preventive closures on the Seward Highway and other highways as well. If weather prevents howitzer usage, the State can and will preemptively close the road, which is why road closures have been calculated for every mitigation option.

- B) If Alternative 2B or 3 were to be selected for the ROD, development of a final avalanche operations plan would occur during the final design phase of the project. Final avalanche operation plans are not typically done at the time of the EIS. The Draft SEIS, 2013 Update to Appendix J Snow Avalanche Report, Section 6.4 Operational Avalanche Risk Management Program, outlined the considerations for developing risk reduction programs for construction and operations. In addition see:
 - Sections 12.4, Appendix 4: Highway Closures
 - Section 13, Appendix 5: Transportation Avalanche Danger Scale
 - Section 13.1, Appendix 6: Highway Closure and Operation Criteria, which outlined the need for operational risk reduction programs, contained examples of the material in such operational plans, and stated that, "These guidelines are a sample of the kind of material that is part of a project-specific operational avalanche plan and are not a substitute for such a detailed plan."
- C) Avalanche control and winter maintenance would be performed by DOT&PF, funded through State General Funds, just as any other routine state highway maintenance in Alaska.
- D) The purpose of explosive avalanche mitigation is to influence timing of avalanches so they run when the road is closed, rather than waiting for them to release naturally when the public is traveling. While use of explosives may increase the absolute number of avalanches, the result is an increase of generally smaller avalanches during road closures and a decrease of possible larger avalanches occurring when the public is traveling. Language of such was added to the 2017 Update to Appendix J Snow Avalanche Report, Section 3.4. Frequency of avalanches when the road is closed affects only snow removal.
- E) The Chugach Range in Southcentral Alaska is a very different snow climate from the Coast Range in Southeast Alaska; using data from it would produce unreliable results. Power law distribution studies use a curve drawn through a plot of avalanche occurrences to derive an estimate of avalanche sizes and frequencies beyond what has been observed. They are interesting theoretically and can be useful, but there are no databases for the northern Coast Range from which to derive power law relationships. Actual avalanche occurrences were chosen as a simpler, more reliable, and more accurate methodology.
- F) There are two components of federal avalanche mitigation approval and funding: 1) annual maintenance and operation and 2) structural mitigation, such as snow sheds.
- (1) FHWA regulation does require maintenance on all federally funded highways. Avalanche mitigation costs are included in the maintenance and operation estimate. There is no reason to believe that avalanche mitigation would not be funded, just as AMHS maintenance needs in all the other alternatives. Please refer to the *2017 Update to Appendix J Snow Avalanche Report*, Section 13.6, Appendix 11, Operating Budget Spreadsheets, and Section 13.7, Appendix 12, Capital Budget Spreadsheets, for updated budget spreadsheets.

- (2) Mitigation efforts that are part of capital costs (tunnels, elevated embankments, etc.) were included in the document. The NEPA process, required under federal law, includes preliminary investigation into the effects of development on the environment, which includes engineering considerations such as avalanche risk. FHWA's concurrence with DOT&PF's NEPA document will signify federal approval of the investigatory process. Final design of the project cannot begin until this federal action occurs.
- G) Avalanches have been effectively mitigated such that the need for real time cameras and communication is not necessary. During avalanche mitigation control, the road would be closed to safely initiate avalanches and clear the roadway. DOT&PF would use several means to announce road closures and re-openings. Planned and unplanned closures would be posted on the 511 website and phone, as well as the DOT&PF's Facebook page and other social media.
- H) The howitzer solutions for the East Lynn Canal route were discarded from consideration early in the evaluation process for reasons of range and cost, and are included in the report only to show that they were evaluated in detail. It is not necessary to give them further attention.

A statement was added to the 2017 Update to Appendix J – Snow Avalanche Report, Section 3.6.3 Option C, East Lynn Canal, Howitzer Delivery Supplemented By Blaster Box and Helicopter Delivery, to clarify this.

The range figures originally used were verified by DOT&PF personnel familiar with howitzer capabilities at the time. In consultation with current DOT&PF avalanche program staff, the avalanche program for the West Lynn Canal route has revised the howitzer limit ranges, and uses fixed exploders where howitzer shots are long or oblique.

- I) This is an editing error; the mention of howitzer ammunition being more expensive is outdated and was deleted from the 2017 Update to Appendix J Snow Avalanche Report. Relative pricing changes constantly; please refer to the 2017 Update to Appendix J Snow Avalanche Report, Section 13.6, Appendix 11, Operating Budget Spreadsheets, for details on current ammunition costs.
- J) Remote exploders and weather stations do not use line power, but are powered by a combination of solar panels, wind generators, and propane-powered generators. Communications are by telemetry. None of these installations are at elevations that could be served by line power running near the roadway.

Snow shed design would either use openings on the downhill side for light and ventilation, or locally generated power. The choice would be made in the final design stage if a build alternative was selected.

Topic/Subtopic: Avalanche/Avalanche Mitigation

Group Comment Text:

The 2013 Update to Appendix J - Snow Avalanche Report should be revised as follows:

- A) Factors used to calculate mitigated AHI are not disclosed or rely on data that may not be representative of the project area. Without understanding the precise factors plugged into the formulas, this numerical expression of hazard risk remains "dimensionless" and the public has no way of evaluating the results.
- B) The estimated 90 percent reduction in AHI with the proposed avalanche mitigation program (see Figure 4B in the 2013 Update to Appendix J) seems optimistic compared with the Seward Highway/Alaska Railroad corridor where, even with a long-standing mitigation program and lower terrain and precipitation, the risk has only been reduced to 50 percent.

Group Comment Response:

A) All the factors, raw data, and mitigation calculation spreadsheets used to calculate the mitigated AHI (risk reduction) are available in pdf format online at www.juneauaccess.alaska.gov.

The discussion in the 2013 Update to Appendix J, Snow Avalanche Report, Section 6.1 Mitigated AHI Target Calculations, is an analysis of how well the goals were achieved, rather than the calculation of the risk reduction. The risk reduction factors for each path and for the overall avalanche program are listed in Section 6.3, Lynn Canal Avalanche Hazard Reduction Methods.

The level of specificity of the 2013 Update to Appendix J – Snow Avalanche Report is more than adequate for EIS-level evaluation. The experience of the authors and peer reviewers has been updated with resumes in the 2017 Update to Appendix J – Snow Avalanche Report.

B) The risk reduction factors are consistent with those routinely achieved by modern avalanche programs worldwide. The program proposed for Lynn Canal follows current best practices, with multiple full-time forecasters for daily field presence.

There are no "geotechnical and design uncertainties" associated with snowsheds or their mitigation capabilities; they are in common use around the world, and their effectiveness is well-proven. All other mitigation factors applied are consistent with best engineering practices worldwide.

Please refer to the 2017 Update to Appendix J – Snow Avalanche Report, Section 3.1, Figure 2, for methods used on various highways worldwide, and to the remainder of Section 3, and to Section 6, Avalanche Mitigation, where the reduction factors are discussed specifically and in detail, especially Figure 4a, where mitigation factors achieved in other locations are listed.

DOT&PF avalanche programs have only been upgraded within the past few years. For example, recently preventive blasting has replaced waiting for slides to hit the road along such routes as the Richardson Highway to Valdez. In the 2014-2015 season, DOT&PF added an avalanche specialist for the Southeast (Southcoast) region. DOT&PF recognizes the seriousness of the need for adequate funding of avalanche programs.

Alaska Railroad programs have also been upgraded within the past 20 years. They face problems unique to railroad operations in extremely difficult terrain and snow conditions that do not apply to highway operations in the very different terrain, snowpack, and weather conditions along Lynn Canal.

Group 7

Topic/Subtopic: Avalanche/Avalanche Mitigation

Group Comment Text:

- A) DOT&PF's current statewide avalanche control programs are inadequate.
- B) The proposed mitigation measures are insufficient. Additional measures should be considered to adequately reduce the risk. See David Hamre (1996) for a discussion of avalanche mitigation technologies that have worked well in the Alaskan landscape (Frequency/magnitude relationship of avalanches in the Chugach Range, Alaska, International Snow Science Workshop [Hamre and McCarty 1996]).
- C) It is not clear if the snow shed cost estimate is reasonable given that the Draft SEIS does not discuss the details of the snow sheds. It is hard to evaluate the efficacy of snow sheds.
- D) The costs for avalanche mitigation associated with Alternative 3 appear to have been inflated relative to Alternative 2B, making Alternative 2B appear more cost effective.
- E) The State should address spending a considerable sum to mitigate the risk of avalanche on the Juneau Access highway while skimping on resources applied to highways elsewhere in the State that may or may not have a similar AHI level.
- F) Construction cost of essential avalanche mitigation safety features was left out of the previous EIS in an attempt to low-ball cost estimates.
- G) The increase of cost estimates are attributed to lawsuit delays.

Group Comment Response:

A) DOT&PF is well aware of the deficiencies in past avalanche programs, and added their first avalanche program staffer for the region in the 2014-15 season as part of an ongoing effort to upgrade avalanche operations.

Preemptive avalanche closures have been in use on Alaska highways, for example in Skagway in the winter of 2015-16, and the ability to use the shuttle ferries during road closures would encourage the use of preventive closures along Lynn Canal.

Staffing for the program includes two full-time avalanche specialists plus one seasonal avalanche specialist, or three people during avalanche season. Staffing at this level is comparable to other transportation and industrial avalanche programs, with two people on duty daily, and the capability to operate 24/7 in shifts when conditions dictate. Please refer to the 2017 Update to Appendix J – Snow Avalanche Report, Section 13.6, Appendix 11, Operating Budget Spreadsheets, for updated details on staffing.

B) The mitigation measures in the Draft SEIS were properly investigated by professionals in the field of avalanche study and deemed sufficient. The authors of the 2013 and 2017 Update to Appendix J – Snow Avalanche Report, are quite familiar with Mr. Hamre's work and its results. It has been added to the Updates to the 2017 Update to Appendix J – Snow Avalanche Report, Section 13.10, Appendix 15, References.

The frequency-magnitude studies, while useful in some cases, are more theoretical and less accurate than the actual avalanche observations used for this study, and it should be noted such data is not available for the Coast Range of Southeast Alaska.

C) DOT&PF engineers developed cost estimates for the snowsheds based on standard Alaska construction costs. Avalanche engineers Art Mears and Associates, of Gunnison, CO, independently developed the cost estimates, which are in substantial agreement and have been added to the 2017 Update to Appendix J, Snow Avalanche Report, Section 6.3, Lynn Canal Avalanche Hazard Reduction Methods.

Snowshed effectiveness is well documented from the design and implementation of snowsheds around the world. Through proper design, snowsheds have proven effective and provide protection for the entire width of the path that they cover. Specifics of detailed design are not typically available at the EIS stage, and the details would be determined further in the final design stage should a build alternative be selected.

The requirements for ventilation for snowsheds were accounted for in the design (openside ventilation), and requirements for lighting were identified and factored into the estimates.

Snowshed issues on Snoqualmie Pass, and the problems with snowsheds, are known and are similar to challenges for overpasses, bridge abutments, and other similar structures along highways. Where alternatives to snowsheds are possible, those alternatives can be used. In the case of the East Lynn Canal route, alternatives are not available, and snowsheds appear to be the best design solution.

D) The potential for avalanche effects to roadways has been fairly evaluated and appropriate mitigation has been proposed for Alternative 2B and 3.

Please refer to the *2017 Update to Appendix J – Snow Avalanche Report*, Section 13.6, Appendix 11, Operating Budget Spreadsheets, and Section 13.7, Appendix 12, Capital Budget Spreadsheets, for updated budget spreadsheets. Operating budgets are currently \$1,458,719 for East Lynn Canal and \$1,257,483 for West Lynn Canal. Avalanche programs for all alternatives involve many of the same staffing, office, weather station, field equipment, and materials costs.

Alternative 3 options have been updated to avoid long howitzer shots, adding some blaster boxes or other fixed exploders. Current capital costs are \$11,185,325 for the preferred Alternative 2B option that minimizes closure time and maximizes risk reduction, and \$6,199,259 for the preferred Alternative 3 option. Capital costs include items such as blaster boxes, loaders, bulldozers, and signage to name a few of the items. Closure estimates are 12.1 days for Alternative 2B and 5.5 days for Alternative 3. The budget sheets, as updated in Appendix 11: Operating Budget Spreadsheets, contain all the details for how costs were calculated. The budgets were developed by the staff of the Alaska Budget Report, a source known for careful objective budget analyses, and they were instructed to consider the options as objectively and carefully as possible. Staff of the Alaska Budget Report have been added to the references in the 2017 Update to Appendix J, Snow Avalanche Report.

The key variables are explosive type and delivery method. The study presents the options and choices that would be made by DOT&PF.

- E) The purpose of this SEIS is evaluating options that provide improved transportation to and from Juneau within the Lynn Canal corridor that will reduce travel times and State and user costs while providing capacity to meet demand and improved opportunity to travel, not for evaluating other DOT&PF projects and/or functions. That said, the JAI maintenance plan includes resources necessary to perform avalanche hazard mitigation and clean-up. It includes costs for all specialized personnel and equipment that would be assigned these duties, and would not take away any resources from other areas of the State.
- F) Additional avalanche mitigation features, such as snow sheds, were added due to refining the alignment and the additional information that was available since final design had begun on Alternative 2B following the 2006 ROD.

The 2014 Update to Appendix D - Technical Alignment Report engineer's estimates for Alternatives 2B, 3, 4B, and 4D highway segments were updated to reflect current layouts, quantities, and unit prices for construction year 2012, as stated in that report (see Attachment E of that appendix). The estimates for Alternatives 2B and 3 were also updated to include camp costs, which were not included in the original estimates in the 2006 FEIS but were identified as necessary in the subsequent 2009 cost report. Adjustments were also made to costs related to preliminary development, mitigation, right-of-way, a maintenance building, and avalanche control Capital Improvement Plan (CIP). Right-of-way, the maintenance building, and avalanche control CIP only apply to Alternatives 2B and 3. The M&O building estimates are based on costs for similar recently constructed facilities. The Indirect Cost Allocation Plan (ICAP) rate has also increased from 4.66 percent used in the 2009 cost report to 4.79 percent for Alternative 2B, and from 4.3 percent used in the 2006 FEIS to 4.79 percent for Alternatives 3, 4B, and 4D.

G) The SEIS does not mention or attribute any increase in costs relating to lawsuit delays.

Topic/Subtopic: Avalanche/Avalanche Mitigation

Group Comment Text:

The list of federal actions required (Section ES-10) should include a waiver from the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) for the use of blaster boxes because they have primed explosives stored in them.

Group Comment Response:

The 2013 Update to Appendix J – Snow Avalanche Report, Section 3.6, Permits for Avalanche Program, was intended to be a list of land use permits. ATF permits are required for all explosive operations, and have been added to that section.

ATF has permitted blaster boxes in the past, and there is no reason to expect that policy to change. All such units delivered now have magazines that conform to ATF requirements.

There is no requirement for ATF permits for gas-based alternatives such as MND's GazEx or the O'Bellx, which use propane and hydrogen, respectively, combined with oxygen to produce their explosions.

Group 1

Topic/Subtopic: Avalanche/Emergency Response

Group Comment Text:

Commenters posed multiple questions regarding the response to an avalanche event:

- A) If travelers are stranded at the Katzehin Ferry Terminal by an avalanche or between avalanches, how will rescue services reach them?
- B) How long will it take for DOT&PF to clear the road after a slide?
- C) Where will travelers find refuge while waiting for rescue? The unmanned Katzehin Ferry Terminal will not have services for stranded travelers. A 24-hour rest facility should be built for stranded travelers.
- D) Will the ferries run if the road is closed? How will shuttle ferries provide access across the closed section? How quickly could ferries and crews be mobilized to restore access in Lynn Canal? Which ferries would be used? The Day Boat ACFs would not have the capacity to pick up the anticipated number of stranded vehicles.
- E) How will road maintenance priorities be established?

Group Comment Response:

A) People who are stopped at the Katzehin Ferry Terminal due to road closures would have the option of returning to Haines or Skagway on the Day Boat ACFs to await the road reopening or stay at the Katzehin Ferry Terminal for the road re-opening. Careful monitoring of avalanche conditions and preventative closures of the highway should prevent people from being stopped at the Katzehin Ferry Terminal or being trapped between slides. In the

unlikely event that people were trapped between slides, and depending on the situation and length of closure, emergency services from Juneau would be deployed. Traveling on any Alaskan road in winter, travelers should be prepared for unexpected stops and delays.

- B) The JAI Project highways would be part of the NHS, a high priority highway. The JAI Project would provide for equipment operators and heavy equipment to be available to clear slides quickly. The avalanche control plan calls for frequent triggering of small avalanches under controlled conditions to reduce the risk of larger avalanches. It is not possible to forecast exact response times to all of the potential scenarios; however, in many cases, slides would be cleaned up and the road re-opened within hours.
- C) The Katzehin Ferry Terminal would be available for use, should travelers be stranded and decide not to return to Haines or Skagway on a ferry, as stated above. The Katzehin Ferry Terminal would be heated and have restrooms. The Katzehin Ferry Terminal would be available as a temporary 24-hour emergency refuge.
- D) The JAI Project provides for alternative ferry transportation between Haines, Skagway, and Juneau in the event of a road closure of more than one day. The maximum anticipated duration of any avalanche related road closure is two days. The ACFs would be used and have a capacity of 53 vehicles, which through modeling shows to have enough capacity for the route. If during these closures, more vehicles need to be transported, then additional sailings would be made. This was clarified in Section 4.3.8.2 of the Final SEIS.
- E) According to the DOT&PF highway maintenance priority system, the JAI Project highway would be a high priority, more than likely a priority 2. This classification is primarily due to its functioning class of being a road used to connect communities. Crews of maintenance personnel and equipment would be designated to maintain the Lynn Canal Highway at a high level, with an updated estimated cost of \$2.4 million per year.

Group 19

Topic/Subtopic: Avalanche/General

Group Comment Text:

The following comments concern Alternative 2B road closures due to avalanche or rock slide:

- A) The road would be closed more often than what is predicted in the Draft SEIS due to heavy snowfall or avalanches. The number of events may increase over time due to the dynamic nature of the environment.
- B) The Draft SEIS did not account for closures resulting from delayed mitigation due to weather. There will be many days when avalanche blasting cannot occur due to weather conditions, and the road will have to be closed as a result. Proposed mitigation would not reduce the risk of avalanche to acceptable levels.
- C) The Draft SEIS did not account for the number of days the road would be posted for "very difficult" or "difficult" driving conditions.

- D) Avalanche/debris removal may take longer than anticipated or be cost prohibitive.
- E) How will it be decided when the road will be closed because of avalanche danger?
- F) How will people be informed of road closures due to avalanche, slides, or poor weather conditions, and how will they be informed of reopenings?
- G) The numerous avalanche and rockslide events over the years could damage the road so it is no longer usable. The cost associated with such damage is a project risk. Who is responsible for this risk to the project?
- H) DOT&PF officials have given various answers for how long the road would be closed.

Group Comment Response:

- A) Heavy snowfall and avalanches were accounted for in the estimated road closure time, and DOT&PF and FHWA are comfortable with the number of predicted closures. The road would be primarily closed when avalanche conditions are present and mitigation cannot be accomplished due to weather conditions. This is why there are as many closure days, as noted in the *2013 Update to Appendix J Snow Avalanche Report*, Section 2.5, Figure 1: Comparison of Selected Options. Weather patterns are dynamic and it is speculative to state that events causing road closures will increase, decrease, or stay the same over time.
- B) Worst cases were accounted for by using actual weather records, rather than theoretical estimates. The closure program is explained in Section 6.4.5, Highway Closure Program, and the calculations for closures are detailed in Appendix 4: Highway Closures as follows:

Closure periods were calculated using the weather logs and avalanche observations from the same six years of field studies as were used in the AHI calculations, with the same correction factors applied.

Each avalanche cycle was evaluated to determine how long the highway would have been closed, and what level of explosive work would have been conducted. Weather events that would have been forecast as avalanche cycles but turned out to be false alarms were also tallied, but given lower figures for closure time and explosive operations, as would have occurred once forecasters realized the expected activity was not materializing.

Highways with mitigated AHIs comparable to the East and West Lynn Canal route are left open at night at "low" through "considerable" hazard levels, unless natural avalanches are forecast to reach low elevations. If avalanches are likely to reach low elevations, and explosive work is not completed, the highway would be closed at night. Night closures were tallied for the major avalanche cycles.

Because howitzer use allows closure section by section as explosive work proceeds, the West Lynn Canal alternative uses spot closures in daytime for explosive work when the danger level is increasing but instability is limited. The highway would have be closed when the instability is increasing more rapidly than explosive work can proceed. Prolonged closures were tallied under these conditions.

Limitations of darkness and storm conditions were factored into the initial tallies for all options. Corrections were added as follows:

- a. An additional 20 percent was taken from the explosive delivery mission tally for helicopter-based programs, because many days that appear suitable based only on the weather records would in fact be too windy, foggy, or stormy. The mission tally was simply reduced, as the window of opportunity would pass and the snowpack would either slide or stabilize on its own.
- b. All blaster box figures were reduced 30 percent because the raw mission tally reflects only their capability for being fired in storm conditions. Operations using blaster boxes report that the high cost of ammunition and its delivery by helicopter necessitate using them conservatively.
- c. Howitzer use figures for the West Lynn Canal WLC1 option were only reduced ten percent, as weather would not have much effect on transporting a trailered howitzer on the highway.

The tallies for missions and highway closure times under all options were further adjusted by 20 percent for crew limitations. It is often impossible to conduct explosive operations because the entire maintenance crew is tied up with other urgent work, is working far enough away that they cannot get back in time, because conditions develop too rapidly to respond, or because of budget and workforce limitations. Some other highway operations reported even greater limitations due to crew factors, but it was assumed that safety and reliability of this highway would be a high enough priority to merit adequate funding. Short funding would increase closure time.

The potential for change is noted in the 2017 Update to Appendix J – Snow Avalanche Report. Some additional paths were created by mass wasting processes, primarily landslides. Others were added due to alignment changes.

Avalanche paths on highways worldwide are dynamic, and their risk is mitigated to acceptable levels. There is nothing about Lynn Canal that would give reason to expect changes that could not be mitigated acceptably. It would be reasonably foreseeable to have changes that could be mitigated, rather than ones that could not.

- C) DOT&PF does not account for "very difficult" or "difficult" driving conditions on any roadways. However, DOT&PF does report driving conditions for all Alaska major highways in the 511 system, which would include any of the alternatives that extend the road. DOT&PF would have maintained and plow/sand the roadway to provide safe driving conditions.
- D) DOT&PF completed a thorough study of the avalanche potential and identified resources needed to handle the hazard mitigation and debris removal. The plan includes a list of all resources required and the costs associated with all aspects of avalanche hazards. Note that the 2017 Update to Appendix D Technical Alignment Report, Appendix C, includes these Maintenance and Operations cost estimates and the 2017 Update to Appendix J Snow Avalanche Report, Appendices 9 through 13, have detailed

Maintenance and Operations cost estimates for avalanche mitigation specifically.

- E) Trained, experienced avalanche technicians would monitor the JAI Project route on a daily basis. The technicians would use observations, weather station data, weather forecasts, and snow telemetry data to determine the hazard. The technicians would identify times when avalanche hazard was high, and would recommend avalanche control operations or preventative road closures when the hazard was high. Clarifying language was added to the Final SEIS in Sections 4.3.8.2 and 4.4.8.1.
- F) DOT&PF would use several means to announce road closures and re-openings. Planned and unplanned closures would be posted on the 511 website, phone, and various social media platforms to ensure that road users receive regular updates of highway conditions. Clarifying language was added to the Final SEIS in Sections 4.3.8.2 and 4.4.8.1.
- G) Damage from rockslides and avalanches would not put the road at risk. The likelihood of a slide event was assessed and would be mitigated to the extent possible during highway design if a build alternative was selected. DOT&PF is responsible for these risks and is staffed and equipped to repair damage from slides and to maintain the highway in operable condition. DOT&PF would have dedicated maintenance personnel and resources for routine maintenance, and would use State and/or federal highway funds to perform major repairs as needed. Clarifying language was added to the Final SEIS in Sections 4.3.8.2 and 4.4.8.1.
- H) In the 2006 Final EIS, Table 4-16, road closures for Alternative 2B were estimated to be approximately 33.9 days per year. The Draft SEIS, Table 4-27, estimated road closures to be approximately 12.1 days per year. This reduction in road closures is due to added avalanche mitigation measures such as snowsheds, remote exploders, bridges, and elevated fills.

7.4 Bald Eagles

Group 27

Topic/Subtopic: Bald Eagles/Mitigation

Group Comment Text:

Even if DOT&PF is able to get an eagle Disturbance Permit, the U.S. Fish and Wildlife Service (USFWS) may impose significant restrictions on construction activities, beyond what DOT&PF may be expecting, and could require compensatory mitigation, which will likely add to the cost of building the road. Cost of bald eagle compensatory mitigation should be estimated and included in the cost estimate for each alternative.

Group Comment Response:

Mitigation of project impacts from alternatives on bald eagles will be site-specific and based on where active bald eagle nests are observed in a pre-construction survey. Mitigation, if necessary, would be included as part of the Bald and Golden Eagle Protection Act permitting process. Given the anticipated impacts for each alternative and DOT&PF past experience, bald eagle mitigation would not add notably to the cost of a specific alternative.

Topic/Subtopic: Bald Eagles/Operation/Maintenance Impacts

Group Comment Text:

- A) The Draft SEIS did not account for avoidance of communal roosting locations during blasting activities, and DOT&PF has not completed a survey to identify these locations.
- B) The Draft SEIS asserted that "it is not practicable to limit construction" to the period outside of bald eagle breeding season, as recommended by the USFWS's National Bald Eagle Management Guidelines. This assessment is inadequate.
- C) The Draft SEIS did not account for helicopter use for avalanche control activities near nests during the breeding season.
- D) The Draft SEIS did not provide any basis for analyzing whether the disturbance of bald eagles in most of their range along the east side of Lynn Canal is compatible with their preservation, and made no mention of other permitted takes or other factors affecting the local and regional eagle populations.

Group Comment Response:

- A) Per the comment, Sections 4.3.16, 4.4.16, 4.6.16, and 4.8.12 of the Final SEIS incorporated the evaluation of effects to bald eagles during operation and construction from the 2004 Appendix R Bald Eagle Technical Report and 2014 Update to Appendix R Bald Eagle Technical Report. Also, Section 5.7 of the Final SEIS was updated to clarify that a pre-construction survey would be conducted for bald eagles. As described in the 2014 Update to Appendix R Bald Eagle Technical Report, surveys conducted since 1997 have not indicated the presence of communal roosting sites along the project.
- B) The USFWS National Bald Eagle Management Guidelines recommend that activities avoid the nesting season and provides a set of distances for construction activities near active eagle nests. When avoidance is not viable, the Guidelines allow for take and disturbance of nest trees. As stated in Sections 4.3.16 and 4.8.12.6 of the Draft SEIS, Alternative 2B was modified to avoid take and to minimize disturbance of nest trees. In addition, construction of Alternative 2B would have been staged and would not have occurred along the entire alignment in any one season.
- C) As explained in Section 5.2 of the 2014 Update to Appendix R Bald Eagle Technical Report, bald eagle nests located in or near the avalanche prone areas may have been impacted by intermittent helicopter operations and blasting noise. Response to such disturbances may have included flushing from, or abandoning, the nest.
- D) Section 4.9 of the Draft SEIS included an evaluation of cumulative effects on bald eagles. Past, present, and reasonably foreseeable projects in combination with the JAI Project would have resulted in the loss of a small amount of habitat, no loss of known nest trees for bald eagles, and no measurable loss of food sources. Considering the ability for bald eagles to habituate to human presence, the cumulative impact of increased human presence in the region would not likely have a population-level effect on bald eagles.

Topic/Subtopic: Bald Eagles/Operation/Maintenance Impacts

Group Comment Text:

This eagle population may be more sensitive and not adapt to disturbance, and may abandon nests during construction due to increased human presence in the area.

Group Comment Response:

Per the comment, Section 4.8 of the Final SEIS incorporated the evaluation of effects to bald eagles during operation and construction from the 2004 Appendix R – Bald Eagle Technical Report and 2014 Update to Appendix R – Bald Eagle Technical Report. The evaluation included an assessment of the potential for bald eagle nest abandonment during construction, as well as other potential effects on bald eagle populations from disturbance activities.

Group 24

Topic/Subtopic: Bald Eagles/Regulations

Group Comment Text:

- A) The Draft SEIS was incorrect in assuming that permits under the Bald and Golden Eagle Protection Act and variances from the City and Borough of Juneau's (CBJ's) Land Use Code will be granted to the JAI Project and would include stipulations sufficient to allow successful use of a nest by eagles. Why did the Draft SEIS assume that the permits/variances would be approved as requested?
- B) The Draft SEIS stated that no nest trees would be removed, but it did not account for the removal of future nest trees. For the discussion of impacts on eagles to be complete, it needs to include impacts caused by removal of trees that could have nests in the future if they are not removed for the road.
- C) Due to all of the clearcutting needed for the road, DOT&PF should consult with USFWS about applying timber harvesting operations guidelines with respect to bald eagles, instead of requesting a permit to disturb an unprecedented number of nests and communal roosts.

Group Comment Response:

- A) Other projects completed by DOT&PF have been granted permits under the Bald Eagle and Protection Act from USFWS and have received set back variances from CBJ. As stated in Section 4.8.12.6 of the Draft SEIS, USFWS may require additional monitoring or mitigation as a stipulation of a permit approval. CBJ previously issued a bald eagle set back variance for roadway construction Echo Cove to Sweeny Creek as part of a project in the vicinity.
- B) Section 4.8.12 of the Final SEIS was updated to denote that the long-term loss of potential nesting trees removed for the road alternatives would be less than 1 percent of available nesting habitat for bald eagles and would not affect the overall population of bald eagles in Lynn Canal for Alternatives 2B, 3, 4B, and 4D.

C) The National Bald Eagle Management Guidelines specify that construction of roads is a Category A activity, and the Guidelines relative to that category apply to the JAI Project. As explained in the 2014 Update to Appendix R – Bald Eagle Technical Report of the Draft SEIS, only 25 to 55 percent of nests are occupied in any given year. DOT&PF does not anticipate the need for any Take Permits for the JAI Project at this time as no build alternative has been selected. DOT&PF would have conducted pre-construction on-the-ground nest surveys to confirm the location of trees with eagle nests if a build alternative had been selected. As described in the 2014 Update to Appendix R – Bald Eagle Technical Report, surveys conducted since 1997 have not indicated the presence of communal roosting sites along the JAI Project alternatives. For 5 years following construction, DOT&PF would have funded USFWS aerial surveys to assess the potential impacts from the project on the Lynn Canal bald eagle population.

7.5 Climate Change

Group 182

Topic/Subtopic: Climate Change/Adapting the Project for Climate Change

Group Comment Text:

A) The Draft SEIS did not consider climate change in regards to how rising global sea levels, storms, and ground movement would affect the project (e.g., through increasing road closures as sea levels rise).

B) Effects of climate change will increase costs and reduce benefits of the road.

Group Comment Response:

A) Section 4.7.9 of the Draft SEIS addressed potential impacts of climate change on the JAI Project, including rising sea levels, uplift of the land as the weight of glaciers melts off of it, increased storm intensity, and other factors. As noted in Section 4.7.9, current design practices address the potential impacts to project infrastructure resulting from the changing climate and resulting sea level rise, along with increased frequency of severe weather events. Section 4.7.9 stated that changes in sea level and increased storm intensity are the primary climate change threats likely to impact the project. However, this section noted that sea level change was not a major concern in the coastal areas of southern Alaska. In fact, it is predicted that sea level in the Juneau area will actually decrease between 1 and 3.6 feet as a result of loss of glacial ice and the resulting uplift. Therefore, sea level change would not be anticipated to affect project facilities constructed near the shoreline.

B) Implementation of the appropriate design practices were included in the construction cost estimate and, in the case of Alternatives 2B and 3, would support the long-term benefit of the road.

Topic/Subtopic: Climate Change/Adapting the Project for Climate Change

Group Comment Text:

The Draft SEIS failed to include the required "hard look" at the implications of climate change on the project. The SEIS should consider/include:

- A) The impact of climate change on road safety in regards to avalanches, debris slides, storm intensity, geoid movement, and changing precipitation amounts and patterns.
- B) How climate changes will affect future costs associated with re-engineering and maintenance.

Group Comment Response:

Climate change impacts could threaten transportation infrastructure. As such, the U.S. Department of Transportation (USDOT) and FHWA have developed policy and guidance regarding climate resiliency. It is FHWA policy to integrate consideration of climate change into its planning, operations, policies, and programs (FHWA Order 5520). The Draft SEIS addresses the implications of climate change on the project in Section 4.7.9. Taking a "hard look" at the effects of climate change on any alternative can only be as reliable as predictions for future conditions.

- A) As noted in Section 4.7.9 of the Draft SEIS, current design practices address the potential impacts to infrastructure resulting from climate change and increased storm intensity (i.e., the impact of climate change and increased storm intensity would have been considered during design of project facilities if a build alternative were selected). Impacts to the road from avalanches, rock slides, and debris flows that might have been associated with climate change were discussed in Sections 4.3.8 and 4.4.8 of the Draft SEIS.
- B) Climate change will not affect future costs. If a build alternative had been selected in the ROD, during final design, DOT&PF would have considered climate change effects and made adjustments to the design as needed. This would have reduced the potential for reengineering project features in the future. DOT&PF evaluates maintenance costs on an annual basis for all State highways and would increase maintenance budgets as warranted by changing conditions.

Group 184

Topic/Subtopic: Climate Change/Adapting the Project for Climate Change

Group Comment Text:

The project should promote mass transit options (e.g., ferries) and make efforts to mitigate climate change by not promoting infrastructure for single vehicle transport.

Group Comment Response:

FHWA and DOT&PF have promoted mass transit and multi-modal solutions with the JAI Project. All project alternatives use the ferry, and five of the build alternatives are primarily ferry transportation. FHWA and DOT&PF are charged with serving the needs of the travelling public under terms of current laws and regulations. Most people, including those

in the project area, travel by personal automobile, and substantial national and statewide funding emphases are frequently focused on accommodating automobiles. Mass transit is part of the national and statewide transportation package, but a pure mass transit project (focused solely on moving people) would not satisfy the purpose and need of the JAI Project. Regarding ferries as mass transit that might help reduce the problem of climate change: As indicated in Table 4-80 (SEIS Section 4.7.9, Climate Change), ferry alternatives would emit large amounts of greenhouse gasses (GHGs). While GHG emissions vary among the alternatives, the variance is not based on the proportion of road driving versus ferry travel. The data indicated that selecting a ferry alternative versus a road-and-ferry alternative would not have necessarily mitigated effects of climate change.

Group 425

Topic/Subtopic: Climate Change/Method of Analysis

Group Comment Text:

The Draft SEIS did not consider some important contributions to climate change resulting from this project and underestimated the GHG emissions. For example, the analysis should consider ferry emissions during loading and unloading, vehicles idling at ferry terminals, ferry use of diesel fuel, loss of carbon sequestration from trees that have been cut, and the social cost of carbon.

Group Comment Response:

The Draft SEIS text was based on FHWA internal guidance for addressing climate change in environmental documents. FHWA is satisfied that the information provided in the SEIS is consistent with that guidance and adequate for the proposed action.

For projects located in nonattainment areas, analysis of idling vehicle emissions, and possibly those associated with loading/unloading of ferries, are conducted via hot-spot CO and particulate matter (PM) analyses; however, because the project is located in an attainment area, hot-spot analyses are not required. Furthermore, the speculative nature of idling emissions (i.e., how long the idling occurs, how many cars) would be difficult to characterize with any level of accuracy. Therefore, FHWA's opinion is that the current analysis of roadway vehicular emissions is sufficiently conservative for identifying impact conditions.

Based on the comment, updated emissions estimates from ferry vessels were included in the Final SEIS, including CO₂ estimates from diesel fuel consumption.

FHWA's opinion is that the qualitative discussion of GHG emissions from construction activities is sufficiently conservative for assessing impact conditions.

Loss of carbon sequestration from permanent removal of trees was added as an impact with respect to climate change and cumulative effects on carbon sequestration. This loss relative to the abundance of trees in the airshed would result in a negligible impact.

The social cost of carbon is an estimate of the costs, expressed in monetary value, by damage caused by each additional metric ton of carbon dioxide put into the atmosphere. The damage includes health impacts, economic dislocation, agricultural changes, and other

effects that climate change can impose on humanity. This value is generally incorporated into a cost-benefit analysis. The social cost of carbon is difficult to calculate, however, and estimates by economists vary widely. The Interagency Working Group on the Social Cost of Greenhouse Gases (IWG, formerly the Interagency Working Group on the Social Cost of Carbon) continues to develop methods for estimating the social cost of carbon. In its most recent Technical Support Document on this subject, IWG provided estimates ranging from \$11 to \$56 per metric ton of CO₂ in 2015, based on averages from three different models and depending on discount rates (IWG, 2016). The social cost of carbon increases over time because future emissions are expected to produce larger incremental damages as physical and economic systems become more stressed in response to greater climatic change, and because Gross Domestic Product is growing over time and many damage categories are modeled as proportional to Gross Domestic Product. By 2050, the estimates of the social cost of carbon range from \$26 to \$95 per metric ton of CO₂ (IWG, 2016).

According to Council on Environmental Quality (CEQ) guidance, NEPA does not require monetizing costs and benefits and, when there are important qualitative considerations, the weighing of the merits and drawbacks of alternatives should not use a monetary cost-benefit analysis (40 CFR 1502.23). With respect to GHG emissions, use of a monetary cost-benefit analysis should be appropriate and relevant to the choice among alternatives being considered, (CEQ, 2016).

FHWA determined that using the social cost of carbon methodology to assess the impacts of the JAI Project alternatives would not be appropriate and relevant to the choice among alternatives; therefore, the methodology is not part of this NEPA analysis. This determination was made for the following primary reasons: (1) the wide range and uncertainty in placing estimates of the value of carbon renders the social cost of carbon methodology speculative and (2) the quantitative analysis of GHG emissions for the JAI Project alternatives indicated that their contribution would have been a relatively minor contribution to global emissions.

Group 176

Topic/Subtopic: Climate Change/Project Impacts on Climate Change

Group Comment Text:

The Draft SEIS Climate Change section did not discuss the cumulative effect of the project on ocean acidification.

Group Comment Response:

Section 4.7.9, Climate Change, identifies ocean acidification as an effect of climate change. The discussion was expanded in the Final SEIS to address the relationship of the proposed project to ocean acidification. The added discussion also acknowledged the contribution of the project to the general effects of climate change. In addition, the Cumulative Impact section regarding Air Quality (SEIS Section 4.9.2.7), was revised to acknowledge ocean acidification as a cumulative effect of increased GHG emissions.

Topic/Subtopic: Climate Change/Project Impacts on Climate Change

Group Comment Text:

A) The use of ferries can make a huge dent in GHG, while the use of vehicles over the same route can significantly increase the amount of GHG emissions. Why should the State fund a project that would encourage more vehicles on roads and more burning of fossil fuels, furthering the climate crisis?

B) Due to the potential for the project contributing to further climate change from increased CO₂ and other GHG emissions, all alternatives except Alternative 1 – No Action and Alternative 4C should be excluded from further consideration.

Group Comment Response:

A) The Draft SEIS addressed fuel use and calculated gallons of fuel that would be used by ferries and automobiles for each alternative in Section 4.7.6, Energy. This information was used to calculate GHG emissions for ferries and automobiles for each alternative in Section 4.7.9, Climate Change. The amount of vehicle traffic, length of road-miles, types and sizes of ferry vessels, and length of marine-miles traveled for each alternative affect the total GHG emissions. Recognizing the preferred alternative may not be the alternative that would contribute the least amount of GHG to the atmosphere, FHWA and DOT&PF must weigh those impacts, and all social, economic, natural, and cultural impacts, against the purpose and need for the project and their duties as public agencies to provide transportation infrastructure and mobility.

The commenters' assertions regarding ferries generating less GHG emissions than vehicles is incorrect. As discussed in Section 4.7.9 of the Draft SEIS, 35 percent of all GHG emissions in the State are from the transportation sector, and CO₂ emissions from motor vehicles in the State of Alaska contributed less than one hundredth of 1 percent (0.0095 percent) of global emissions in 2010 and are projected to contribute even less by 2040. GHG emissions were calculated for future conditions (2050 in the Draft SEIS) associated with the project based on factors such as projected traffic and estimates of fuel consumption associated with vehicles and ferries (see Table 4-71 of the Draft SEIS). As shown in that table, GHG emissions from ferries are higher than those from vehicles under all alternatives. Under Alternative 2B, ferries comprise 55 percent of the total project GHG emissions; under Alternative 3, ferries comprise 66 percent of the total project GHG emissions.

B) The assertion that only Alternative 1 – No Action and Alternative 4C should be considered due to the potential for other alternatives to contribute to further climate change is problematic as it does not consider the purpose and need for this project or the many factors that decision makers are required to evaluate in reaching a decision. Total GHG emissions, along with other project impacts and benefits, are considered in the SEIS to allow FHWA to make an informed decision in the selection of an alternative.

Topic/Subtopic: Climate Change/Project Impacts on Climate Change

Group Comment Text:

The Draft SEIS did not address the loss of carbon capture caused by the removal of trees in its analysis of alternatives with roads.

Group Comment Response:

Section 4.7.9 of the SEIS addresses climate change. The text was augmented in the Final SEIS to include the incremental effect of removing trees in the road corridors, causing loss of carbon capture (see also Section 4.9.2.7 of the Final SEIS).

Group 423

Topic/Subtopic: Climate Change/Project Impacts on Climate Change

Group Comment Text:

It is unclear whether ferries or vehicles use more fuel. The SEIS should include an explanation of estimated fuel usage for ferries and vehicles under each alternative and use this information in the assessment of climate change impacts.

Group Comment Response:

The Draft SEIS addressed fuel use and calculated gallons of fuel that would be used by ferries and automobiles for each alternative in Section 4.7.6, Energy. These values were used to determine greenhouse gas emissions, which are presented for ferries and automobiles for each alternative in Section 4.7.9, Climate Change.

7.6 Construction

Group 132

Topic/Subtopic: Construction/General

Group Comment Text:

The Draft SEIS included a construction cost estimate from 2009. The SEIS should provide an updated estimate.

Group Comment Response:

The Draft SEIS included a cost estimate for all alternatives that was updated to reflect 2012 construction costs. This is discussed in Section 4 of the *2014 Update to Appendix D – Technical Alignment Report*. Further, the estimates were included in Attachments D and E to this report for the ferry terminal and road capital costs respectively. The Final SEIS was updated to reflect 2016 construction costs. The method for determining these costs is discussed in Section 4 of the *2017 Update to Appendix D – Technical Alignment Report*. The updated estimates are included in Attachments D and E to this report for the ferry terminal and road capital costs, respectively.

Topic/Subtopic: Construction/General

Group Comment Text:

Who is responsible for highway construction, schedule, work quality, and maintenance?

Group Comment Response:

DOT&PF is responsible for the highway construction and maintenance. The road would have been constructed by a contractor selected during the competitive bid process. Management and oversight of the contract and contractor's work would be accomplished by DOT&PF. Standard contract provisions require the work to be completed in accordance with DOT&PF specifications. If the work does not meet the contract specifications, the contractor would be required to correct the work to ensure compliance with the contract. When a project is bid under the competitive bid process, a completion date is specified and contractors bid the work accordingly. If the completion date is not met, liquidated damages are implemented and applied to the contract. Scheduling the work to meet the contract completion date is the contractor's responsibility. After project completion, the road would be owned and maintained by DOT&PF.

Group 135

Topic/Subtopic: Construction/General

Group Comment Text:

Will the highway alternatives be paved and include culverts and bridges?

Group Comment Response:

All proposed highways will be paved and include culverts and bridges.

Group 136

Topic/Subtopic: Construction/General

Group Comment Text:

Will the construction footprint account for lights, cell towers, and turnouts?

Group Comment Response:

Roadway lighting and cell towers were not included as components of the alternatives evaluated in the SEIS. Roadway lighting was considered; however, lighting of low volume rural roadways is not cost effective or consistent with DOT&PF practice. It was not anticipated that lighting would be installed along any road alternative in the foreseeable future. Securing the necessary authorizations and the design and construction of cell towers would be the responsibility of private cell phone providers. Locations for pullouts and scenic overlooks have been identified in consultation with USFS and are included in Alternatives 2B and 3 and are described in Sections 4.3 and 4.4 of the SEIS.

Topic/Subtopic: Construction/General

Group Comment Text:

A) Where and how would the large amount of rock and materials generated from blasting and cuts during road construction be disposed of?

B) How would explosions during construction impact tourism?

Group Comment Response:

A) Generally, the material generated from cuts are used for fills. Engineers typically try to balance cuts and fills. DOT&PF would have characterize the geochemical properties of blasted rock to confirm that the rock was not hazardous and could be used as clean fill for the roadway and ferry terminal embankments (Sections 4.3.8.4 and 4.2.8.3 of the Draft SEIS). DOT&PF anticipated incorporating all mineral materials generated from blasting into the road embankments (Sections 4.3.8.4 and 4.2.8.3 of the Draft SEIS). Overburden would have been used to cover shot rock slopes, as practicable, to reduce their visibility (Sections 4.3.3.4 and 4.4.3.4 of the Draft SEIS). No material from road construction would have been disposed of as waste in a wetland or water body. In addition, the Wetlands Permit Application contained additional information specifying that "no blasting is anticipated within waters of the U.S. All blasting near waters of the U.S. would be controlled to avoid incidental discharge of blasted materials into those waters (including wetlands) adjacent to the project. Construction camps, borrow pits, and waste areas would be sited in upland areas and stabilized during and after use to avoid and minimize impacts to water quality" (Appendix Z 2014 Update to X – Permit Application & 404b1 & Wetlands).

B) Lynn Canal is typically 2 to 6 miles wide. Blasting noise is expected to travel 3 to 4 miles so likely would be audible in mid-channel but not loud. It may not be audible at all over the typical noises of a cruise ship, ferry, or other vessel. Blasting would be in isolated areas, and different areas would be blasted at different times, so the impact would not be continuous or widespread and would be unlikely to be heard in any community. For any given tourist's visit, it likely would be a minor annoyance or curiosity for a short time. Tourism as an industry is not expected to be negatively affected. Sections 4.3.5 and 4.4.5 of the Draft SEIS discussed tourism by community for the two road alternatives for which blasting would occur, and Section 4.8.8 discussed noise of construction. The distance blasting noise may carry was discussed for wildlife in the Draft SEIS (Section 4.8.12, particularly for Steller Sea Lions under Section 4.8.12.7), and this distance discussion was added to Section 4.8.8 of the Final SEIS in relation to humans on the water or using the shoreline areas during construction.

Topic/Subtopic: Construction/General

Group Comment Text:

The Draft SEIS did not provide a clear explanation or engineering plan for how road construction would be executed

Group Comment Response:

An EIS is not a design or engineering document. The Draft and Final SEIS provided descriptions of proposed construction activities to a suitable level of detail for DOT&PF and FHWA to assess potential impacts, and for decision makers to select an alternative in a ROD.

The project's 2006 Initial Financial Plan and the 2007 financial plan update (available on the project website) described how construction would be divided into zones and would occur through at least five sequenced contracts. Prior to funding construction, FHWA would need to approve an updated financial plan, which would explain the proposed sequencing and limits of the construction projects for the selected alternative.

Group 482

Topic/Subtopic: Construction/General

Group Comment Text:

- A) How will cut and fill areas be impacted by weather? Will these cuts and fills increase the amount of snow sliding into the roadway?
- B) Are the engineering estimates for constructing bridges (Lacy and Antler Rivers) accurate?
- C) What is the depth to bedrock?
- D) Have meltwater flows from the glacier and weather been accounted for in the highway alternatives?

Group Comment Response:

- A) Cut and fills would be consistent with typical roadway construction in the Southcoast region. The impact on cuts and fills due to weather is not a concern. In particular, most embankments would be constructed from shot rock, which is less susceptible to erosion than soil material. Soil embankments would be seeded. In cut areas, there would be sufficient ditch width to prevent snow from sliding onto the roadway. All avalanche chutes have been appropriately mitigated. An increase of the amount of snow sliding onto the roadway due to cuts and fills is not expected.
- B) The engineering estimates for the Lace and Antler River bridges were updated to reflect 2016 construction prices. These costs were reflected in Attachment E of the 2017 Update to Appendix D Technical Alignment Report. All bridge cost estimates were based upon historic bid tab data collected throughout Alaska. Where necessary, unit prices were adjusted to account for the geographic location, project scale, and other relevant factors.

- C) The depth to bedrock for the numerous bridges for the road alternatives varied widely. For the Lace, Antler, and Katzehin River bridges, the depth to bedrock varied along the length of the bridges. Not all bridge piles were designed/required to extend to bedrock. All bridges were founded on deep pipe piles.
- D) Meltwater flows have been accounted for in the design of the bridges and roadway in highway alternatives.

Topic/Subtopic: Construction/Mitigation

Group Comment Text:

A USFS public use cabin located to minimize "other user interruptions" to the wilderness experience will be impacted by construction of Alternative 2B as it will put this cabin on the road system. What mitigation would be provided for this impact?

Group Comment Response:

Sections 5.11, 5.12.1, and 6.2.2.2 of the Draft SEIS identified mitigation for changes to the Berners Bay Cabin. A trail would be provided to the cabin, which would become a road-accessible walk-up cabin, and a new water-accessible USFS cabin in a remote area would be provided in coordination with USFS. Section 6.2.2.2 documented that the toe of the highway embankment would be more than 800 feet from the cabin use area, with the centerline approximately 1,000 feet away and 500 feet higher in elevation.

Section 2.3.3.1 of the Draft SEIS, which described Alternative 2B and indicated 500 feet of separation between the cabin and the new highway, was revised in the Final SEIS to reflect the greater separation distances. While Section 5.11 of the Draft SEIS discussed mitigation for the Berners Bay Cabin, this measure only applied under Alternative 2B and is no longer included in Chapter 5 of the Final SEIS.

Group 137

Topic/Subtopic: Construction/Visual

Group Comment Text:

A) Will the road/terminal be lit?

- B) Will the lights at the Katzehin Ferry Terminal be shielded to decrease glare seen from Haines?
- C) How will lighting on the highway affect wildlife?

Group Comment Response:

- A) Appropriate lighting would have been provided at the ferry terminal facilities.
- B) The overhead lighting fixtures would have been designed to minimize glare to ensure vessel and pedestrian safety and reduce light pollution effects. However, the lighting would have likely been visible from Haines.

C) Roadway lighting is not anticipated for build alternatives. The terminal sites would have lighting, but its effect on wildlife would be very localized and is anticipated to be minimal.

Group 144

Topic/Subtopic: Construction/Mitigation

Group Comment Text:

- A) How many camps and generators are proposed?
- B) Bears are incorrectly grouped with carnivores and scavengers. The SEIS should state that bear-proof containers and practices would be used. Wildlife measures are to protect wildlife as well as humans.

Group Comment Response:

- A) An independent estimate that was completed for Alternative 2B by Western Federal Lands in the 2009 Cost Report determined that two construction camps would be needed to construct the project. These camps would typically be powered by dual diesel power generators. It is also likely that numerous portable generators would be needed to periodically support tools or equipment surrounding the camp. For Alternative 3, it was assumed that one camp with similar characteristics and accommodations would be utilized. The costs for these camps were reflected in the cost estimates for Alternatives 2B and 3.
- B) Sections 5.9 and 5.12.1 of the Draft SEIS stated, "During construction, all garbage would be properly disposed of in closed bear-proof containers to avoid attracting bears and other carnivores and scavengers." This statement indicates that bear-proof containers would be in use. Although "carnivore" and "omnivore" and "carnivore" and "scavenger" are not mutually exclusive terms, the language was changed in the Final SEIS to read "...bears and other wildlife" to avoid confusion. Discussion in Section 5.9 of the Final SEIS of a wildlife interaction plan was modified to indicate that the plan would be for the protection of wildlife as well as humans.

7.7 Cultural, Historical, and Archaeological Resources Group 274

Topic/Subtopic: Cultural, Historical, and Archaeological Resources/Consultation with Tribes

Group Comment Text:

- A) Sealaska Corporation and Douglas Indian Association (DIA) request that a cultural resource specialist be hired to monitor construction activity in areas where there is potential to impact historic and cultural resources of significance to the Tribe. Monitoring should include Tribal Government officials or designees.
- B) The Tribes request immediate contact if anything of possible historic or cultural significance to the Tribe is disturbed or found through construction or monitoring activities.

Group Comment Response:

A) As a result of FHWA and DOT&PF's meetings on February 25, 2016, with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and the State Historic Preservation Office (SHPO), it was noted that monitoring in specific areas may be warranted. Continued consultation with these Tribal entities and SHPO, if a build alternative had been selected, would typically occur during detailed design to determine specific locations where construction monitoring may be appropriate.

B) As stated in Section 4.8.3 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains or associated funerary objects were discovered during construction, work in the vicinity of the discovery would halt until the discovery was evaluated and appropriate consultation, including with Tribes, is conducted consistent with Section 106 of the National Historic Preservation Act.

Group 277

Topic/Subtopic: Cultural, Historical, and Archaeological Resources/Existing Conditions

Group Comment Text:

- A) The SHPO concurred with FHWA's determination that Alternative 2B would have no adverse effect on any historic property, but this is an incorrect assessment. Berners Bay is an area that is culturally significant as the ancestral land of the Auk Kwan Tlingit. Cultural resources and human remains/burials have been identified in Berners Bay, as well as near the proposed alternative.
- B) The project could have an indirect impact on adjacent sites by increasing access to the area. This site should be given a larger buffer for avoidance.
- C) Spirit Mountain (or Lions Head Mountain) located in Berners Bay is sacred to the Auk Kwan.
- D) All valuable cultural resources are not included in the National Register of Historic Places.

Group Comment Response:

A) FHWA has complied with Section 106 of the National Historic Preservation Act for this project. The presence of historic properties and places of traditional religious and cultural importance to Tribes and other historic properties within the area of potential effect (APE) for each alternative were established through background research, extensive consultation, and field investigations. Field and aerial surveys did not identify historic properties of cultural importance to the Tribes within the project APE. Based on research, consultation, and field investigations, it was determined that no historic properties of cultural importance to the Tribes would be directly impacted by any reasonable alternative. However, it was determined that because some alternatives are within the boundaries of the Berners Bay Historic Mining District, there would be an effect to the Mining District, but the effect would not be adverse (see Section 3.1.3 of the Draft SEIS for further detail).

To protect sensitive site information, the data and analyses contained in these documents were only summarized in the SEIS, although all of the information therein was used in

making determinations of eligibility and findings of effect. For example, the locations of sensitive archaeological and burial sites were not disclosed in the Draft SEIS. It is understandable that a review of the Draft SEIS could lead to confusion in regards to the summary of this site information appearing not to include all site locations.

FHWA and DOT&PF, along with the SHPO, had meetings on February 25, 2016, with Sealaska Corporation, Sealaska Heritage Institute, DIA, and Goldbelt Corporation to address the concerns expressed in comments on the Draft SEIS. Upon conclusion of these meetings, FHWA maintained that their determination of no adverse effect on any cultural resources and historic properties is valid.

As was discussed during those meetings, the Alaska Heritage Resources Survey (AHRS) database was reviewed for the SEIS. Reported locations of known cultural resources were considered during the development of the project, including the historic Tlingit winter village with burial sites and petroglyphs in Berners Bay. The presence of any historic properties within the APE for each alternative was established through record searches; surveys within the APE; and consultation with Tribes and organizations, USFS, and SHPO. No previously unidentified sites of cultural or historic importance were identified during the February 25, 2016, meeting discussions.

FHWA and DOT&PF intend to continue consulting with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, other Tribal entities, SHPO, and USFS as the project moves forward.

Section 3.1.3 of the Draft and Final SEIS included information regarding cultural resources within the project's APE, and Sections 4.1.3, 4.3.4, 4.4.4, 4.5.4, 4.6.4, 4.8.3, and 4.9.2.3 of the Draft and Final SEIS included a discussion of project effects to known historic properties.

The existence of burial sites and sites of cultural importance in the Berners Bay area was first noted during the initial archaeological literature review for this project, conducted in 1994. Their reported locations were considered during the development of the inventory design and were factored into the field survey methodology. This design was developed in consultation with archaeologists from USFS and the Alaska Office of History and Archaeology.

As stated in Sections 4.8.3, 5.10, and 5.12.1 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains were discovered during construction, work in the vicinity of the discovery would halt until the discovery was evaluated and appropriate consultation, including with Tribes as appropriate, is conducted per Section 106 of the National Historic Preservation Act. If the discovery included human remains or associated funerary objects, it could also be subject to the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), and Tribal consultation would be conducted per NAGPRA.

B) DOT&PF and FHWA have acknowledged that indirect impacts could occur as a result of the project. Indirect impacts to cultural resources from the project were discussed in Sections 4.3.4, 4.4.4, and 4.6.4 of the Draft SEIS. During the February 25, 2016,

consultation meetings with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and SHPO, DOT&PF agreed to revisit the Alternative 2B alignment and evaluate the possibility of shifting the road further from these sites, knowing that topography and other geological situations may prohibit it. Additional text was added to Section 3.1.3 of the Final SEIS regarding the cultural importance of the project area.

- C) Spirit Mountain (or Lions Head Mountain) would not be impacted by the highway for Alternative 2B. As discussed in Section 4.3.4, FHWA determined that Alternative 2B would have no adverse effect on any historic property, and SHPO concurred that a finding of no adverse effect remains appropriate for this alternative. No other reasonable alternative would approach Spirit Mountain.
- D) Evaluation and identification of prehistoric and historic properties of traditional religious and cultural importance to Tribes, either included or eligible for inclusion on the National Register of Historic Places in the SEIS, is based on record searches, surveys within the study area, and consultation with Tribes and organizations, USFS, and SHPO. As reported in Section 3.1.3 of the Final SEIS, DOT&PF and FHWA understand that the project is located in an area that has been identified as culturally significant by Tribes. No previously unidentified sites of cultural or historic importance were identified as a result of comments received on the Draft SEIS, or during FHWA and DOT&PF consultation meetings on February 25, 2016, with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and SHPO. FHWA and DOT&PF intend to continue consulting with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, other Tribal entities, SHPO, and USFS as the project moves forward.

Group 270

Topic/Subtopic: Cultural, Historical, and Archaeological Resources/General

Group Comment Text:

The State fails to consider the Native use of land and the rights of Natives on these lands under the law.

Group Comment Response:

The State has considered the Native use of lands and the rights of Natives on lands within the project area. It is DOT&PF and FHWA's intent to continue to fully consult with Alaska Native groups regarding this project; disclose project impacts to their interests; and avoid, minimize, or mitigate project effects on historic and cultural properties and impacts on subsistence hunting, fishing, and gathering activities.

DOT&PF and FHWA have followed the process laid out in the regulations (e.g., Section 106 of the National Historic Preservation Act) for consulting with Tribes and identifying and protecting culturally important sites. The Draft SEIS discussed this process in Sections 3.1.3 and 4.1.3.

Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) requires an evaluation of subsistence uses and needs. Existing levels of subsistence hunting, fishing, and gathering were addressed in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD, *Land Use Technical Report*, of the Draft SEIS. Project impacts to

subsistence resources were discussed in Sections 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 of Appendix DD.

Most of the land crossed by the highway segments for Alternatives 2B and 3 are in the Tongass National Forest or the Haines State Forest. A discussion of land use and impacts from the project on land use was included in Section 3.1.1 and 4.1.1, 4.2B.1, 4.3.1, 4.4.1, 4.5.1, and 4.6.1 of the Draft SEIS and Appendix DD, *Land Use Technical Report*. FHWA and DOT&PF consulted with USFS regarding land use issues in the Tongass National Forest.

Group 282

Topic/Subtopic: Cultural, Historical, and Archaeological Resources/Method of Analysis

Group Comment Text:

Comments received on the Draft SEIS expressed concern that the project will have direct and indirect adverse effects on culturally significant Auk Kwan ancestral lands, cultural resources, and human remains/burial sites. These comments suggest:

- A) DOT&PF failed to consult fully with interested parties for potential impacts to historic and cultural resources, and did not conduct additional field studies for the Draft SEIS. Therefore, FHWA has failed to consider all the relevant information, resulting in an incomplete consideration of impacts to cultural resources.
- B) The Auk Kwan Tribe was not consulted as required under Section 106 of the National Historic Preservation Act.
- C) New research indicates that the protocols developed for guiding archaeological survey (i.e., areas having high potential for cultural resources) did not consider the effect of isostatic rebound on these areas.

Group Comment Response:

A) As discussed in Sections 3.1.3 and 7.1 of the Draft SEIS, DOT&PF sent letters in September 2003 to 11 tribal organizations, of which, 6 are Federally Recognized Tribes (Chilkoot Indian Association of Haines, Klukwan Inc., Golbelt Inc., Chilkat Village of Klukwan, Sealaska Corporation, DIA, Tlingit and Haida Central Council, Skagway Traditional Council, Auk Kwan Traditional Council, Sealaska Heritage Institute, Hoonah Indian Association), SHPO, USFS, and National Park Service (NPS), inviting them to participate in the process of identifying cultural properties (prehistoric and historic) and determining the effects of the alternatives on such properties for the 2005 Draft SEIS. DOT&PF conducted follow-up phone calls and face-to-face meetings when requested by the Tribes and Native organizations. In August 2004, FHWA sent letters to these same entities, inviting them to comment on FHWA's determination of eligibility on historic properties for the National Register of Historic Places and determination of potential effects on any historic properties in the APE.

In 2012, SHPO was consulted and concurred with the APE for the project and field methodology. In addition, SHPO concurred with FHWA's determinations of eligibility for all historic properties within the APE of Alternative 2B (with minor changes to the site

boundaries) as discussed in Section 4.3.4. The Tribes and Tribal organizations were additionally notified regarding opportunities for input through scoping outreach, the notice of availability, and the public hearing process as part of the Draft SEIS. FHWA and DOT&PF did not receive scoping comments from Tribes or Tribal organizations but did receive comments from DIA, Sealaska, and Auk Kwan on the Draft SEIS. FHWA and DOT&PF responded to Draft SEIS comments in the Final SEIS (see this appendix). The APEs did not change between SHPO's concurrence and the Draft SEIS. Following the additional consultation described below, FHWA and DOT&PF reviewed the existing analysis and determined that additional field investigations are not necessary (see paragraph below).

The investigations (research and field studies) of cultural resources presented in the Draft SEIS was a synthesis of several technical reports and memoranda regarding historic and archaeological sites prepared for this project between 1994 and 2005. A follow-up literature review was conducted in 2012 to determine if any new information regarding cultural resources in the APE had become available since 2005. No new cultural resources were identified within the APE. Together, these documents comprise the cultural resources record for the project. In part, they include:

- Archaeological Inventory of the East Lynn Canal Alternative, Juneau Access Road Improvement Project. Gary Wessen, Elena Nilsson, Michael S. Kelly, and Sandra Flint. Dames and Moore, Inc., Chico, California. 1994.
- Archaeological Survey on the West Coast of Lynn Canal: William Henry Bay to Pyramid Island. Amy F. Steffian, Owen K. Mason, and Stacie J. McIntosh. Northern Land Use Research, Fairbanks. 1994.
- Inventory and Evaluation of Historic Properties For Lands Within the Area of Potential Effect from Addendum No. 1 to the Plan of Operation for the Kensington Gold Project. Submitted by Coeur Alaska in April 2002. Brenden Raymond-Yakoubian. Integrated Concepts and Research Corporation, Anchorage. 2004.
- Juneau Access Road 2003 Cultural Resource Studies: West Lynn Canal Alternative Update and Skagway Approach Survey Results. Catherine M. Williams, Peter M. Bowers, and Lisa J. Slayton. Northern Land Use Research, Inc., Fairbanks. 2004.
- Determination of Eligibility for the Dalton Trail (SKG-052). Northern Land Use Research, Inc., Fairbanks. 2004.
- Determination of Eligibility for the Skagway Hydroelectric Complex District (SKG-189). Northern Land Use Research, Inc., Fairbanks. 2004.
- Determination of Eligibility for the Lower Dewey Lake Trail (SKG-203). Northern Land Use Research, Inc., Fairbanks. 2004.
- Juneau Access Road 2004 Cultural Resource Studies, East Lynn Canal Alternative Update. Michael R. Yarborough and Catherine M. Pendleton. Cultural Resource Consultants LLC, Anchorage. 2004.
- Juneau Access Road 2005 Cultural Resource Study, East Lynn Canal Alternative Update. Michael R. Yarborough and Catherine M. Pendleton. Cultural Resource Consultants LLC, Anchorage. 2005.
- Alaska Heritage Resources Survey database, State of Alaska Office of History and Archaeology, 2012.

To protect sensitive site information, the data and analyses contained in these documents were only summarized in the Draft and Final SEIS, although all the information therein was used in making determinations of eligibility and findings of effect. For example, the locations of sensitive archaeological and burial sites were not disclosed in the Draft and Final SEIS. It is understandable that a review of the Draft and Final SEIS could lead to confusion regarding the summary of this site information, since it did not include all site locations.

On February 25, 2016, meetings with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and SHPO verified that no previously unidentified sites of cultural or historic importance were missed.

- B) Consistent with Section 106 procedures, the Auk Kwan was not specifically consulted under Section 106 as a Tribe because the Auk Kwan is not a Federally Recognized Tribe. However, as a part of the NEPA process, the Auk Kwan have been given multiple opportunities to provide input on the project. Comments from Auk Kwan members on the Draft SEIS were considered and are addressed in this appendix JJ. FHWA and DOT&PF followed State and federal regulations as well as FHWA guidelines regarding consultation with Federally Recognized Tribes.
- C) The effects of isostatic rebound (referred to as uplift in the SEIS) were considered as a part of the archaeological analysis. Section 3.2.1.1 of the Draft SEIS reported that after deglaciation, the gradual rebound of land that had sunk below its original level due to weight of glacial ice resulted in the emergence of marine deposits and uplifted rock faces. Clarifications and additional information was added to Section 3.1.3 of the Final SEIS regarding survey methodology and considerations in the APE.

Group 294

Topic/Subtopic: Cultural, Historical, and Archaeological Resources/Mitigation

Group Comment Text:

What mitigation is proposed to address the numerous burial sites that could be disturbed in Berners Bay?

Group Comment Response:

The presence of burial sites and/or historic properties within the vicinity of the APE for each alternative was established through background research, consultation, and field investigations. No known burial sites would be affected by any alternative.

Because project alternatives are not anticipated to disturb burials/burial sites in Berners Bay, no site-specific mitigation was proposed. However, as stated in Section 4.8.3 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains were discovered during construction, work in the vicinity of the discovery would halt until the discovery was evaluated and appropriate consultation, including with Tribes, was conducted consistent with Section 106 of the National Historic Preservation Act.

7.8 Cumulative

Group 201

Topic/Subtopic: Cumulative/Economic

Group Comment Text:

Are businesses and organizations likely to develop along the road? For example, do the cruise ship companies plan to construct additional gift stores and docks where they can sell excursions and avoid paying high rents and docking fees in Juneau and Skagway?

Group Comment Response:

Private land along Alternatives 2B and 3 is very limited. Most of the land along the highway routes for Alternatives 2B and 3 is USFS land or Haines State Forest land and would be unlikely to be developed by any cruise company or other business or organization for commercial use. Such proposals would be subject to a USFS environmental document and decision or a separate State Forest decision, and docks would be subject to State permits for use of submerged lands and USACE environmental document and permits for fill in waters of the U.S.

Group 204

Topic/Subtopic: Cumulative/Economic

Group Comment Text:

If actual traffic numbers fall below projections, AMHS revenues will not meet projections, putting the AMHS at further risk.

Group Comment Response:

If actual traffic volumes fall below projections, AMHS has the operational flexibility to respond through such actions as reducing operating hours or assigning a vessel elsewhere in the system. The transportation system in Lynn Canal is projected to be subsidized by the State under any project alternative. Revenues, expenditures, and State support are discussed in Appendix BB, *Revenues and Expenditures Report for Lynn Canal, Fiscal Years 2005–2015*, as well as Section 1.4.4 and the appropriate sections (Other Transportation Impacts - AMHS) in Chapter 4 of the Draft SEIS. FHWA and DOT&PF cannot speculate how AMHS might alter service in response to changes in revenues, expenditures, and State support.

Group 186

Topic/Subtopic: Cumulative/General

Group Comment Text:

The Draft SEIS does not address the indirect effects of the road on wildlife and habitat. Human disturbance (e.g., trash, dumping, bonfires, firearms, tour group activities, etc.) would cause degradation to terrestrial and aquatic wildlife species and habitat, and would alter the natural, recreational, and wilderness characteristics of the area. What would be the strategy for funding patrols for the area and reducing illegal dumping and shooting along the highway?

Group Comment Response:

The Terrestrial Habitat sections and Terrestrial Mammals subsections (under Wildlife) for each alternative in Chapter 4 of the Draft and Final SEIS addressed indirect effects of the road on wildlife and habitat, including trash and dumping. The Alaska State Troopers would have had primary authority regarding law enforcement along the highway. The Alaska Department of Safety, through the Division of Alaska Wildlife Troopers, have primary hunting and fishing regulation enforcement responsibilities. USFS also has enforcement duties on its lands. These agencies are funded generally from State or federal funds and are not funded project by project. While the Draft SEIS acknowledged litter and dumping might have occurred along a road, even with enforcement efforts, litter and dumped items typically do not result in important impacts to wildlife species. It is possible individual animals could have been affected.

Group 197

Topic/Subtopic: Cumulative/Land Use

Group Comment Text:

The road through USFS land may have additive impacts to natural resources by providing access to Land Use Designation (LUD) lands. The Draft SEIS did not account for funding to mitigate and regulate access.

Group Comment Response:

The purpose of the project is to provide a roadway for transportation; not to provide access to adjacent lands. USFS has the authority to regulate access to its lands. While USFS lands are public lands and typically open for public use, USFS could institute restrictions on how the land is used (e.g., to protect sensitive resources), but neither DOT&PF nor FHWA have that control. Limiting places to park, however, is a long-term measure that is within DOT&PF control. No roadside parking is being provided other than turnouts whose locations have been determined through years of coordination with USFS. USFS would be responsible for any future access and resulting need for management or control.

Group 211

Topic/Subtopic: Cumulative/Marine and Freshwater Habitat/Species

Group Comment Text:

A) Improved access from the highway could increase sport fishing pressure in areas that have experienced little pressure before.

B) Degradation from the road could lead to reduced returns and productivity, which would affect commercial fisherman.

Group Comment Response:

A) As discussed in the Draft SEIS, Alternative 2B could result in increased competition and pressure for sport fishers. However, the Alaska Department of Fish and Game (ADF&G) and the Board of Fish regulate salmon sport fishing seasons and limits, and are charged by the Alaska Constitution with managing for sustained yield. They frequently must address allocation between sport and commercial fishing interests. Draft SEIS Section 4.3.1.3 addresses sport fishing as potential competition for commercial fishing for

Alternative 2B and discloses likely increased use of fish streams along the route. Similar subsections address the topic for other alternatives.

B) The road itself and the bridges are not expected to create substantial impact to fish. Most streams will be crossed without piers. Wide river deltas, such as the Lace River entering Berners Bay, will include piers placed 130 feet apart and would provide little or no impediment to fish passage.

Group 191

Topic/Subtopic: Cumulative/Past, Present, Reasonably Foreseeable Actions

Group Comment Text:

How does this project relate to the idea of relocating the State capital? People in support of moving the capital may point to the high construction and annual maintenance costs of the Juneau access road as wasteful capital expenditures and reasons for moving the capital from Juneau.

Group Comment Response:

The purpose and need for the project is to improve access to and from Juneau for Lynn Canal communities, not to resolve a debate on relocating the State's capital. As stated in Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS, Alternatives 2B and 3 would not provide a direct highway link to Juneau. Because Alternative 2B would improve access to Juneau in terms of cost, frequency, and capacity, this may reduced the perception that it is difficult and expensive for Alaska residents to visit the capital. However, it is unlikely implementation of any of the alternatives would substantially alter the debate. Improving transportation within Lynn Canal is warranted, in part, because Juneau is the capital, but the purpose of providing improved transportation is for business, recreation, school activities, medical, shopping, and any other reason people move between communities. The Draft SEIS disclosed avalanche issues and construction, operating, and maintenance costs. The State cannot regulate how people use this information to support their arguments in favor of or against the project.

Group 192

Topic/Subtopic: Cumulative/Past, Present, Reasonably Foreseeable Actions

Group Comment Text:

A) The Draft SEIS failed to rigorously explore the potential cumulative and indirect effects of the JAI Project that would result from development in the area.

- B) The Draft SEIS did not include an evaluation of the existing mining claims in the area and how the road might improve their economic viability. More mining in the area would increase environmental impacts.
- C) The Draft SEIS did not consider the potential for commuter traffic in Lynn Canal (i.e., people in Haines and/or Skagway commuting to Juneau for work).
- D) The SEIS should consider future possibilities associated with Alternative 3, including additional ferry access, recreation, mining, access to nearby communities, and utilities.

Several public landings and camping areas could be constructed between Glacier Point and Icy Straits for ease of access and safety.

Group Comment Response:

A) The Draft SEIS included analyses of the indirect effects of the project alternatives in Sections 4.2 through 4.7 and cumulative impacts in Section 4.9. Indirect effects are the effects of a project that occur later in time or outside of the direct impact area. Potential indirect impacts of the project described in the Draft SEIS included increased hunting pressures and recreation use of USFS lands as a result of increased access with Alternative 2B, and an increase in the need for housing in Haines or Skagway as a result of more flexible and frequent travel opportunities to those communities.

Cumulative impacts refer to the additive effects of the direct and indirect impacts of the proposed project and other past, ongoing, and reasonably foreseeable actions affecting the same resources. The cumulative effects analysis is based on potential cumulative impacts identified in Scoping and on reasonably foreseeable actions that may contribute to cumulative impacts. FHWA and DOT&PF rigorously explored these types of impacts by contacting local and State officials to identify ongoing and planned activities that may affect the same resources as the proposed action, how resources are currently being managed, and what growth scenarios are anticipated in the affected communities with and without the project.

- B) The Draft SEIS (page 4-37) acknowledged that a highway would provide easier and less expensive access to mineral resources, but access alone does not determine whether a mineral deposit would be developed. FHWA and DOT&PF are not aware of specific mining prospects that would go into development if a road were built, hence the statement "It is unlikely that any mineral deposits within the region would be developed solely because of this improved access." The Final SEIS was updated with new information pertaining to reasonably foreseeable future exploration associated with the Kensington Gold Project (Section 4.9.1.1) and potential cumulative impacts to habitat for mountain goats, wolves, and eagles; marine species using the adjacent and downstream Berners Bay; wetlands and water quality; and disturbance to wildlife from activities such as blasting (see Section 4.9.2).
- C) The traffic models used to develop traffic projections included a number of assumptions regarding trip destinations and reasons for travel, including travel for work, recreation, and shopping.
- D) The cumulative impacts assessment provided in Section 4.9 of the Draft SEIS considered reasonably foreseeable future actions. FHWA and DOT&PF cannot speculate on the types of development that might occur in the future. As noted in Section 4.9.1, "reasonably foreseeable" actions are those that are funded or permitted and would occur with or without the JAI Project.

Topic/Subtopic: Cumulative/Social

Group Comment Text:

The project should not move forward without analyzing an Auke Bay bypass, due to cumulative impacts the project would have on the Auke Bay community.

Group Comment Response:

The alternatives as proposed and evaluated in the SEIS meet the purpose and need for the JAI Project without requiring any additional road improvements in Auke Bay; associated traffic forecasts do not indicate a need for any improvements for the highway in Auke Bay to function in a safe manner.

Group 210

Topic/Subtopic: Cumulative/Terrestrial Habitat

Group Comment Text:

A highway alternative could lead to deforestation.

Group Comment Response:

Deforestation is not considered likely to occur because most of the land along Alternative 2B is part of Tongass National Forest and is highly managed, mostly for preservation of resources. Similarly, most of the land along the Alternative 3 corridor is in Tongass National Forest and Haines State Forest. The addition of a road would not likely change management of the land in these areas.

Group 208

Topic/Subtopic: Cumulative/Water Resources

Group Comment Text:

The Draft SEIS did not evaluate the potential indirect effects of spills, runoff, sedimentation, and altered hydrology associated with long-term highway use on aquatic resources. For example, sanitary wastewater discharge at the Katzehin Ferry Terminal could affect Katzehin River eulachon and spill events in Berners Bay could affect spawning of herring, eulachon, and capelin. Over time, the additive impact could be large.

Group Comment Response:

Section 4.3.9.3 of the Draft SEIS evaluated the potential effects of fuel spills/leaks, debris generation, winter sanding, and vehicular traffic. Highway construction, maintenance, and operation of the Alternative 2B road could affect water quality by introducing metals, fuel, oil, and other potential contaminants to water courses. The analysis of these discharges indicated that they would not substantially alter water quality. The comment example of wastewater discharge from ferry terminals was also evaluated and addressed and the SEIS notes that discharges would be treated to meet federal and State standards prior to discharge into Lynn Canal.

Impacts from water quality on aquatic species (e.g., eulachon, herring, and capelin) in Lynn Canal, including the Katzehin River and Berners Bay, were assessed in the 2014

Update to Appendix N – *Essential Fish Habitat Assessment* and errata. As described in detail in the 2004 *Appendix N* – *Essential Fish Habitat Assessment*, surface runoff from the proposed highway and bridges would not exceed water quality standards or adversely impact the water quality of receiving waters for the long term. Wastewater would be treated prior to discharge to meet water quality standards. As such, maintenance and operation of the highway alternatives would not likely lead to degradation of anadromous and marine Essential Fish Habitat (EFH) or effects on the commercially important EFH species (e.g., eulachon, herring, and capelin).

Stormwater research indicates that runoff from low volume rural roadways has minimal to no impact on the water quality of receiving waterways. Runoff from the proposed road/bridges would not exceed ADEC Water Quality Standards (AWQS) or adversely impact the water quality of receiving waters for the long term. There is the potential for an oil/hazardous substance spill resulting from vehicle accidents. To minimize construction and long-term water quality impacts, best management practices (BMPs) would be implemented (see Sections 4.8.6 and 4.3.9.3).

Ferry operations would have minimal impact under Alternative 2B. Mainliner wastewater discharges would be eliminated because the ferries used under Alternative 2B would have sanitary waste holding tanks. In addition, the Katzehin Ferry Terminal would have a sewage treatment facility with permitted outfall, and its discharges would be within permit guidelines. Similar to the system used at the Auke Bay Ferry Terminal, the aeration and ultraviolet light disinfection would be used at the Katzehin Ferry Terminal, so no adverse impacts to water quality would occur. Ferry operations could result in accidental discharges, spills, and leaks. Historically, however, these have been minor with only minimal and temporary impacts to water quality.

Aquatic species, as assessed in the 2014 Update to Appendix N – Essential Fish Habitat Assessment, would not be affected because the water quality impacts would be mitigated. In addition, a State Section 401 water quality certification was issued for Alternative 2B, confirming that this alternative would adequately and appropriately meet water quality standards for receiving waters.

7.9 Editorial and Document Management

Group 301

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

- A) Please confirm/correct the number of avalanche chutes, zones, and locations in the document
- B) Please confirm/correct the varying distances from the Berners Bay Cabin.

Group Comment Response:

A) As stated in Section 4.3.8.2 (Avalanches) of the Draft SEIS, "The 2013 Update to Appendix J – Snow Avalanche Report (see Appendix Z) identifies 43 avalanche paths along the East Lynn Canal Highway corridor. The proposed highway alignment for Alternative 2B crosses 41 avalanche paths (the other two identified paths do not reach the alignment)."

Since these two paths would not have reached the alignment, no mitigation is necessary and thus was not brought into discussion in the Executive Summary.

B) The centerline of the Alternative 2B alignment is approximately 1,000 feet east of the Berners Bay Cabin at an elevation approximately 500 feet above the cabin. This information was updated/corrected throughout the document.

Group 416

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

- A) The Draft SEIS's analysis, predictions, methodologies, and conclusions were flawed and subject to opinions, not supported by evidence.
- B) Data and metrics should be ground-truthed.
- C) The Draft SEIS did not include new information, including information about geological hazards and prior substantive comments.
- D) The Draft SEIS used faulty or best case scenario assumptions to arrive at conclusions that were disputed by its own attached data.
- E) The Draft SEIS omitted references such as the Haines Household Opinion Survey, which could not be readily found via an internet search.

Group Comment Response:

- A) The reports and analyses used and developed for the Draft and Final EIS used a variety of data, forecasting tools, and methodologies. As appropriate, professional judgment by subject matter specialists was often employed in these analyses. Such analyses can be subject to criticism, especially as time passes and scientific understanding changes; however, they reflect the best effort at the time to characterize and understand the alternatives and their impacts in the future. In the original communication, this comment was the general lead-in to several issues that were coded as separate comments and addressed elsewhere.
- B) There were disparate methodology and data needs for each of the studies and reports generated or referenced for the SEIS. Each was reviewed by subject matter specialists and reflect the best effort at the time to characterize and understand the alternatives and their impacts based on a preliminary level of design. An EIS documents a process to provide comparative data to inform decision makers. Exhaustive scientific studies are not always available or needed to accomplish this goal. FHWA and DOT&PF anticipate that some ground truthing would have taken place during final design and before construction if a build alternative had been selected, such as bald eagle nest locations, wetlands delineation, and amphibian pond location surveys.
- C) The Draft SEIS included new and updated information from the 2006 EIS. As detailed in Section 3.2.1, Geology, DOT&PF conducted a geotechnical investigation in 2006 and shifted the alignment of Alternative 2B to avoid many of the geologic hazards identified in

the previous survey. DOT&PF also updated the geologic hazards evaluation in 2012 and $Update\ to\ Appendix\ J-Snow\ Avalanche\ Report\ (Appendix\ Z)$ in 2013, and incorporated the information into the Draft SEIS. A summary of the Alternative 2B geological hazards and related mitigation strategies are discussed in the 2017 $Update\ to\ Appendix\ D-Technical\ Alignment\ Report.$

- D) A response to the suggestion that the Draft SEIS uses faulty assumptions or best case scenario assumptions to arrive at conclusions disputed by DOT&PF's own data is difficult to craft without specific examples. The collection of data, development of assumptions, and methodologies were all reviewed by subject matter specialists, and reflect the best effort at the time to characterize and understand the alternatives and their impacts. DOT&PF and FHWA has welcomed scrutiny into the process and has adjusted or updated analyses over time based on input from the public and agencies.
- E) The Section 10, References, pointed users to a website that had hosted Haines community news, including the 2011 Haines Household Opinion Survey final report, but it now appears to be redirecting users to advertisements. Appendix EE, *Socioeconomic Effects Technical Report* (References), of the Final SEIS was updated to identify the new location, which could be found online (at the time of this appendix's publication) at: http://www.hainesalaska.gov/sites/default/files/fileattachments/administration/page/1585/h aines survey report.pdf

Group 417

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

Please update the index to include references to herring in Chapters 3, 4, and 5.

Group Comment Response:

Per your comment, the Final SEIS index has been updated and includes references to herring.

Group 427

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

Table 1-2 in the Draft SEIS is at variance with Appendix B to Appendix AA, *Traffic Forecast Report*, and should be updated with current Department of Labor population statistics that forecast flat population growth in Southeast Alaska through 2042.

Group Comment Response:

Table 1-2 has been spot checked against population history and forecast in Appendix B to Appendix AA, and it appears no change to the table is necessary. Table 1-2 does not use forecasts but focuses only on historical data.

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

- A) The Regional Snowfall discussion (Section 5 of the 2013 Update to Appendix J Snow Avalanche Report) does not have correct data for "Haines Downtown" and has questionable data from the "Haines Airport" location. For example, the Haines Downtown snowfall average for the past 15 years of official complete records is 160.1 inches, more than double the figure listed in the Draft SEIS. October through April conditions, maintenance requirements, road closures, and avalanche mitigation need to reflect the true average Haines snowfall.
- B) The Katzehin to Taiya Inlet snowfall data should not be included in the average as this is not part of the road alignment. Including it causes the overall alignment average to be significantly understated.
- C) The reported calculated route average is based on a simple average of the three segments and does not give weight to the respective distances delineated by the described segments. The "true" estimated two-segment route average should be used instead.

Group Comment Response:

The 2017 Update to Appendix J – Snow Avalanche Report, Section 5 Regional Snowfall, states that these were estimates based on limited data. As with all projects in Alaska, the available weather data is regional rather than project-specific, and period of record is variable and usually not very long, as climate records go. Different data sets over different periods inevitably yield a range of values, and quality of the data is variable. This is why avalanche hazard evaluation and program design is based on actual observed and recorded avalanche activity; not on snowfall estimates or weather records. No greater level of accuracy is either available or necessary for avalanche evaluation at the EIS level, nor are additional weather measurements needed before the design, construction, and operations stages.

A) The weather data included in the 2013 Update to Appendix J, Snow Avalanche Report were not updated from the original 2005 studies. These figures were updated in the 2017 Update to Appendix J – Snow Avalanche Report presented in the Final SEIS with what is currently available online, including their periods of record, from the Juneau office of the National Weather Service:

Juneau International Airport (1981 to 2010): 87 inches (2.2 meters)

Lena Point (1983 to 2015): 80 inches (2.0 meters)

Tee Harbor area (station no longer exists): 145 inches (3.7 meters)

Haines downtown (2000-2015): 165 inches (4.2 meters)

Haines Airport (1972-2013; no longer records snowfall): 133 inches (3.4 meters)

Haines Highway, Pleasant Camp (2001-2015): 236 inches (6.0 meters)

Skagway Airport (1965 to 2010; no longer records snowfall): 49 inches (1.2 meters)

Skagway (harbor; no longer records snowfall): 37 inches (0.9 meters)

Skagway Power (downtown; 2001-2015): 52 inches (1.3 meters)

- B) The estimates presented in the original 2005 study were unchanged by the new data, and the estimated snowfall at starting zone elevations along the East Lynn Canal route from Berners Bay to the Katzehin River could be best described as ranging from approximately 150 inches (3.8 meters) to 210 inches (5.3 meters). This is less than 200 inches (5.1 meters) overall. The figure for all of Lynn Canal, from Berners Bay to Skagway, is useful as regional climate information along the entire route, including those portions served by ferries.
- C) A paragraph has been added in the 2017 Update to Appendix J Snow Avalanche Report to clarify the rough nature of the snowfall estimates, and their lack of importance to the avalanche assessment and mitigation program: "Snowfall is not calculated into avalanche hazard evaluation or used to develop mitigation measures. Avalanche studies are based on hard data from actual avalanche occurrences, rather than indirect calculation from snowfall figures. Snowfall for Alaska projects must always be estimated from the records that are available in the region. These observations are usually incomplete, and taken over a relatively short period of record, so the snowfall estimates are necessarily rough estimates only."

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

More emphasis should be placed on Figure ES-1 (2020 Forecast Summer Demand and Capacity for All Alternates) in the Executive Summary.

Group Comment Response:

The commenter, in this and associated comments, suggested that traffic demand for Alternatives 2B and 3 would be lower than indicated and attached a revised Figure ES-1 to illustrate. The commenter is generally critical of the terminology and methods used to generate forecasts of demand and associate them with capacity. Traffic modelers for the project considered the input relative to the methods they used and concluded the methods used were sound. The alternatives were compared using a consistent forecasting model across all the alternatives. The discussion of these forecasts appears in Sections 4.1.5, 4.3.7, 4.4.7, 4.5.7, and 4.6.7 of the SEIS, and the numbers in these sections were updated in the Final SEIS. Detailed traffic forecasts and methods were provided in Appendix AA, *Traffic Forecast Report*. Although some people may read only the Executive Summary, it is meant only as an overall summary of these issues and should not be taken as the full discussion.

Group 430

Topic/Subtopic: Editorial and Document Management/General

Group Comment Text:

The SEIS should be clear and concise as required by the CEQ. As such, information within the document should be consolidated and reorganized. For example, the Draft SEIS appendices are not easily located within the Appendices Volumes (1-6), and errata sheet information should be incorporated within the updated appendices.

Group Comment Response:

DOT&PF recognizes the difficulties in reviewing and navigating the long and complex SEIS documents. The long history of the EIS and SEIS processes makes it difficult to have concise documents. Consolidating and reorganizing documents may serve some users; however, DOT&PF and FHWA sought to maintain the original EIS's order and highlight where changes and additions were made to avoid concerns from stakeholders that materials were being hidden or removed from the record. This has resulted in study appendices being located in different files. The Final SEIS conforms to standard practices for the organization of NEPA documents, and reorganization of the documents could cause frustration and confusion for many public and agency stakeholders who have been following the project and its documents throughout its long time frame.

7.10 Energy

Group 46

Topic/Subtopic: Energy/Method of Analysis

Group Comment Text:

- A) The analysis should factor in increased use of electric vehicles and the associated reduced fuel cost.
- B) The analysis should consider the increasing use of electrical vehicles by incorporating vehicle charging stations into the highway alternatives. Electrical power will also be needed at the Katzehin Ferry Terminal.
- C) The analysis should account for the reduction in GHG emissions from electrical vehicle use. For example, the emissions reported in Table 4-71: Estimated GHG Emissions by Alternative (2050) should be reduced for Alternative 2B due to anticipated increased electric vehicle usage.
- D) The analysis should consider the lower cost per vehicle for Alternative 2B to reflect the present and pending electric transportation transformation.

Group Comment Response:

Regarding A), B), C), and D): Section 4.7.9 of the Draft SEIS addresses vehicles that might use alternative energy sources in a discussion of the unpredictable nature of projecting GHG emissions. Because such vehicles are not the standard and because future use is not known, the Draft SEIS addressed common gasoline-fueled vehicles. In this way, the analysis was conservative in terms of projecting user costs, emissions, and related environmental impacts. There are no current State or federal policies or laws requiring that charging stations for electric vehicles be included in transportation projects in Alaska. Fueling for vehicles, regardless the type of fuel, is typically left to the private sector; therefore, no charging system or electrical utility along the road corridor is proposed as part of the project.

Topic/Subtopic: Energy/Method of Analysis

Group Comment Text:

- A) Are there opportunities to reduce fuel consumption with the existing AMHS fleet?
- B) Is natural gas an alternative fuel that could provide a cost savings?
- C) What would the costs of upgrades and potential savings with another fuel source look like in comparison to current fuel usage patterns?

Group Comment Response:

- A) Addressing fuel consumption across the entire fleet would not address the purpose and need of this project. The focus of the JAI Project is on reducing State costs within the Lynn Canal Corridor, and the concern is overall costs, not just fuel costs. While fuel costs are an important component of overall costs, staffing is the largest cost, especially for ferries that operate long hours and require two worker shifts. Day boat shuttle ferries help to address the staffing issue. Building new vessels is an opportunity to build the latest technology for fuel efficiency into the ship, but costs savings on fuel would likely be incremental and unlikely to result in large savings overall, because considerable energy must be generated to push vessels through the water. See also Response B, below.
- B) Currently, natural gas is not a viable option in Southeast Alaska, as no source is available. The new Day Boat ACFs, which would be used in some of the alternatives, will use Tier III engines, which operate at the highest efficiency. These engines can be converted to use natural gas in the future, should a natural gas supply be available. However, natural gas storage tanks would be required to be above deck, thus reducing passenger capacity.
- C) The alternatives presented in the SEIS use the technology and fuel sources available in Southeast Alaska. Given the issues indicated in Responses A and B, analyzing the costs of upgrades to existing ferries to use more efficient engines or to convert ferries to other fuel sources is outside the scope of this project and its purpose and need.

7.11 Environmental Justice

Group 308

Topic/Subtopic: Environmental Justice/Method of Analysis

Group Comment Text:

- A) Per Executive Order (EO) 12989, the economic and health impacts to low-income and minority citizens should be considered for this project. The Draft SEIS failed to include meaningful analysis regarding EO 12898 mandates related to cost and time burdens across all alternatives.
- B) Cost impacts to walk-on passengers—including the elderly, disabled, students, and low-income families—is not adequately considered. Alternative 2B would put an unfair burden—in terms of cost, time, and ability to travel—on low-income populations.

[Note, general impacts to walk-on passengers are addressed under Comment Group #116.]

C) This project allows the State to neglect its duty to provide public transportation to all Alaskans, with Alternative 2B disproportionately affecting the disabled, elderly, students, and those without well-maintained and/or four-wheel-drive vehicles.

Group Comment Response:

A) FHWA complied with EO 12989, as well as USDOT and FHWA guidance on Environmental Justice in the Draft SEIS. As discussed in Section 3.1.5 of the Draft SEIS, the EO requires federal agencies to identify and address, "as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations." In this NEPA analysis, FHWA did not identify a disproportionately high and adverse effect on low-income and/or minority communities as a result of project alternatives.

Cost and time burdens for all travelers, including low income and minority populations, were discussed in Chapter 4 of the Draft SEIS. Reducing user costs was an element of the purpose and need statement. The alternatives evaluated in the Draft SEIS met the need for reduced user costs to varying degrees. Additional discussion regarding cost information and impacts to low-income and/or minority walk-on passengers were added to Sections 4.3.7.5, 4.4.7.5, 4.7.2 of the Final SEIS and Sections 3.1.4 and 3.1.5 of the *Socioeconomic Effects Technical Report* (Appendix EE).

B) While commenters have included the elderly, disabled, and students in comments regarding EO 12989, these populations are not Environmental Justice populations. This does not mean, however, that FHWA has not considered impacts from the proposed project on these populations.

Similar to any other passenger, elders, disabled, and students traveling by ferry would need to continue making their own accommodations for traveling on the highway portion of their trip between Lynn Canal communities, whether from Auke Bay to Juneau or Katzehin to Juneau. AMHS accommodates disabled passengers per the ADA. Providing transportation for walk-on passengers is not a primary responsibility of DOT&PF (see Section 1.4.1.1). Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS described how pedestrians and cyclists will be accommodated with Alternatives 2B and 3, respectively, and includes an analysis of the potential for a bus or van service to develop in the Lynn Canal corridor.

The current surface transportation system in Lynn Canal operates like an expensive toll road, which has an impact on low-income travelers, in some cases precluding their ability to travel outside their hometown. As indicated in the Draft SEIS, vehicle travel on the AMHS costs roughly four to six times as much as travel over the same distance on a highway (see Section 1.4.5). One of the stated purpose and need elements of the project is to reduce user costs for transportation in the corridor. As previously stated, FHWA has determined, based on traditional measures of Environmental Justice, that none of the build alternatives would have a disproportionately high and adverse effect on low-income or minority communities.

However, based on this comment, additional information regarding impacts to elderly, disabled, and student passengers was added to Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS and Sections 3.1.4 and 3.1.5 of the *Socioeconomic Effects Technical Report* (Appendix EE).

C) The State does not have a duty to provide town to town public transportation. The marine highway system was developed to provide a means to transport vehicles. Passenger transportation (walk-ons) was a consequence of this action. FHWA does not deny that some of the project alternatives will affect travelers in Lynn Canal to varying degrees. However, FHWA has determined that none of the build alternatives would have a disproportionately high and adverse effect on low-income or minority communities, which could include elderly, disabled, and student passengers. Additional information regarding impacts to elderly, disabled, and student passengers was added to Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS and Sections 3.1.4 and 3.1.5 of the Socioeconomic Effects Technical Report (Appendix EE).

The AMHS is the only public transportation that carries both passengers and vehicles in Lynn Canal. The purpose of this project is to improve surface transportation within Lynn Canal. As explained in Section 1.4.1.1 of the Draft EIS, the State's primary responsibility is to provide a transportation facility for vehicles. Because of the nature of the AMHS, the facilities to move vehicles also accommodate walk-on passengers. However, this is a secondary function. The project's purpose is not to provide public transportation. Alternative 2B was selected as the preferred alternative for the Draft SEIS because DOT&PF and FHWA believe it best met the purpose and need for the project.

7.12 Essential Fish Habitat (EFH) – Marine and Freshwater Group 29

Topic/Subtopic: Essential Fish Habitat – Marine and Freshwater Justice/Existing Conditions

Group Comment Text:

No data collection or analysis on eulachon, herring spawning, or biomass have been completed at the Katzehin River delta. The data could have been easily collected by expanding the area surveys that ADF&G uses monthly to get data for fishing regulations in Lynn Canal. This information gap does not allow for a rigorous analysis of Alternative 2B impacts on EFH at the Katzehin River delta.

Group Comment Response:

FHWA has coordinated with National Marine Fisheries Service (NMFS) on the project since 1994, and has continued to coordinate with the NMFS on the EFH assessment, Endangered Species Act (ESA) Section 7 consultation, and Marine Mammal Protection Act authorization (eulachon and herring are prey species for ESA listed species and marine mammals). NMFS provided comments on the Draft SEIS EFH Assessment, requesting minor clarifications. The EFH assessment was updated through errata, which is included in Appendix Z of the Final SEIS. Section 4.3.13 of the Draft SEIS noted that EFH is present within the Katzehin River delta area. Surveys have been conducted at the site and confirmed the presence of Pacific herring and eulachon in the Katzehin River delta. The

analysis in the Draft SEIS considered the presence of these species and the potential impacts from project activities on these species.

Group 30

Topic/Subtopic: Essential Fish Habitat – Marine and Freshwater Justice/Existing Conditions

Group Comment Text:

The Final SEIS should consider incorporating elements into the design of the Auke Bay Ferry Terminal for Alternative 1B to dissipate the additional wave energy from vessels and minimize continued degradation of the adjacent Auk Nu Cove eelgrass bed.

Group Comment Response:

Alternatives 1B, 4A, and 4C did not propose additional modifications to the existing Auke Bay Ferry Terminal to dissipate additional wave energy. Based on the comment, Sections 4.2B.13 and 4.5.13 of the Final SEIS acknowledged the increased wave energy effects on eelgrass from utilizing Auke Bay for Alternatives 1B, 4A and 4C. Eelgrass in these terminal areas is already disturbed, and nearshore habitat around Lynn Canal is extensive; therefore, localized, periodic disturbances and additional wave energy at the Auke Bay Ferry Terminal from ferry operations is not anticipated to substantially degrade the eelgrass bed adjacent to Auk Nu Cove beyond its existing condition.

Group 36

Topic/Subtopic: Essential Fish Habitat – Marine and Freshwater Justice/Habitat Fragmentation/Loss

Group Comment Text:

- A) What impact would off-road vehicles (ORVs) have on wildlife and anadromous streams?
- B) Increased access for ORVs in the Berners Bay area would affect salmon and eulachon spawning habitat.
- C) Negative impacts from the road include more vandalism and degraded areas from ORVs.

Group Comment Response:

- A) Impacts to wildlife and stream habitat from ORVs were discussed in Section 4.3.12 of the Draft SEIS. ORVs could damage upland and wetland vegetation, resulting in direct loss of habitat and habitat damage through destruction of vegetation, erosion, and increased stream siltation. Noise and the presence of ORVs could displace some wildlife species, resulting in mortality from collisions or human interaction. See also Response B, below.
- B) The proposed project does not include access facilities for ORVs; however, a highway would afford ORVs access to adjacent lands. As stated in Section 4.3.12, USFS is aware of the potential for ORV impacts and plans to develop an ORV enforcement policy if the East Lynn Canal Highway is constructed.

C) Impacts to terrestrial habitat through camping and hiking, illegal dumping, and unauthorized collection of firewood were discussed in Section 4.3.14 of the Draft SEIS. Impacts to aquatic habitat, fish habitat, and wildlife were described in Sections 4.3.12, 4.3.13, and 4.3.15 of the Draft SEIS.

Group 37

Topic/Subtopic: Essential Fish Habitat – Marine and Freshwater Justice/Habitat Fragmentation/Loss

Group Comment Text:

- A) The Draft SEIS does not consider the importance of the Lynn Canal nearshore habitat (intertidal or subtidal) to juvenile salmonids, eulachon, or other species for critical feeding or refuge areas.
- B) The Draft SEIS did not adequately address the effects of increased fill incorporated into the design after the 2006 ROD at the Katzehin River and Katzehin Ferry Terminal on EFH, salmonids, eulachon, and prey species of Steller sea lions. Because the Katzehin River includes important habitat for fish, fish for the nearby Steller sea lion critical habitat at Gran Point, and is an important contributor to the commercial chum fishery, the SEIS should address the effects of fill at the Katzehin River.
- C) The Draft SEIS did not include information regarding how long construction related infrastructure (e.g., temporary barge ramps along the shores of Lynn Canal to allow access of upland field camps) would remain in place or what the EFH impact of these facilities would be. The Draft SEIS did not include a detailed plan and timeline for the post-construction recovery of these sites.
- D) The Draft SEIS contains references to "unidentified fish" in shoreline surveys. The species composition and areas most essential to these fish were never determined.
- E) The Draft SEIS failed to consider the indirect impacts to fish that can result from structural shoreline modifications that permanently alter physical processes.
- F) Although the slopes of fill areas would likely be colonized by similar intertidal and subtidal species to those on the fill site over a few seasons, the amount and character of the area available for recolonization would be different from the undisturbed intertidal and subtidal zone. Recolonization would not restore the community to its original state, reducing its value as foraging habitat for commercial fish species.

Group Comment Response:

A) The importance of near shore habitat was addressed in the Draft SEIS. Areas of near shore habitat that were considered high value EFH areas would be avoided as determined in coordination and consultation with ADF&G, USFWS, and NMFS. The Draft SEIS described the presence of marine habitat and anadromous species in Sections 3.3.2 and 3.3.4 and the potential impacts to these resources for each alternative in Chapter 4. However, as a result of the comment, recent available data on EFH and species use of the Katzehin River and delta area was incorporated into Sections 3.3.2 and 3.3.4, and revisions to descriptions of potential impacts from the alternatives were provided in Chapter 4 of the

Final SEIS. Chapter 4 of the Final SEIS was also expanded to include an evaluation of the effects on the larval stage of eulachon from Alternative 2B, 3, and 4B/4D.

- B) The addition of fill proposed since issuance of the 2006 ROD in intertidal and subtidal areas was proposed to address concerns related to scour at the Katzehin River bridge abutment for Alternative 2B. This would result in placement of additional materials and an overall increase of 0.64 acre of fill within the Katzehin River intertidal area, 0.55 acre of which would affect EFH. Construction and long-term effects to EFH from the ferry terminal north of the Katzehin River were evaluated in Sections 5.4.1.2, 5.4.2.3, and 5.4.2.4 of the 2004 Essential Fish Habitat Assessment and Sections 2.1.1 and 2.1.2 of the 2005 Addendum to Appendix N Essential Fish Habitat Assessment. Due to comments, the site-specific effects of the increased fill on EFH in this area were described in Section 4.3.13 of the Final SEIS. The realignments of Alternative 2B since 2004 have reduced EFH impacts associated with highway fill and crossing structures for the Antler, Berners/Lace, and Katzehin Rivers. As stated in Section 4.2.2 of the 2014 Update to Appendix N Essential Fish Habitat Assessment, 25.5 acres of intertidal and subtidal fill is a small portion of the available habitat in Lynn Canal and would have minimal effects on the EFH available in Lynn Canal.
- C) The impacts to EFH from construction and operation of Alternative 2B were presented in Section 4.2.2 of the 2014 Update to Appendix N Essential Fish Habitat Assessment and Section 2.1.2 of Attachment A 2005 Addendum to Appendix N Essential Fish Habitat Assessment. Information from these reports was incorporated into Sections 4.3.13 and 4.8.11 of the Draft SEIS. In addition, Section 4.8.11 of the Final SEIS included an evaluation of the effects of the temporary barge ramps on eulachon and the anticipated post construction recovery timeline per the comment.
- D) Although not all species were identified during the surveys, the assessment presented in Section 4.2.2 of the 2014 Update to Appendix N Essential Fish Habitat Assessment, Section 2.1.2 of Attachment A 2005 Addendum to Appendix N Essential Fish Habitat Assessment, and Section 4.3.13 and 4.4.13 of the Draft SEIS provided an evaluation of effects representative of fish species known to occur in Lynn Canal and its tributaries. FHWA regards the analysis contained in these documents to be sufficient for characterizing impacts to these resources and making an informed decision for the project. Consultation with NMFS as part of the EFH assessment and ESA Section 7 consultation, led to agreement with the use of representative species to assess potential impacts to aquatic species.
- E) Section 4.3.13 of the Final SEIS was updated to include potential indirect effects to fish from shoreline modifications due to placement of fill associated with the highway alternatives. The loss of near shore habitat associated and potential effects to juvenile salmon are presented in Section 4.2.2 of the 2014 Update to Appendix N Essential Fish Habitat Assessment, Section 2.1.2 of Attachment A 2005 Addendum to Appendix N Essential Fish Habitat Assessment, and 5.6.2 of the 2005 Appendix N Essential Fish Habitat Assessment.
- F) Section 4.3.13 and 4.4.13 of the Draft SEIS includes analysis of the potential for recolonization in the intertidal and subtidal areas following construction of the road

alternatives. Species that recolonize these areas will continue to provide foraging habitat for commercial fish species at a similar level and value as the original species. In addition, the loss of intertidal and subtidal habitat represents less than 1 percent of the overall habitat in Lynn Canal and would not affect regional populations of species that depend on these areas.

Group 38

Topic/Subtopic: Essential Fish Habitat – Marine and Freshwater Justice/Mitigation

Group Comment Text:

The Final SEIS should re-evaluate the impacts of the preferred alternative (Alternative 2B in the Draft SEIS) to determine if the level of mitigation already completed (e.g., Yankee Cove artificial reef site) is commensurate with, and compensates for, effects the final alternative may have on living marine resources, including EFH. Current mitigation measures for the Katzehin River only address construction. Additional mitigation for this and other areas may be needed to address final project impacts.

Group Comment Response:

In the 2006 FEIS, DOT&PF committed to \$780,000 in-lieu fee compensation to offset unavoidable adverse impacts to intertidal and subtidal marine waters (EFH). In 2008, DOT&PF provided \$324,000 to construct the Yankee Cove project that established two artificial reefs to enhance habitat important to spawning and rearing fish, including Pacific herring and marine invertebrates. FHWA determined the balance remaining (\$456,000), in addition to the in-water work timing window to avoid sensitive life stages of fish (March 15 through June 15) and other measures described in Chapter 5 of the Draft SEIS, would provide adequate mitigation for Alternative 2B impacts to marine resources. Alternative 1 – No Action (preferred alternative) would not result in impacts; therefore, no mitigation is required or proposed under Alternative 1 – No Action.

7.13 Fish – Marine Fish, Anadromous Fish, and Shellfish Group 39

Topic/Subtopic: Fish – Marine Fish, Anadromous Fish, and Shellfish/Existing Conditions

Group Comment Text:

The Draft SEIS did not evaluate the effects of the proposed road and ferry terminals on the larval stage of Lynn Canal eulachon. There was too little information on the marine distribution of larval and juvenile eulachon to determine the extent of the impact to these fish

Group Comment Response:

Per the comment, Section 4.3.13, 4.4.13, and 4.6.13 of the Final SEIS was expanded to include an evaluation of the effects of Alternatives 2B, 3, 4B, and 4D on the larval stage of eulachon in Lynn Canal.

Topic/Subtopic: Fish – Marine Fish, Anadromous Fish, and Shellfish/Existing Conditions

Group Comment Text:

Anadromous streams listed in the Draft SEIS are not accurate in terms of species compositions and the location of fish passage barriers. ADF&G, Habitat Division staff will be correcting the anadromous waters catalog next spring and will provide the corrected information to DOT&PF as it becomes available.

Group Comment Response:

The description of anadromous waters in both the Draft and Final SEIS was based on best available information from ADF&G. The most recent version of the anadromous waters catalog was provided to DOT&PF and incorporated into the Final SEIS.

Group 149

Topic/Subtopic: Fish – Marine Fish, Anadromous Fish, and Shellfish/General

Group Comment Text:

- A) A map showing the location of Berners Bay herring spawning locations should be included in the Final SEIS and should include ADF&G, Commercial Fisheries Division's Geographic Information System (GIS) shapefiles.
- B) The status of the federal ESA listing of the Southeast Alaska Distinct Population Segment of Pacific herring should be included in Chapter 3 of the Final SEIS.
- C) Chapter 3 of the Final SEIS should state that the herring fishery could resume if the Lynn Canal population recovered.

Group Comment Response:

- A) Pacific herring spawning maps provided by ADF&G were incorporated into Section 3.3.4.1 and Figure 3-19 of the Final SEIS.
- B) Per the comment, Section 3.3.7 of the Final SEIS addresses the Pacific herring petition to list under the ESA and NMFS conclusion that the listing was not currently warranted.
- C) An assessment of population recovery in Lynn Canal for Pacific herring was included in Section 3 3 4 1 of the Final SEIS

Group 483

Topic/Subtopic: Fish – Marine Fish, Anadromous Fish, and Shellfish/Existing Conditions

Group Comment Text:

- A) The SEIS should include a commitment to replace the herring spawning habitat that would be lost with development of a ferry terminal at Sawmill Cove.
- B) The in-water work window in the Antler and Lace Rivers should be extended by a week to protect outmigrating eulachon larvae from shock from setting pilings and vibration from heavy equipment.

C) What species are included and what activities are covered with the March 15 through June 15 in-water work window?

Group Comment Response:

- A) Sections 4.4.13 and 4.6.13 of the Draft SEIS described the potential impacts to fish species from development of the Sawmill Cove Ferry Terminal. Mitigation for overall project impacts to fish was included in the Final SEIS based on consultation with NMFS for EFH.
- B) The timing of eulachon outmigration was taken into consideration for determining inwater work windows. Section 4.2 of the 2014 Update to Appendix P Anadromous and Resident Fish Technical Report, which described Alternative 2B and its river crossings, stated that construction would not begin until June 15 to avoid impacts to eulachon at their larval stage. The in-water work windows were recommended by NMFS and ADF&G. Further, piers were only proposed in major water crossings where full spanning of the channel was not feasible, so any outmigration occurring after June 15 would not have been impeded.
- C) In-water work windows are recommended by NMFS and ADF&G with primary considerations given to important fish species, including anadromous and other game fish and threatened, endangered, or sensitive species. Periods are established to avoid the vulnerable life stages of these fish including migration, spawning, and rearing.

Group 42

Topic/Subtopic: Fish – Marine Fish, Anadromous Fish, and Shellfish/Operation/Maintenance Impacts

Group Comment Text:

The Draft SEIS did not evaluate the effects of increased marine and highway traffic, runoff from roads and parking lots, ORVs, wastewater discharge, barriers to fish movement, and increased silt and sedimentation on fish species. Specifically:

- A) The road and bridges would create a barrier and interfere with returning salmon.
- B) Road runoff, silt, and pollutants would enter streams and result in damage to spawning streams
- C) Wastewater from the ferry terminal, ferry traffic, and development on the shoreline would affect fish movement and habitat availability at Katzehin and in Berners Bay.

Group Comment Response:

- A) Section 4.3.13 of the Draft SEIS explains that bridge crossings for Alternative 2B would not encroach on stream channels, except in the case of the Antler, Lace, and Katzehin Rivers, and that the piers in those rivers would be approximately 130 feet apart and would not impede fish movement.
- B) Section 4.3.13 of the Draft SEIS addresses the potential presence of pollutants and

sediment in highway runoff. These substances would not likely be concentrated enough to cause direct mortality or disturbance to anadromous and resident fish due to the low volume of traffic expected. Impacts from runoff were also discussed in the 2004 *Essential Fish Habitat Assessment* (See 2005 Supplemental Draft EIS Appendices: www.juneauaccess.alaska.gov).

C) Sections 4.3.13, 4.4.13, and 4.6.13 of the Draft SEIS considered discharges of sanitary wastewater from new ferry terminals as well as marine vessels, leakage of fuels and lubricants from marine vessels, and the potential effects on fish. They also describe impacts to habitat from the shoreline development of the ferry terminals. Water quality effects and shoreline development are not expected to affect overall populations of aquatic species.

7.14 Geology

Group 161

Topic/Subtopic: Geology/Geologic Hazards as Impacts on Alternatives

Group Comment Text:

The project facilities (road, bridges, ferry terminals) are at risk from geologic events:

- A) What measures are in place to protect the highway, bridges, and ferry terminals during a tsunami or earthquake?
- B) Glaciomarine and glacier outwash deposits are known to be potentially unstable during major earthquakes. These muds and clays could cause significant engineering problems along the right-of-way, but particularly for pilings for the major rivers.
- C) What effects would glacier outburst floods, seasonal debris flows, glacier isostatic adjustment, and glacial river sediment load have on project facilities?

Group Comment Response:

A) Bridges, ferry terminals and other structures are designed to satisfy the requirements of the American Association of State Highway Transportation Officials (AASHTO) Guide Specifications for LRFD Seismic Bridge Design. These guidelines identify measures such as structural components for bridges and ferry terminal structures that help them to resist seismic effects related to earthquakes. The seismic guide specifications (similar to a building code) include requirements that allow engineers to design bridges that can safely accommodate earthquake-induced ground movements without undue risk of collapse. This design goal is achieved by providing bridges that can safely undergo the large distortions that result from earthquakes. There is no national standard for the design of structures to resist the effects of tsunami; however, the bridges and ferry terminal components incorporate design recommendations associated with the hurricane type storm surges that are similar to tsunami effects such as high water levels and loads imposed from storm waves. For road components other than structures, there are no guidelines for seismic resistance. Road embankments that have the potential to be impacted by wave action or tsunamis, are designed to include measures provided by guidance from the FHWA HEC-25 (Highways in the Coastal Environment), USACE EM 1110-2-1100 (Coastal Engineering Manual), and the Alaska DOT&PF Coastal and Harbor Design Procedures Manual.

- B) While there is no national standard for the design of structures to resist the effects of liquefaction, soil softening, lateral spread and slope instability, these issues are considered in the design. The bridges are founded on deep, large diameter pipe piles that can accommodate large deformations associated with seismic hazards. A geotechnical exploration plan was executed to determine the engineering properties of the underlying soil which, in turn, are used to develop foundation recommendations that reflect the site conditions.
- C) The most potential for impact from these the natural occurrences would be on bridges due to raising or lowering of the riverbed. These types of occurrences would have no impact on bridges due to design of the piles that support the bridges accommodating long-term scour and other factors that alter the riverbed elevation.

Topic/Subtopic: Geology/Geologic Hazards as Impacts on Alternatives

Group Comment Text:

The Draft SEIS did not fully consider the geological hazards that would affect design and long-term use of the highway:

- A) Information related to landslides and geological hazards was not updated with information from the 2006 and 2012 geotechnical reports.
- B) Potential risks associated with geologic hazards were to be further evaluated in geotechnical and hydrologic studies conducted in support of final design and construction; however, it is critical to disclose these risks now so that decision makers may make a reasoned choice between alternatives.
- C) The explanation of the rockfall hazard is unclear. The reported number of locations of rock slide areas and their relationship to avalanche paths was inconsistent in the Draft SEIS.
- D) How will geologic hazards be mitigated?

Group Comment Response:

- A) The 2017 Update to Appendix D Technical Alignment Report was updated to include a discussion of the geologic hazards within Alternative 2B.
- B) The purpose of the Surficial Mapping and Hazard Mapping conducted as a part of the *Lynn Canal Highway Phase I Zone 4 Geotechnical Investigation* (Golder Assoc., 2006) was to identify risk as it pertained to the public and construction. All known and identified risks were disclosed and considered during the preliminary design of Alternative 2B. The risks associated with these hazards are summarized in the *2017 Update to Appendix D Technical Alignment Report*.

- C) All hazard types were defined in the Lynn Canal Highway Phase I Zone 4 Geotechnical Investigation (Golder Assoc., 2006) in Section 3.3.1, Definition of Hazards. While rockfall is used to define individual blocks of rock that detach from bedrock outcrops and fall, rockslides are comprised of multiple blocks. Both are natural processes that are present along most highways in Alaska. DOT&PF manages rockfall and other types of hazards along existing highway corridors with the Unstable Slope Management Program (USMP). It is expected that should Alternative 2B be constructed, all the rock cuts and rock slopes that exist along the highway corridor would have been inventoried, assessed, and ranked in accordance with DOT&PF's USMP policies. There are two rockslide locations. Avalanche studies conducted as part of the 2013 Update to Appendix J – Avalanche Technical Report, indicated that large rockslide paths might develop as avalanche paths in the future, although this is undemonstrated at either of the identified rockslide locations. The Draft SEIS contained alignment sheets (Attachment A of the Technical Alignment Report) that depicted the locations of the identified geological hazards and the avalanche paths. Both were treated individually for design purposes and mitigated differently. Where avalanche paths and geological hazards are coincident, the *Technical Alignment Report* geological update reported the respective proposed mitigation measures.
- D) Geologic hazards would have been mitigated with standard of practice strategies. These strategies—avoidance, removal, conveyance, stabilization, protection, and monitoring—are used for all highway projects as a normal course of business. None of the hazard types identified along the East Lynn Canal Highway corridor are unique or unusual. A summary of the geologic hazards and related mitigation strategies were discussed in the 2017 Update to Appendix D Technical Alignment Report.

Topic/Subtopic: Geology/Operation/Maintenance Impacts

Group Comment Text:

- A) The Draft SEIS did not adequately address the issues related to acid generating rock. Publications by the USFS, Bureau of Mines, Alaska Department of Natural Resources (DNR), and ADEC specific to this concern in the project area should have been reviewed.
- B) The SEIS should disclose what it will cost to dispose of acid generating rock.

Group Comment Response:

A) The level of investigation and analysis provided (with preliminary design) is adequate for the purposes of the Final SEIS. The 2017 Update to Appendix D – Technical Alignment Report included discussion of acid generating rock. The potential for acid generating rock was not raised as a concern during the entire development of the 2006 FEIS or during the scoping phase for the Draft SEIS. Detailed on-site investigation for the potential of acid generating rock would typically be identified in final design-level geotechnical investigations if a build alternative had been selected. The presence of acid generating rock is only a hazard in areas where rock cuts must be made. Once the presence of this rock type was identified, it would either have been avoided or a mitigation plan would have been established for the appropriate use, encapsulation, or disposal of the material.

The geological maps referenced in the comment were reviewed. The maps indicated the potential of acid generating rock within Alternative 2B between Station 757+00 and Station 1459+00. Mineralization associated with potential for causing acid rock drainage was described in bedrock units along the Alternative 3 corridor.

B) If acid generating rock is identified, the detailed estimates for disposing of any acid generating rock would have been determined by the location and volume encountered. This would typically be undertaken in the final design phase of the project if a build alternative had been selected. However, the Final SEIS cost estimates were updated to include a contingency cost item for acid generating rock disposal for Alternatives 2B and 3.

Group 159

Topic/Subtopic: Geology/Operation/Maintenance Impacts

Group Comment Text:

- A) What equipment and personnel resources are needed to remove debris from rockslides, and where would equipment be stored?
- B) How often would the road be closed?
- C) How long would it take to remove rockslide debris, and where would the rockslide debris be disposed?
- D) What are the costs associated with rockslide debris removal?
- E) The Draft SEIS does not consider maintenance issues associated with debris flows.

Group Comment Response:

- A) A new Maintenance and Operation (M&O) Station would have been constructed near the original Comet Mine camp (MP 66) for Alternative 2B. Equipment for snow removal and debris cleanup would have been stored at this location. Equipment routinely used to clear debris from highways in Alaska incudes pickups equipped with snow plows, loaders, excavators, and dump trucks. Debris cleanup is a routine activity for DOT&PF M&O.
- B) It is impossible to precisely predict road closures. However, DOT&PF makes every attempt to mitigate hazards impacting State highways. To protect against potential closures along the Lynn Canal Highway, DOT&PF conducted a hazard mapping program designed to identify the hazards and provide a preliminary assessment of their relative severity. As discussed in *Lynn Canal Highway Phase I Zone 4 Geotechnical Investigation*, hazard frequency values "... should be considered preliminary estimates." These preliminary estimates were assigned to aid in identification of active hazards versus inactive hazards. The frequency categories presented in Section 3.3.2 of that report could just as effectively been labeled: unknown, frequent, less frequent, infrequent, and rare. The ultimate purpose for providing the estimates of hazard frequency, quantity, predictability, and all other parameters was to highlight areas of importance where additional design effort would be required. The preliminary hazard mapping conducted for this project was highly successful in doing that.

The 2014 Update to Appendix D - Technical Alignment Report included a brief discussion of geologic hazards. Each identified hazard was tabulated to show the associated mitigation condition based on the current design. Based on the current design, inadvertent road closures may occur over the lifetime of the project. It is expected that these closures would have required less than half a day to clean up. It is also expected that in the event of a full width road closure, single lane traffic would be restored within two hours and two-lane traffic would be restored within half a day. This is consistent with closures experienced on other Alaska highways with similar terrain.

If a build alternative had been selected, during the final design phase of this project, areas impacted by hazards that were not already been mitigated by the current alignment and could potentially close the road would have been looked at in additional detail. With the goal of eliminating or minimizing road closures to the extent possible, detailed mitigation measures would have been designed after more data and a refined understanding of each hazard could be obtained. There is, however, always the possibility of a large anomalous event. These rare events occur on highways through mountainous terrain common in states like Alaska, Washington, Oregon, Colorado, Montana, and Wyoming.

- C) The time required to remove debris from the highway varies depending on type, size, and volume of material. M&O policy is to quickly open one lane of travel to allow traffic flow during remaining cleanup. Debris is typically disposed of along the downhill shoulder of the highway within the right-of-way. The following are three typical scenarios to help provide a more definitive estimate of the time required to clear debris from the road:
- (1) In Ketchikan, rockslides of 10 to 30 cubic yards are not uncommon. These events typically fill the rockfall catchment ditch and spill over onto the paved shoulder and part of one lane. In this case, traffic is routed around the debris using standard traffic control devices to redirect the traffic onto the unaffected lane and shoulder. Once M&O is notified of the road closure, traffic flow would be re-established in this manner in approximately 30 to 60 minutes by personnel responding from the Lynn Canal M&O Station.
- (2) In Ketchikan and parts of the Haines Highway, there are infrequently rockslide events of 50- to 100 cubic yards that fill the rockfall catchment ditch, shoulder, and one lane, then spill over into the second lane and shoulder. In this case, M&O would respond with crew and equipment sufficient to provide traffic control and cleanup simultaneously. Once M&O is notified of the road closure, single lane traffic flow would be re-established in this manner in approximately 1 to 2 hours by personnel responding from the Lynn Canal M&O Station.
- (3) Debris flows on the Haines Highway have covered the full width of the highway, requiring a full day to open up a single lane of traffic.
- D) Highway cleanup costs are tied to the M&O labor and equipment rates and any additional rentals or contracted assistance. These costs are typical highway maintenance costs that have been accounted for in alternative cost estimates and were reflected in Attachment C to the 2014 Update to Appendix D Technical Alignment Report.

E) The Draft SEIS construction cost estimate included a placeholder for addressing debris flows. Maintenance associated with debris flows is very well understood by the Southcoast Region design section through involvement with large scale debris flows along the Haines Highway. Design strategy for the debris flows is primarily focused on eliminating maintenance requirements by conveying the debris flow event under the road by using bridges or through the road via large purposefully designed debris flow pipes. The high angle, well channelized debris flows along the East Lynn Canal Highway corridor are ideally suited for this strategy.

7.15 Hazardous Materials

Group 205

Topic/Subtopic: Hazardous Materials/Operation/Maintenance Impacts

Group Comment Text:

- A) What spill response measures and BMPs are in place in the event of a spill on the highway?
- B) What toxins would occur in stormwater run-off, and how would it affect the surrounding area during road M&O activities?

Group Comment Response:

- A) DOT&PF is prepared to respond to spills on the highway in accordance with ADEC guidelines. M&O crews are trained in spill response and have spill response equipment on hand to contain and clean up spills. BMPs include deploying containment and absorbent material to isolate the spill, immediately notifying other responding agencies, properly disposing of cleaned-up hazardous material, and follow-up monitoring of the spill site
- B) The main pollutants that could potentially run off the highway via stormwater are oil and poly-carbon based products. These types of pollutants come from the fuels, lubricants, and additives used to keep vehicles and equipment in operational order. If these pollutants were to spill onto the highway, they would settle within the adjacent road shoulder and ditch lines. Ditches are cleaned when necessary and debris is stockpiled at an approved site away from aquatic sources, thus minimizing effects on the environment. The effects on the environment would be no more or less than any other highway in Alaska of similar traffic volume, which have been documented to be low.

7.16 Land Use

Group 490

Topic/Subtopic: Land Use/Existing conditions

Group Comment Text:

Registry Rock and Dewey Lakes Recreation Area should be added to the list of municipal parks in Section 6.2.1 of the SEIS.

Group Comment Response:

Neither of these areas is subject to use by any of the alternatives addressed in detail in the Draft and Final SEIS. Sections 3.1.1.6 (Land and Resource Uses) and 3.1.1.7 (Parks and Recreation Facilities) of the Draft and Final SEIS addressed parks and recreation in the

project area. Section 6.2.1 referenced in the comment is for park and recreation lands protected by Section 4(f). Dewey Lakes Recreation Area was already mentioned in Section 3.1.1.7. FHWA examined the Dewey Lakes Recreation Area in its analysis for the 2005 Draft EIS and determined it was not a Section 4(f) property. It has not been formally considered since then because no alternative would have affected it. Therefore, it is appropriate that it was not addressed in Section 6.2.1 of the Draft SEIS.

Registry Rock was added to Section 3.1.1.7 of the Final SEIS as an attraction, although it appears no entity has designated it for park, recreation, or historic purposes. The 2009 Comprehensive Plan showed current ownership in the area of Registry Rock as Municipality of Skagway, current land use as Commercial, zoning as Industrial, and "Future Growth Designation" as "Waterfront Commercial Industrial." By Municipality of Skagway definition in its Municipal Code, municipal lands outside the Industrial zoned area are part of Dewey Lakes Recreation Area, so Registry Rock (inside the Industrial zone) is not part of the recreation area. These zoning designations and apparent lack of any separate designation as a park, recreation area, or historic site indicate that Registry Rock is not protected under Section 4(f). Therefore, it is appropriate that Section 6.2.1 of the Draft SEIS did not discuss Registry Rock.

Group 505

Topic/Subtopic: Land Use/General

Group Comment Text:

Road alternatives will degrade unique wilderness values along Lynn Canal due to habitat loss and fragmentation, wildfires, overhunting, sprawl, and other environmental degradation. The wild area along Lynn Canal should remain free of roads.

Group Comment Response:

It is important to note that Congress established transportation corridors on both sides of Lynn Canal in Section 4407 of SAFETEA-LU. In addition, USFS has included transportation corridors on both sides of Lynn Canal as a part of their adopted Forest Plans for many years. The SEIS addresses impacts of a road providing access to Berners Bay and other areas along Lynn Canal, areas currently enjoyed as wild areas for remote recreation. Effects discussed include impacts to hunting and fishing. For example, see Section 4.3.1.3 regarding land use impacts from Alternative 2B. The SEIS disclosed impacts of habitat loss and fragmentation, particularly under the discussion of terrestrial mammals (the 15th subsection under each alternative). Juneau sprawl would be unlikely to occur along proposed road corridors, because the land along both sides of Lynn Canal is mostly Tongass National Forest or Haines State Forest and is not available for commercial and residential development. Areas of private land could become developed, but very little private land occurs on either side of Lynn Canal in the area where road corridors are proposed. A small area south of Haines on the west side is the principal exception.

Topic/Subtopic: Land Use/General

Group Comment Text:

The Draft SEIS incorrectly stated that State projects are not required to conform to local land use plans. State projects must comply with local planning and zoning ordinances and other regulations, unless the governor grants a waiver. Alaska Statutes (AS) 35.30.020 and 35.30.030 should be reviewed.

Group Comment Response:

The Draft SEIS is correct in stating "State agencies' are not required to conform to local land use plans." The comment is correct that AS 35.30.020, requires that DOT&PF construction plans "shall comply with local planning and zoning ordinances and other regulations in the same manner and to the same extent as other land owners." Municipalities develop specific planning and zoning ordinances and regulations to implement goals and objectives of broader and more general land use plans. See AS 29.40.030-040. DOT&PF is required to comply with municipal ordinances and regulations, not with general policy statements and goals that are embodied in municipal land use plans.

Group 499

Topic/Subtopic: Land Use/Recreation Access/Impacts

Group Comment Text:

- A) Will recreational access points (parking lots, picnic areas) or campgrounds be developed along the proposed roadway? If so, how would they be funded?
- B) Has the benefit of expanded recreation use been considered?
- C) Is it the role of DOT&PF to provide low-cost recreation by improving access to this area? If so, should the recreation costs be considered against each other?

Group Comment Response:

The Draft SEIS addresses impacts of a road providing access to Berners Bay and other areas currently enjoyed for remote recreation, disclosing the perceived negative impacts as well as the perceived positive impacts. See for example Section 4.3.1.3 for Alternative 2B.

- A) The Draft SEIS stated the locations of 11 pullouts for Alternative 2B and 8 pullouts for Alternative 3. See the beginnings of Sections 4.3 and 4.4 as well as Figures 4-1 and 4-13 of the Draft SEIS. These pullouts typically are associated with rivers, coves, and scenic overlooks. From a transportation point of view, they were intended for rest breaks, but they are acknowledged to provide access to surrounding land for recreationalists, and the Draft SEIS indicated that future USFS trails were reasonably foreseeable from some of these pullouts. The Draft SEIS indicated these would have been funded by others (see also Section 4.9.1.3). The construction of the pullouts would be funded primarily with federal funds. The State of Alaska would have been responsible for funding the maintenance.
- B) The benefits of expanded recreation were presented in the Draft SEIS in sections on land use, see for example Section 4.3.1.3 for Alternative 2B.

C) DOT&PF does not have the mission nor the authority to provide recreational access points and recreational developments on National Forests lands. The purpose of the project is as stated in Chapter 1, Purpose and Need, of the Draft SEIS. Recreation access may be a side benefit for many but is not a purpose of the project.

Group 501

Topic/Subtopic: Land Use/Recreation Access/Impacts

Group Comment Text:

- A) The road will provide access to currently inaccessible areas, which will degrade hunting and fishing opportunities from access and increased use; result in over-harvesting, competition, and illegal hunting and fishing; and degrade wilderness and recreational experiences along the route and at Berners Bay.
- B) The cabin at Berners Bay will no longer be remote. The SEIS should be specific about the distance the road will be from the cabin.

Group Comment Response:

- A) The SEIS addresses impacts of a road alternative providing additional access to Berners Bay and other areas currently enjoyed for remote recreation, and discloses those impacts (including impacts to hunting and fishing). Hunting and fishing effects are also addressed under the Subsistence and Terrestrial Mammals sections for each alternative (4.3.6 and 4.3.15.3 for Alternative 2B).
- B) The SEIS was explicit in several locations about the separation of the proposed highway from the existing Berners Bay Cabin. The centerline would be approximately 1,000 feet from the cabin. A pullout and trail would have been established as part of the project, making this a road- or boat-accessible cabin. In addition, the project would have constructed a new, remote, water accessible cabin in cooperation with USFS. The Final SEIS text was revised to consistently report the correct separation distance between the cabin and highway under Alternative 2B (see Sections 2.3.3.1, 3.2.6, 4.7.7.1, and 6.2.2.2).

Group 491

Topic/Subtopic: Land Use/TNF Land Use Designations

Group Comment Text:

- A) The JAI Project is not exempt from the USFS Forest Management Plan and must comply with regulations pertaining to Old Growth Habitat Requirements and the Roadless Rule. Road construction is prohibited unless the Secretary of Agriculture finds that the project is in the public interest and no other reasonable and prudent alternative exists.
- B) The Draft SEIS did not address the project's impact on Old-Growth Habitat.

Group Comment Response:

A) The State of Alaska currently holds an easement interest in each transportation and utility corridor established by Congress in SAFETEA-LU Section 4407, as amended by the FAST Act. Once the State of Alaska determines the precise location of the highway facility

within the Section 4407 corridor, USFS must issue recordable documentation of the Congressionally established easement. Congress stated its intent that "the Secretary of Agriculture will not withhold or deny the issuance of an easement for a proposed transportation or utility project that otherwise has all necessary construction permits and authorizations from other State and Federal agencies." (Senate Report 114-80, at pages 23-24 (July 15, 2015)). Thus, USFS's issuance of recordable documentation of the easement is a non-discretionary and ministerial act. The Secretary of Agriculture and USFS may be required to make a finding under the Roadless Rule and may need to complete a NEPA decision for a plan amendment related to adjusting Old Growth Habitat LUD boundaries to recognize the highway easement; however, these processes and decisions would be internal to USFS and could occur after the completion of the Final SEIS.

The Roadless Rule excepts classes of road projects from its general prohibition, including an exception when the Secretary of Agriculture determines that a road is provided for by statute or treaty (36 CFR 294.12(b)(3)). Transportation and utility rights-of-way and easements along the east and west sides of Lynn Canal were granted to the State of Alaska by Congress in SAFETEA-LU's Section 4407. Thus, the Secretary of Agriculture need only to make an affirmative finding that Congress provided a highway easement by statute in order to fulfill the requirements of the Roadless Rule.

The Final SEIS contained information that USFS may need in order to make its required findings and decisions. Appendix DD, *Land Use Technical Report*, provided an evaluation of Roadless Area characteristics, as requested by USFS, to allow for evaluation under the Roadless Rule. Some material, particularly in the discussion of Old Growth Forest Reserves, was reviewed and updated to reflect the current understanding among the State and federal agencies. While the Final SEIS presented this material for USFS consideration, according to Congress's recent statement of intent, the Secretary of Agriculture and the USFS do not have authority to withhold or deny the issuance of the Congressionally granted transportation and utility easement once the proposed highway facility has all necessary permits for construction from State and federal agencies other than the USFS.

B) It is not accurate to state that the Draft SEIS failed to address the consequences of losing old growth habitat. Also, it is not accurate to state that the only assessment of these impacts is an attempt to quantify the number of acres of old growth forest that would have been lost. The effects of the loss of habitat as a result of the project was principally recorded in sections addressing terrestrial habitat and wildlife, with related information in wetlands and water habitat sections (generally subsections 12 through 17 under each alternative in Chapter 4), and in associated technical reports. The link between the land management and the terrestrial habitat and wildlife discussions was strengthened in the Final SEIS, with better cross-references and language more clearly linking the sections.

The USFS process for examining whether the Old Growth Habitat LUD boundaries need to be changed was undertaken for Alternative 2B by USFS, ADF&G, and USFWS since publication of the Draft SEIS, and results were incorporated into the Final SEIS. Modifications to small Old Growth Reserve boundaries have been recommended as an outcome of that process.

Topic/Subtopic: Land Use/TNF Land Use Designations

Group Comment Text:

Neither Section 4407 of SAFETEA-LU, nor the related Memorandum of Understanding between USFS and the State of Alaska pertaining to SAFETEA-LU, grant specific rights-of-way or easements that exempt them from applicable federal laws and regulations for federally funded highway projects.

Group Comment Response:

Since this comment topic was submitted in 2014, Congress amended Section 4407 of SAFETEA-LU in Section 1446 of the 2015 transportation authorization legislation known as the FAST Act (Pub. L. 114-94). As amended, Section 4407 states that Congress has granted the easements that connect the communities of Southeast Alaska, including easements cross Inventoried Roadless Areas.

In the FAST Act, Congress provided technical corrections to Section 4407 of SAFETEA-LU to clarify the transportation and utility rights-of-way and easements that are granted. Section 4407 now reads: "Notwithstanding any other provision of law, the reciprocal rights-of-way and easements identified on the map numbered 92337 and dated June 15, 2005, are granted."

With passage of the FAST Act, Congress unambiguously granted these easements to the State of Alaska. Map 92337 depicts transportation and utility corridors connecting communities in Southeast Alaska. he precise location of the highway and utility easements within these corridors is to be determined through environmental review and permitting for construction of the highway; once a project receives construction authorization from State and federal regulatory agencies (other than USFS), USFS must issue the Section 4407 easement for construction and operation of the highway. This process was summarized in the Congressional intent language accompanying the Section 4407 amendment:

"As soon as possible, the Committee intends the Secretary of the Agriculture (Secretary) to prepare and deliver to the State of Alaska an easement for the construction and operation of each highway located in a transportation and utility corridor identified on Map 92337 where the State of Alaska has already secured all necessary Federal and State permits for the construction of each highway facility.... The Committee intends that the Secretary of Agriculture will not withhold or deny the issuance of an easement for a proposed transportation or utility project that otherwise has all necessary construction permits and authorizations from the other State and Federal agencies." (Senate Report 114-80, at pages 23-24 (July 15, 2015))

Passage of the FAST Act in December 2015 resolved certain questions pertaining to the original language of Section 4407; as stated by Congress: "The technical correction to this section [Section 4407 of SAFETEA-LU] cures a perceived defect and now will allow the exchange of all remaining reciprocal easements to continue" (Senate Report 114-80, at page 23 (July 15, 2015)). The Final SEIS Land Use sections in Chapters 3 and 4 were reviewed and updated as needed to reflect the amended language. Section 3.1.1.3 regarding State lands was updated to reflect the State's land interest in these easements. This

clarification of the law and these changes to the SEIS should allow USFS and FHWA to reach their respective decisions without substantial further questions of legislative intent.

Section 4407 does not explicitly afford the USFS any discretion in approving the conveyances. The Draft SEIS did not "suggest that Section 4407 of SAFETEA-LU grants the State specific rights-of-way or easements." Rather, SAFETEA-LU and the FAST Act granted transportation and utility easements along corridors connecting the communities of Southeast Alaska. Because Congress granted transportation and utility easements in general corridors, the State of Alaska and USFS developed a Memorandum of Understanding to provide a process and procedure for the exchange of the Congressionally granted easements after the precise locations of the facilities are identified. Language in the Final SEIS was reviewed and revised as necessary for clarity on these points.

Group 633

Topic/Subtopic: Land Use/TNF Land Use Designations

Group Comment Text:

Section 4.3.1.3 of the Draft SEIS stated that "Alternative 2B would reduce the amount of land remaining roadless. This remaining area would appear natural, and would still provide opportunities for solitude, self-reliance, adventure, and primitive recreation. The roadless boundary would not change...." This statement is inaccurate because the portion of what is presently roadless no longer would be. Users seeking such an experience would have to head inland from the road and would no longer be able to experience an undeveloped interface between shoreline and adjacent upland terrain.

Group Comment Response:

The statement is accurate, although it is understandable that it could be confusing. USFS's Inventoried Roadless Areas are areas that were mapped in the past. As changes occur on the land, such as the proposed road components of Alternatives 2B and 3, the mapped areas ("roadless area boundary") would not change, but the area literally free of road influence would be reduced, as indicated in the paragraphs at and above the text quoted in this comment. This effect refers to the formal, designated inventoried roadless area. It is true that the character of other areas that do not currently have roads would also change. Such changes were already discussed in the SEIS. For example, see Section 4.3.1.3 regarding Alternative 2B.

7.17 National Environmental Policy Act

Group 317

Topic/Subtopic: National Environmental Policy Act/FHWA Requirements

Group Comment Text:

A) Alternative 2B will not meet federal and State requirements for providing a safe transportation system for the traveling public. Under 23 United States Code (USC) 109, the Secretary of Transportation's approval of a highway is conditioned upon a determination that the facility will adequately serve the existing and planned future traffic of the highway in a manner that is "conducive to safety, durability, and economy of maintenance." The safety determination should be in the context of comparing Alternative 2B to the existing facilities.

B) The cost of making the road safe must be included in the Draft SEIS.

Group Comment Response:

A) Any transportation project developed by DOT&PF and approved by FHWA must meet established engineering standards and practices for safety and reliability. FHWA may grant an exception to a specific design criteria on a case by case basis with justification. FHWA would have ensured that any alternative selected for construction fulfills the standard identified in 23 USC 109. DOT&PF and FHWA disclosed the anticipated implications to safety of travel in Lynn Canal under each of the alternatives in the SEIS, including Alternative 1 – No Action. The safety record of AMHS and anticipated safety of the primarily roadway alternatives were disclosed in the SEIS. While it is true that highway travel tends to have more accidents, there is no reason to believe that accident frequency on Alternative 2B or 3 would have been statistically different than on similar highways in Alaska.

B) The costs associated with construction (including safety features), maintenance, and operation of these roads were disclosed in the Draft and Final SEIS. All roads constructed under State and federal authority must follow State and federal design procedures and standards that have been established to support safe travel.

Group 318

Topic/Subtopic: National Environmental Policy Act/FHWA Requirements

Group Comment Text:

Financial planning in the Draft SEIS is inadequate and counter to the State's requirement for fiscal constraint and financial planning required by 23 USC 135. Approval of a preferred alternative that cannot be funded would be arbitrary, capricious, and an abuse of discretion. Partial funding would lead to segmentation of the project; partial construction of a road would not meet the project's purpose and need, nor would it have independent utility under NHS criteria.

Group Comment Response:

Approval of any of the alternatives is not arbitrary, capricious, or an abuse of discretion. Had a build alternative been selected, it would have been fully funded and completely built. There is no alternative that only goes to Kensington Mine. This project has been advanced by FHWA, as evidenced by a 2006 ROD, continued efforts in the SEIS, and their previous approvals of the STIP (consistent with 23 USC 135(g)). Alternative 1 – No Action has been selected; therefore, there is no funding in the STIP for this project.

Group 405

Topic/Subtopic: National Environmental Policy Act/General

Group Comment Text:

- A) The State has failed to fully adhere to CEQ regulations for complying with NEPA because the Draft SEIS lacks discussion of the relationship between project costs and benefits by including analysis of unquantified environmental impacts, values, and amenities (40 CFR 1502.23).
- B) The cost-benefit analysis in the Draft SEIS only considered conventional costs and did not consider environmental impacts, values, and amenities or the long-term cumulative effects on climate, which can have monetary costs.

Group Comment Response:

- A) 40 CFR 1502.23 refers to traditional cost benefit analysis, where all costs and benefits are described quantitatively, if possible, and qualitatively otherwise. That type of cost benefit analysis is not required by NEPA and has not been conducted as part of this SEIS. Analysis of the economic efficiency and cost-effectiveness of project alternatives was limited to User Benefit Analysis, Life Cycle Cost Analysis, and Total Project Life Cost Analyses. Conducted in accordance with standards set by AASHTO, these analyses did not, and were not intended to, consider the full spectrum of costs and benefits. JAI Project economic efficiency and cost-effectiveness analyses did not include economic benefits associated with each alternative (e.g., from commercial or industrial development) nor did it include effects on environmental values or amenities.
- B) The analysis did not monetize costs to the natural environment. As stated in Section 4.1 of the Draft and Final SEIS, the analysis focused primarily on standard economic indicators and did not attempt to incorporate economic impacts to the natural environment, economic cumulative effects on climate, or economic benefits such as new access to recreation areas. No attempt was made to monetize impacts to the natural environment. Impacts were quantified in other ways (e.g., acres of land affected) and were discussed qualitatively throughout other sections of the SEIS.

Benefit cost ratios described in the Draft SEIS were not intended to represent a full measure of all benefits and costs associated with project alternatives. In fact, benefit cost ratios described in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, of the Draft SEIS were narrowly based on user (traveler) benefits alone and did not consider a wide range of other potential household, commercial, industrial, and community benefits associated with improved Lynn Canal access.

The purpose of the economic efficiency and cost-effectiveness analysis conducted as part of the Draft SEIS was to determine which alternatives serve the largest number of travelers and the lowest possible cost. A number of measurements are important in the selection of a preferred alternative. For example, the total number of travelers served is important. Alternative 2B serves substantially more travelers than any other alternative (9.6 million vehicles versus 1.4 to 3.4 million vehicles for the marine alternatives). The cost to serve each traveler is another important measurement (Alternative 2B is lowest in terms of per user cost).

Group 407

Topic/Subtopic: National Environmental Policy Act/General

Group Comment Text:

There should be an independent review of the assumptions and conclusions in the SEIS.

Group Comment Response:

The Draft SEIS was released for public and agency review and comment, as required by law. This, in essence, serves as part of an independent review, especially regarding environmental regulatory elements. In addition, the travel demand methodology was independently reviewed by a doctorate professor that specializes in traffic forecasting, and the avalanche information was independently reviewed multiple times. The initial 2004 draft study was reviewed by three nationally prominent avalanche specialists. Specific information included in the 2013 Draft SEIS update was reviewed by a nationally prominent specialist. In addition, FHWA provided an independent review of the assumptions and conclusions in the SEIS.

Group 410

Topic/Subtopic: National Environmental Policy Act/General

Group Comment Text:

A direct, side-by-side comparison of the economic modeling results between road and marine travel cannot be made because the AASHTO methodology employed was not designed to evaluate ferry systems. This issue was raised during the 1997 Draft EIS, but the same methodology was used again. NEPA requires an agency "to respond in a substantive and meaningful way" when given specific criticism for using an inappropriate methodology.

Group Comment Response:

Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, acknowledged the challenges of employing a traditional AASHTO methodology in evaluating projects involving modes of transportation other than roads. However, the AASHTO methodology, customized for the JAI Project with the specific modifications noted in Appendix FF, remains appropriate and the best available approach for measuring user benefits associated with each alternative. Further, sensitivity analysis allowed for testing of model inputs and results most closely related to problematic aspects of the AASHTO methodology, such as frequency delay costs.

Topic/Subtopic: National Environmental Policy Act/General

Group Comment Text:

FHWA needs more justification as to why it would approve a ROD for a project with such a low cost-benefit ratio. The project's net negative benefits do not supply a compelling reason for approval, or show the long-term benefits to the State if it were to be approved.

Group Comment Response:

Benefit cost ratios described in the Draft SEIS were not intended to represent a full measure of all benefits and costs associated with project alternatives. In fact, benefit cost ratios described in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, of the Draft SEIS were narrowly based on user (traveler) benefits alone and did not consider a wide range of other potential household, commercial, industrial, and community benefits associated with improved Lynn Canal access.

The purpose of the economic efficiency and cost-effectiveness analysis conducted as part of the Draft SEIS was to determine which alternatives serve the largest number of travelers at the lowest possible cost. That all benefit cost ratios calculated in Appendix FF are less than 1 does not mean investment in better infrastructure is imprudent; it mainly reflects that transportation infrastructure costs are very high in Alaska, where populations are generally small, distances long, terrain often challenging, and sea conditions often difficult. Analysis of economic efficiency in the Draft SEIS indicated that Alternative 2B would be superior to other action alternatives, except Alternative 4D, which supports one-third the traffic associated with Alternative 2B. In arriving at a decision, DOT&PF and FHWA must balance the cost-benefit ratio result with consideration of all impacts and benefits described throughout the EIS and appendices.

Group 322

Topic/Subtopic: National Environmental Policy Act/NEPA Requirements

Group Comment Text:

The public and decision makers have not been provided current or sufficient information to consider the impacts of the project in accordance with NEPA. A new environmental document should be prepared with updated and revised information, as well as unbiased methodologies and assumptions. The Draft SEIS failed to provide adequate data to support DOT&PF and FHWA conclusions.

Group Comment Response:

FHWA and DOT&PF strongly disagree with the assertion that the Draft SEIS did not provide adequate data to support conclusions. The document is comprehensive and complete. Impacts of the project alternatives were disclosed to a reasonable level for public review and for decision makers to identify an alternative that best met the purpose and need for action. FHWA and DOT&PF have updated information in the Final SEIS to refresh data, correct errors and omissions, or in other ways respond to comments on the Draft SEIS, as appropriate. There is no need to prepare a new document for public review.

Topic/Subtopic: National Environmental Policy Act/NEPA Requirements

Group Comment Text:

FHWA should not issue a simultaneous Final SEIS/ROD. A new document should be prepared for public review.

Group Comment Response:

FHWA and DOT&PF have updated information in the Final SEIS to include newly available data, correct errors and omissions, or in other ways respond to comments on the Draft SEIS, as appropriate. The document is comprehensive and complete. No new studies or additional interpretations of project data are needed. There is no need to prepare a separate new document for public review. Per 23 USC 139(n)(2), FHWA developed and approved a combined Final SEIS and ROD.

Group 329

Topic/Subtopic: National Environmental Policy Act/NEPA Requirements

Group Comment Text:

If DOT&PF intends to build the road to Skagway, the project has been improperly segmented to avoid NEPA compliance. Evidence that a link to Skagway has been considered can be found in testimony to an Alaska State Legislature House Transportation Standing Committee Hearing (February 12, 2008) and in an easement between USFS and DOT&PF (November 22, 2006).

Group Comment Response:

At this time, DOT&PF has no intention to pursue an extension of a road from Katzehin to Skagway.

It is true that USFS has incorporated three transportation/utility corridors along Lynn Canal into the Tongass National Forest Plan: (1) from Echo Cove along the shore to Skagway, with a ferry terminal near the mouth of the Katzehin River; (2) from Skagway southward along Taiya Inlet, then northwesterly along Lutak Inlet to Haines; and (3) from Haines across the Chilkat River/Inlet near Pyramid Island, then south to William Henry Bay. Easements for these corridors and many others in Southeast Alaska were granted by Congress in SAFETEA-LU as amended by the FAST Act.

Group 330

Topic/Subtopic: National Environmental Policy Act/NEPA Requirements

Group Comment Text:

- A) The Draft SEIS violates NEPA because it does not contain a true No Action alternative: Alternative 1 No Action should represent existing conditions.
- B) Because the Draft SEIS fails to support its assumption that reduced AMHS service elsewhere would result in unmet demand, its conclusion that ferries may not be reassigned is arbitrary and "does not represent the 'substantial treatment' required by NEPA's implementing regulations to any non-construction alternatives."

Group Comment Response:

A) Alternative 1 – No Action consists of the highway and ferry transit system existing as of 2014, plus improvements programmed by DOT&PF in the Statewide Transportation Improvement Fund, the two state funded ACFs currently under construction at the time of this Final SEIS, and the stated AMHS plans for their use in Lynn Canal. Programmed improvements are described in Section 2.3.1 of the Draft SEIS. Including programmed improvements as part of a No Action alternative is common practice in preparing EISs where the improvements are already committed; this does not violate NEPA and is consistent with FHWA policy and guidance. There is no guarantee that any AMHS asset would be deployed in Lynn Canal as service is constantly changing. However, DOT&PF and FHWA have determined that Alternative 1 – No Action as described in the Draft SEIS is an appropriate representation of the State transportation system in Lynn Canal if no action were taken under the JAI Project.

B) The Draft SEIS does not claim that reduced service elsewhere would "result in unmet demand." Appendix CC, *Development of Alternative 1B – Enhanced Service with Existing Alaska Marine Highway (AMHS) Assets*, indicated that moving certain vessels would jeopardize AMHS's mission and explained the impacts to the mission from moving those vessels. In many instances, the AMHS would not be able to easily relocate vessels from one area to another without serious service consequences. In each of these cases, there are people and businesses that rely on the AMHS service they get, even if some consider the demand "pathetic" or the service level provided "excessive." The conclusion that ferries may not be reassigned is not arbitrary and is explained explicitly in Appendix CC.

Group 311

Topic/Subtopic: National Environmental Policy Act/ Other Federal Agencies

Group Comment Text:

The Draft SEIS needed to include information on USDOT funding guidelines.

Group Comment Response:

Environmental documents typically do not include information on USDOT funding guidelines. However, "A Guide to Federal-aid Programs and Projects," which discusses Federal-aid funding types and associated requirements may be found on the FHWA website at: http://www.fhwa.dot.gov/federalaid/projects.cfm.

7.18 Public Process

Group 287

Topic/Subtopic: Public Process/Accessibility

Group Comment Text:

- A) The manner in which comments and testimony are collected may bias the type of comments received. People who do not support the road are more likely to submit comments online and attend meetings, while people who support the road may feel discouraged from doing so.
- B) The Alaska Legislature does not have a task force for public input. Time-limited testimony by invitation only has been the norm on the JAI Project. People are not part of the decision-making process, nor can they make suggestions.

Group Comment Response:

- A) The public involvement process is meant to provide opportunities for information to be shared among project proponents and opponents. Opportunities to comment are made public and are not targeted to any stakeholder groups. Comments, whether from testimony at public meetings or through website submittal, email, faxes, letters, or other forms, are not taken as a representative poll of public interest on the project for use in decision making (i.e, the decision is not based upon a vote). Commenters who support the road have had several means to comment other than attending public meetings, including web submittals, faxes, letters, and emails. All comments received have been given equal consideration regardless of the source of the comments.
- B) DOT&PF and FHWA welcome public input in this process. The Draft and Final SEIS were developed with input from stakeholders, including community members, local residents, regulatory agencies, port and harbor commissions, and conservation organizations. Testimony in public meetings must include time limitations to provide equal opportunity for all individuals to give their input in that forum. By giving each speaker the same amount of time, everyone is given an opportunity to be heard. Written comments are not limited and all comments are equally considered regardless of venue.

Regarding Legislative testimony, that process is separate from the JAI Project. DOT&PF and FHWA have no control over testimony before the Legislature (e.g., who, when, for how long, etc.).

Group 288

Topic/Subtopic: Public Process/Accessibility

Group Comment Text:

- A) The online comment tool was not user friendly. There needs to be an acknowledgment that a comment was received.
- B) Submitted emails were not accepted by the project's email system.
- C) Materials related to the project should be readily available to the public on the website.

Group Comment Response:

- A) If a comment was successfully submitted using the website, a popup message did appear to indicate that the comment was successfully transmitted. While more than 675 commenters successfully submitted comments on the website, some commenters may have had difficulty, particularly if they had very lengthy comments or tried to attach additional documents or figures. The website was only one of many ways that comments could be submitted. Comments could also be emailed, faxed, mailed, dropped off in person, or recorded at the public hearings. If attachments in an electronic communication appeared to be missing, and contact information was available, DOT&PF contacted the individual to obtain the missing attachment.
- B) There are many technological reasons why an email may have been rejected by the system. The website includes contact information for DOT&PF personnel to address such issues. In addition, DOT&PF provided several mechanisms for commenting (email, fax, mail, etc.) with the intent of accommodating a wide range of technological experience and access abilities. In one instance, a flood of emails entered the system at once over a weekend and put the system on alert, temporarily halting communications from one organization. All of these individual emails were identified with one organization, so DOT&PF worked with the organization to have a CD mailed to DOT&PF with all the individual comments.
- C) The full Draft SEIS—in its entirety and as individual chapters, figures, and Appendices—was posted on the website at the time the Notice of Availability was published. The website also contains updated geotechnical reports and alternative descriptions, 2012 SEIS Scoping summary materials, the 2009 cost report and materials related to the 2005 Supplemental Draft EIS and 2006 FEIS. The October 2014 Draft SEIS public hearing session times and locations were also posted on the website. Chapter 10, References, pointed users to a website that had hosted Haines community news, including the 2011 Haines Household Opinion Survey final report, which now appears to be redirecting users to advertisements. As of the publication of this Final SEIS, the report can be found online at:

http://www.hainesalaska.gov/sites/default/files/fileattachments/administration/page/1585/h aines_survey_report.pdf. The Final SEIS has been updated to identify the new location.

Group 284

Topic/Subtopic: Public Process/Ballots and Resolutions

Group Comment Text:

- A) Previous public polls, resolutions, and ballot initiatives have voted against the road in favor of improved ferry service.
- B) The public testimony and comments of those who do not favor the road is not considered in the decision-making process.

Group Comment Response:

A) The purpose of the NEPA review process is to provide the public and agencies the opportunity to comment on the reasonable alternatives and the adequacy of the environmental analysis of those alternatives presented in the Draft SEIS. NEPA's public

process is not a "vote" on the project or specific alternatives; however, substantive information provided by the public and other stakeholders is carefully considered by FHWA and DOT&PF decision makers during the review and decision-making process. Information regarding advisory votes and resolutions was be taken into consideration by decision makers, but is not binding on them.

B) All comments received during the Scoping and Draft SEIS public comment periods—those in favor of mainly road alternatives and those opposed to mainly road alternatives—have been considered and were used to prepare the Final SEIS, contributing to the information weighed by the decision maker, FHWA, in identifying the selected alternative documented in the ROD.

Group 285

Topic/Subtopic: Public Process/Ballots and Resolutions

Group Comment Text:

The decision to build the road should be put to a public vote or poll.

Group Comment Response:

The purpose of the NEPA review process is to provide the public and agencies the opportunity to comment on the reasonable alternatives and the adequacy of the environmental analysis of those alternatives presented in the Draft SEIS. NEPA's public process is not a "vote" on the project or specific alternatives; however, substantive information provided by the public and other stakeholders is carefully considered by FHWA and DOT&PF decision makers during the review process. Information regarding advisory votes and resolutions was be taken into consideration by decision makers, but is not binding on them.

Group 681

Topic/Subtopic: Public Process/General

Group Comment Text:

- A) Not enough information has been provided to the public regarding the project, its impacts, and how it will affect the existing ferry system.
- B) FHWA and DOT&PF have not complied with AS 44.62.213(b), which requires the agency to respond to requests for information within 10 days and ensure the questions and answers are made available to the public.
- C) The group First Things First sent out materials that appear to be from DOT&PF advocating for a certain alternative. Why is DOT&PF allowing this?

Group Comment Response:

A) FHWA and DOT&PF disagree with the assertion that information provided to the public regarding the project, impacts, and specifically impacts to ferries, has been inadequate or incomplete. The Draft SEIS is comprehensive and complete. At the time the Draft SEIS and appendices were released to the public, those documents were posted on the JAI Project website. Hard copies of the Draft SEIS were provided upon request.

Electronic copies of the Draft SEIS and appendices were also provided free upon request. Hard copies of the Draft SEIS and appendices were available at libraries in Juneau, Skagway, and Haines and CD copies of the Draft SEIS and appendices were made available at the public hearings. This distribution provided ample opportunity for any interested member of the public to review the Draft SEIS and its supporting technical appendices, including impacts to the ferry system. FHWA and DOT&PF have updated information in the Final SEIS to refresh data, correct errors and omissions, or in other ways respond to comments on the Draft SEIS, as appropriate.

- B) Article 4 of the Alaska Administrative Procedures Act (AS 44.62.180-290) provides the procedures for the adoption of regulations by a State agency. The statutory provisions referenced in the comment, AS 44.62.213(b), is only applicable when a State agency is adopting, amending, or repealing a regulation; the statutory provision and its requirements are not part of the Alaska Public Records Act and are not applicable to request for public records referenced in the comment. DOT&PF's response to the records request referenced in the comment was accomplished in accordance with the Alaska Public Records Act.
- C) DOT&PF cannot monitor or control the distribution of publicly available information.

Group 280

Topic/Subtopic: Public Process/Other Agency Consultations

Group Comment Text:

- A) The Municipality of Skagway requests the opportunity to review the Final SEIS prior to ROD.
- B) The comment period was inadequate to fully review and provide thorough comments on the Draft SEIS.
- C) Many of the supporting documents that are referenced are not included or are buried in the Draft SEIS and cannot be discovered and retrieved within the timeframe of the comment period.

Group Comment Response:

- A) Per 23 USC 139(n)(2), FHWA developed and approved a combined Final SEIS and ROD. FHWA and DOT&PF updated information in the Final SEIS to include newly available data, correct errors and omissions, or in other ways respond to comments on the Draft SEIS, as appropriate. The document is comprehensive and complete. No new studies or additional interpretations of project data were necessary.
- B) Public review period for the Draft SEIS was extended from the CEQ-required 45 days to 60 days, giving more time for review based on the document's complexity.
- C) It is true that not all the supporting documents that are referenced in the Draft SEIS are included in the Draft SEIS or available on the Project website. However, all documents referenced in the Draft SEIS are available as part of the Project's administrative record. The project website provides access to all technical reports appended to the Draft SEIS, as well as the geotechnical studies and project documents preceding SEIS development.

These were all available at the time the Draft SEIS was released.

Group 281

Topic/Subtopic: Public Process/Other Agency Consultations

Group Comment Text:

The Juneau Audubon Society requests to be involved as a stakeholder during design and permitting in regards to wildlife mitigation.

Group Comment Response:

Direct stakeholder involvement for permitting would best be accomplished by working directly through the actual regulatory agency issuing the permit, such as through the Section 10/404 Public Notice issued by USACE. Alternative 1 – No Action has been selected as the preferred alternative in the Final SEIS; therefore, no additional permitting and design is anticipated. If a build alternative had been selected for development, DOT&PF would have coordinated with USACE and other agencies to develop appropriate design and mitigation.

Group 290

Topic/Subtopic: Public Process/Public Hearing

Group Comment Text:

Hearings should have been held outside of Southeast Alaska, such as in Anchorage where the majority of Alaskan residents live, to allow for participation by other potentially affected interests.

Group Comment Response:

FHWA and DOT&PF typically limit public hearings to communities that would be directly affected by a proposed action. Acknowledging that other parties from outside of these communities may have an interest in the project, it is not practical to host in-person meetings with them. FHWA and DOT&PF located the public hearings in areas where people who might experience changes in their quality of life, community, or surrounding environment as a result of the project would be reasonably able to attend. All potentially affected interests had equal opportunity to submit comments and participate in the decision making process for the JAI Project through website and electronic availability of the Draft SEIS, all Technical Report Appendices, and other pertinent project information. All comments received were given equal weight during considerations.

Group 291

Topic/Subtopic: Public Process/Public Hearing

Group Comment Text:

The public hearings held in Haines and Skagway were a waste of money.

Group Comment Response:

FHWA and DOT&PF do not believe the public hearings held in Haines and Skagway were a waste of money. Participation in the public comment process—either through hearings or

submitting written comment—is an important way to participate in the decision-making process. FHWA and DOT&PF held public hearings in the three communities that are the focus of the JAI Project. Hearings provided an opportunity for residents to submit oral comments directly to FHWA and DOT&PF staff. More than 47 people in Haines participated in the pre-hearing public open house, and 65 signed up to testify at the hearing. In Skagway, 56 people signed in at the open house and 37 people testified at the hearing.

Group 295

Topic/Subtopic: Public Process/Public Hearing

Group Comment Text:

There is no evidence that scoping was conducted as part of the Draft SEIS to identify critical issues.

Group Comment Response:

Chapter 7 of the Draft SEIS provided evidence of the Scoping process undertaken for the JAI Project SEIS. FHWA and DOT&PF conducted Scoping during January and February 2012 to obtain input from agencies and the public on the new Alternative 1B, updated reasonable alternatives, and new information about the project area. Chapter 2 of the Scoping Summary Report (available on the project website) described the activities, methods, and materials utilized to conduct Scoping for agencies and the public. These included the Notice of Intent published in the Federal Register, newspaper advertisements and an informational insert, development of a project mailing list, a newsletter and postcard, agency meetings, and web site postings.

7.19 Purpose and Need

Group 533

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

A) In general, the analysis of alternatives in the Draft SEIS is biased to favor road alternatives over ferry alternatives.

- B) All alternatives should be developed to a comparable level of detail for a true, unbiased evaluation. The Draft SEIS did not compare logistical, financial, environmental, or maintenance costs equally across alternatives.
- C) Studies that do not support Alternative 2B were downplayed and ignored in the Draft SEIS.

Group Comment Response:

- A) The purpose and need information is not biased, but rather documents legitimate transportation problems with the current system. All the reasonable alternatives, both road and marine, meet the purpose and need for the project to varying degrees.
- B) All alternatives were developed to a sufficient level of detail to support a reasoned choice under NEPA. DOT&PF and FHWA went to considerable lengths to evaluate each of the alternatives equally and objectively. Consistent metrics were provided, comparable

studies were conducted, and all results were disclosed and published. In 2006, FHWA completed a ROD. Following the ROD, FHWA issued Authority to Proceed (ATP) for Final Design, Right-of-Way, and Advance Construction. When the ROD was vacated in 2009, the ATPs for Final Design, Right-of-Way, and Advance Construction was rescinded and no further design work was done except as needed to address Draft SEIS issues. Consequently, more detail is available for Alternative 2B as final design studies and permitting activities provided additional information. Nevertheless, all alternatives have been developed with sufficient detail to compare impacts, costs, and benefits. The additional information available on the 2006 selected alternative, is not the result of bias, but rather a consequence of the lawsuit and the restart of the NEPA process. It is not necessary to advance all alternatives to this advanced level to fairly compare alternatives.

C) The analysis for the SEIS was conducted by professionals with expertise doing this type of analysis, based on sound methodologies, and use of updated baseline data. All studies and analyses were disclosed and published. The work was reviewed through multiple public review periods over many years. DOT&PF and FHWA reviewed all material, analysis, and comments to identify a preferred alternative; they did not downplay or ignore information or analysis.

Group 534

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

- A) Travelers will not benefit from this project, so who will benefit (e.g., mining, logging, oil, or gas companies; land developers; or other special interest groups)?
- B) What is the project's real purpose?

Group Comment Response:

- A) The SEIS indicates that travelers would benefit from the project, principally by substantially reducing the average travel time and cost of travel between communities, increased flexibility on when they can travel, and increased capacity in the Lynn Canal corridor. These benefits would accrue to all travelers, including business and industry. It is not the purpose of the project to single out a specific business or industry group for benefits; the project serves all users. The SEIS addressed effects to logging, the Kensington Gold Project, fishing, and other business interests in the Socioeconomic Resources sections of Chapter 4 for each alternative (see subheadings for Industry/Commercial Sectors).
- B) The purpose and need for the project is spelled out in Chapter 1 of the SEIS. As stated in Chapter 1, the purpose and need is multi-faceted. The State of Alaska provides transportation for all legitimate transportation—for shopping, commuting, social connections, recreation and tourism, other business and industry, freight, military and security needs, and for school teams to compete with other schools, among the many travel purposes. It is the goal of the State to provide better flexibility, additional capacity, improved travel time, and reduced costs for all users. The specifics of these project purposes appear in Chapter 1.

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

- A) How much money has been spent on final design of the East Lynn Canal Road?
- B) What documentation authorized development of the preferred alternate in the Draft SEIS to such a high level?

Group Comment Response:

- A) Approximately \$8 million was spent on final design for Alternative 2B between the 2006 ROD and the injunction that was put in place in 2009.
- B) In 2006, FHWA completed a ROD. Following the ROD, FHWA issued ATP for Final Design, Right-of-Way, and Advance Construction. When the ROD was vacated in 2009, the ATPs for Final Design, Right-of-Way, and Advance Construction was rescinded and no further design work was done except as needed to address Draft SEIS issues.

Group 538

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

Has the ferry service been intentionally manipulated or degraded to reduce ridership in an effort to justify the project?

Group Comment Response:

AMHS ferry service has not been manipulated or degraded to try to justify the project. AMHS is continually working to reduce costs and limit cost increases while providing the best service it can given vessel availability and budgetary limits placed upon it. AMHS is expensive to operate and maintain, and has been targeted over the years for cost savings. The goal of this project, as described in Chapter 1, Purpose and Need, is trying to deal with these very challenges—finding a way to provide better service at a lower cost to users and the State.

Group 539

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

The Draft SEIS analysis misinterprets or biases the elements of the purpose and need statement to favor Alternative 2B or provides specious analysis to support Alternative 2B. The following examples are cited:

- A) It will not be more convenient or cheaper for foot (walk-on) traffic. The focus on moving vehicles is biased.
- B) Because of poor weather and avalanches, flexibility for travel and capacity of road alternatives is misleading. There is no accounting for many days of non-optimum driving conditions. Travel times are too optimistic.

- C) Alternative 2B restricts flexibility and opportunity to travel because travelers cannot make reservations for vehicles in advance. Travelers must plan trips to coincide with ferry schedule departures and arrivals driving the road. Not being guaranteed a spot limits flexibility.
- D) The purpose of the project it is to "provide capacity to meet transportation demand in the corridor," not to "generate and accommodate the greatest projected traffic demand." The Draft SEIS analyzes the alternatives by determining how much each would increase demand to favor the road alternatives.

Group Comment Response:

The purpose and need information is not biased or based on flawed analysis, but rather documents legitimate transportation problems with the current system. To some extent, the commenters confuse the purpose and need, which documents existing problems, with impacts that they do not like.

- A) Walk-on passengers would be accommodated on shuttle ferries. The road alternatives (2B and 3), however, represent a shift in the way transportation would be provided in the corridor—away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles provide most of the transportation (shorter, shuttle ferries would provide links connecting the roadways). The SEIS acknowledged the impact to travelers wishing to not take a vehicle but also makes clear the State does not recognize a responsibility to provide public transportation. The cost of taking a vehicle would be considerably cheaper under Alternative 2B than it would be under Alternative 1 No Action; therefore, there would be less economic incentive to travel as a walk-on passenger. DOT&PF and FHWA recognize that this shift would have an effect on passengers who do not own vehicles (approximately 9 percent of the combined Juneau, Haines, and Skagway households). Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS described impacts to "Pedestrians and Bicyclists" for Alternatives 2B and 3, including walk-on passengers.
- B) The Draft SEIS acknowledged that adverse driving conditions would occur on the East Lynn Canal Highway in the winter, but anticipated that State maintenance crews would keep the highway open under all but the most severe conditions. Such severe weather conditions might have called for road closures. DOT&PF and FHWA disclosed the impacts of potential road closures and mitigated those effects to the extent that travel delays and closures would be minimized. Service to and from Juneau during a road closure would have been provided by running a ferry in Lynn Canal. Therefore, even during road closures, the flexibility for travel under the proposed road alternatives would be at least as good as the existing service. All alternatives were forecast based on an annual average basis, and all alternatives were treated equally. Service and cancellations on the marine alternatives could also have occurred, and like the road alternatives, travel times were based on the average.
- C) Alternative 2B would have increased flexibility of travel as compared to Alternative 1 No Action. Having frequent service, multiple times per day would increase the flexibility of when travel could occur and would decrease the need for a reservation. Under the

current ferry system in Lynn Canal travelers have limited choices for what time of day or day of the week to make their trip. Contrary to the comment, there would actually be less need to plan trips to coincide with scheduled ferry arrivals and departures. Because of the frequent drive through loading and unloading nature of the ferry trip under Alternatives 2B and 3, capacity and travel time would be improved and travelers would not need reservations. If a traveler missed their planned ferry connection (or the ferry they had planned to take was full), they would only have to wait a few hours for another sailing (as opposed to the next day, which they would need to do under Alternative 1 – No Action). Increasing the frequency of travel under Alternative 2B greatly increases the system capacity, improves the flexibility of when people can travel, and eliminates the need to have a reservation.

D) The purpose and need statement is to provide capacity to meet transportation demand in the corridor. Each of the reasonable alternatives satisfies the purpose and need to varying degrees in that they provide greater capacity than Alternative 1 – No Action and they each have been designed to accommodate the demand that would occur given differences in attributes such as cost, travel time, and convenience. In other words, there is an underlying latent demand for travel in the corridor (unconstrained demand) and more or less of that demand will be realized with each alternative depending on the attributes of that alternative.

The Draft SEIS used the term "generate," which did not clearly communicate the situation. The phrasing "realize and accommodate" was substituted for the phrasing "generate and accommodate" to try to clear up confusion. There is nothing biased in transportation providers wanting to identify, select, and build alternatives that maximize the usefulness of the investment in the transportation facility as measured by the number of people who will use it. It was this notion being connoted in the phrasing "realize and accommodate" the greatest projected demand.

Group 540

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

Since capacity is the key logistical metric, the ferry constraints decide the preferred alternative regardless of environmental impacts. Environmental impacts do not seem to have been considered in the selection of the preferred alternative in the Draft SEIS.

Group Comment Response:

The purpose and need for the JAI Project were oriented towards transportation benefits, and the identification of the preferred alternative was based on balancing how well alternatives met the transportation need with their social, economic, and natural environmental impacts. Impacts to the natural and socioeconomic environment, as well as the ability to mitigate impacts, are important considerations that weigh into USACE's decision in issuing its Section 404 permit. This comment is based on the text of the Section 404(b)(1) analysis, which is related to the USACE permit application attached to the SEIS. The USACE has specific criteria that define practicable alternatives, including costs, logistics, and technology in consideration of the overall project purpose. In addition, the overall project purpose must be met by any alternative to be considered practicable.

Therefore, an alternative may be dismissed by the USACE based on their regulatory criteria, including logistics.

Group 562

Topic/Subtopic: Purpose and Need/Bias

Group Comment Text:

The Draft SEIS is biased because it was too focused on access to/from Juneau and did not sufficiently cover the link between Haines and Skagway, or connections from Juneau to points south.

Group Comment Response:

The purpose and need statement for the project is to improve surface transportation to and from Juneau. DOT&PF and FHWA have updated the data in Chapter 1 of the Draft SEIS since 2006 and have reconfirmed the project purpose and need. Because Juneau is a regional hub, with a substantial population and employment base, the demand for travel in and out of Juneau has been identified as driving the primary needs of the project.

Group 527

Topic/Subtopic: Purpose and Need/Completeness

Group Comment Text:

Travel safety and reliability should be included in the purpose and need statement.

Group Comment Response:

Safety and reliability are included in the purpose and need statement for a project only if there is a demonstrable safety or reliability problem on the transportation link being considered. An example would be where there are a higher number of accidents than the State average for similar transportation links. Safety and reliability are not a problem with the current system; therefore, neither safety nor reliability are a stated purpose and need factor for the proposed project. Any transportation project proposed by DOT&PF and FHWA must meet established engineering standards and practices for safety and reliability. Therefore, all of the evaluated project alternatives were developed to be safe and reliable in accordance with standards.

Group 528

Topic/Subtopic: Purpose and Need/Completeness

Group Comment Text:

The SEIS purpose and need should include a comprehensive measure of overall cost-effectiveness criteria (e.g., net present value, benefit-cost ratio, etc.) to measure State and user costs, which are components of the purpose and need statement.

Group Comment Response:

Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, is an economic analysis of user benefits and of costs to users and the State. These measures are evaluation tools and come into the SEIS principally in Chapter 4 in discussions of effects

of the alternatives. These measures figure into the purpose and need for the project because the benefits of time saved, lower user costs, and lower costs to the State are part of the project's purpose and need statement. Purpose and need statements are unique to each project and do not typically include "cost-effective" language. Appendix FF addresses cost effectiveness and benefit-cost ratio, along with other measures.

Group 529

Topic/Subtopic: Purpose and Need/Completeness

Group Comment Text:

Why has DOT&PF restricted its study to surface alternatives?

Group Comment Response:

The SEIS purpose and need statement identifies and describes problems with the current surface transportation system that need to be resolved. The surface transportation system provides service for a very different market of travel, with very different needs than the air transportation system. The current AMHS surface connection in Lynn Canal is part of the NHS. The NHS, through Lynn Canal, connects to the rest of Alaska and to the remainder of the Lower 48 states. Surface connectivity serving vehicles in Lynn Canal allows private and commercial vehicles access and connectivity to the entire NHS network. Improving air travel would not improve flexibility for travel or reduce State or user costs on this important NHS link. Problems with the air transportation system have not been identified and would be addressed under a separate purpose and need statement for a separate project.

Group 531

Topic/Subtopic: Purpose and Need/Completeness

Group Comment Text:

Residents and visitors from Haines and Skagway come to Juneau, without a car, to connect with Alaska Airlines and the air travel network. Improving freight and passenger connections to and from Auke Bay from downtown Juneau and the airport would represent a significant access improvement that has not been adequately addressed in the SEIS.

Group Comment Response:

Improving freight and ferry passenger connection to and from Auke Bay and downtown Juneau were not identified as part of the purpose and need for this project. The Auke Bay Terminal, airport, and downtown Juneau are already connected by a highly functioning highway with sufficient capacity. DOT&PF and FHWA developed alternatives to address the problems identified in the SEIS Chapter 1, Purpose and Need. This chapter identifies deficiencies in surface transportation provided to and from Juneau in the Lynn Canal corridor. For all alternatives, public transportation between Auke Bay and Juneau or the airport would be provided by the municipality or private sector.

Topic/Subtopic: Purpose and Need/Existing Access

Group Comment Text:

The ferry system meets the purpose and need statement: "Provide the capacity to meet transportation demand in the corridor."

Group Comment Response:

DOT&PF and FHWA data has demonstrated that there is considerably higher demand for travel than is currently met by the existing system. Due to high costs, slow travel times, and other inconveniences, the system does a poor job at serving corridor demand. These problems were documented in Chapter 1, Purpose and Need, of the Draft SEIS. The SEIS analysis included primarily ferry and road alternatives to improve flexibility, improve capacity, and reduce State and user costs to be better serve travel in the corridor.

Group 521

Topic/Subtopic: Purpose and Need/Flexibility and Opportunity for Travel

Group Comment Text:

- A) Alternative 2B does not meet the project purpose and need, nor does it improve access to Juneau because it does not:
- (1) Reduce travel times;
- (2) Reduce costs to the State;
- (3) Provide greater opportunities for travel and capacity to meet demand; and
- (4) Have provisions for those traveling without a car.
- B) It will reduce travel flexibility and opportunity and increase travel time because:
- (1) Traveling the road will be difficult, dangerous, or impossible in bad weather conditions;
- (2) Vehicle parking will not be available at the Katzehin Ferry Terminal, so travelers will incur the additional cost of transporting and parking their vehicles; and
- (3) Travel times will be long.
- C) Alternative 2B does not provide the capacity to meet transportation demand in the corridor because there will be no safe, reliable, public transportation to the Katzehin Ferry Terminal for those without vehicles.

Group Comment Response:

A) (1) Alternative 2B does meet the purpose and need for the JAI Project, and all build alternatives reduce travel times, including Alternative 2B. See Table ES-1 and in Chapter 2 (subsections labeled "Travel Time" under each alternative).

- (2) Only Alternative 4D reduces State costs compared to Alternative 1 No Action. Because of the higher traffic volumes predicted to be generated, Alternatives 2B, 3, 4B, and 4D would have cost the State less than Alternative 1 No Action on a per vehicle basis, with Alternative 2B having the lowest cost per vehicle.
- (3) As explained in Sections 2.3.3, 2.4, and 4.3.7.2 of the Draft SEIS, Alternative 2B would not have provided improved transportation opportunities for Lynn Canal residents. Alternative 2B would have provided 56 ferry round trips per week from Katzehin to Haines during the summer. Under Alternative 1 No Action, there are only 8 trips per week between Auke Bay and Haines. In the winter, there would only be 6 ferry round trips per week between Auke Bay and Haines under Alternative 1 No Action compared to 42 under Alternative 2B. Similar increases for travel between Juneau and Skagway were also reported. Capacity would increase over Alternative 1 No Action as reported in Table ES-1. Alternative 2B can carry 636 vehicles per day to/from Skagway in summer and 848 to/from Haines as compared to Alternative 1 No Action, which can carry 61 vehicles per day to/from Skagway and 93 vehicles per day to/from Haines. Higher capacities were similarly reported for winter travel.
- (4) Walk-on passengers would be accommodated on the ferries under Alternative 2B. The road alternatives (2B and 3), however, represent a shift in the way transportation would be provided in the corridor—away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles provide most of the transportation (shorter, shuttle ferries would provide links connecting the roadways). It is true that DOT&PF and FHWA do not anticipate that walk-on passengers would continue to find it as convenient to have someone drive them to the Katzehin Ferry Terminal as they do Auke Bay.
- B) (1) Alternative 2B would increase travel flexibility and opportunity for travel, in addition to providing reduced travel times. DOT&PF and FHWA have disclosed the impacts of potential road closures and have mitigated those effects to the extent that travel delay should be minimized. DOT&PF and FHWA believe the SEIS accurately discloses the most likely scenario (i.e., that the highway may be closed limited days each winter, and that if such closures were expected to be lengthy, one or more ferries would be available for transportation in Lynn Canal at levels similar to Alternative 1 No Action). Thus, even during road closures, travel flexibility and travel time would be no worse than currently, and at all other times would be a substantial improvement.
- (2) As already mentioned, DOT&PF and FHWA do not anticipate that current walk-on passengers would continue to walk-on with the same frequency at Katzehin. The cost of taking a vehicle would be considerably cheaper under Alternative 2B than under Alternative 1 No Action; therefore, there would be less economic incentive to travel as a walk-on passenger. The user costs reported included the cost of transporting a vehicle on the ferry (and the cost of driving it there). Costs for parking were not included for any of the alternatives, as the end destination of travelers is not known, and that end destination may or may not have included parking costs. Parking would not be allowed at Katzehin. It is recognized that walk-on passengers would need to get to and from the Katzehin Ferry Terminal. The impacts of that change (including an estimate in costs for walk-ons) were reported in Section 4.3.7.5, Other Transportation Impacts, of the Final SEIS.

- (3) Travel times would be considerably less under Alternative 2B than under Alternative 1 No Action. Travel times were summarized for all alternatives in Table ES-1. In fact, travel time would be roughly half under Alternative 2B as compared to Alternative 1 No Action.
- C) The ferry capacity under Alternative 2B would be sufficient to accommodate the anticipated demand and the roadway capacity would be many times greater than projected demand. The road alternatives (2B and 3) would represent a shift in the way transportation would be provided in the corridor, away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles provide most of the transportation. DOT&PF and FHWA recognize that this shift would have an effect on passengers who do not own vehicles (approximately 9 percent of the combined Juneau, Haines, and Skagway households). Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS described impacts to "Pedestrians and Bicyclists" for Alternatives 2B and 3, including walk-on passengers.

Topic/Subtopic: Purpose and Need/Flexibility and Opportunity for Travel

Group Comment Text:

Southeast Alaska would be better served by a ferry alternative, which would give AMHS flexibility to improve access to all Southeast communities, not just people traveling to Juneau.

Group Comment Response:

The purpose of the JAI Project is to provide improved surface transportation to and from Juneau in Lynn Canal. This is developed in Chapter 1, Purpose and Need, of the Draft and Final SEIS. The project examines multiple ferry alternatives to solve the problems outlined in the purpose and need statement. The ferry alternatives include vessels that theoretically could be deployed elsewhere, but that is not anticipated because improving access to all Southeast Alaska communities is not a purpose or need for the project.

Group 638

Topic/Subtopic: Purpose and Need/Flexibility and Opportunity for Travel

Group Comment Text:

Flexibility seems an unfortunate purpose and need criteria as there are no threshold values, it is unmeasurable, and it is subjective.

Group Comment Response:

The frequency of service under Alternative 1 – No Action provides a minimum "threshold" for flexibility, meaning DOT&PF and FHWA want to find an alternative that does better than the existing system. Chapter 1, Purpose and Need (see Section 1.2.3), and Chapter 3, Affected Environment (see Section 3.1.7), indicated how often existing ferry service is available. Each alternative evaluated would have improved upon the frequency by providing the user more choices about when they want to travel. Chapter 4, Environmental Consequences, under Subsections on Transportation (e.g., see Section 4.3.7.2, for

Alternative 2B), indicated how often service would have been available under the various alternatives. A comparison showed increases between the existing conditions/Alternative 1 – No Action and the build alternatives. For example, summer service between Juneau and Haines under Alternative 2B would be available eight times per day, while existing ferry service is only available 1 to 2 times per day. These are objective measures, and they indicate that travelers would have greater opportunity for when they might choose to travel and therefore greater flexibility in planning their travel.

Group 604

Topic/Subtopic: Purpose and Need/General

Group Comment Text:

- A) The purpose and need statement in the Draft SEIS is still flawed, and has not been changed since it was criticized by the EPA and rejected by USACE.
- B) The Draft SEIS did not provide full transparency in discussing the purpose and need for safe, efficient Juneau access.

Group Comment Response:

A) The purpose and need statement for the project has not been found inadequate or flawed. The purpose and need addresses the transportation needs in Lynn Canal. DOT&PF and FHWA data have demonstrated that there is considerably higher demand for travel than is currently met by the existing system. However, due to high costs, slow travel times, and other inconveniences, the system does a poor job at serving corridor demand. These problems are documented in Chapter 1 of the Draft SEIS. CEQ directs federal agencies to grant substantial deference to the lead federal agency with expertise in the stated field, in this case, FHWA, in determining the purpose and need for transportation projects (see CEQ 2003, Letter to the Honorable Norman Y. Mineta from James L. Connaughton regarding purpose and need. Available on the internet at: https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/CEQPurpose2.pdf and FHWA 2003, Guidance on "Purpose and Need" available on the internet at

https://www.environment.fhwa.dot.gov/guidebook/Gjoint.asp). For this project, FHWA, as the lead agency, has deference for developing the transportation purpose and need for the project. It should be noted, however, that USACE does develop their own project purpose for their use in wetland permitting and analysis under the Clean Water Act. USACE's overall project purpose is sometimes broader than that of the transportation agencies.

B) The purpose and need statement was developed with full transparency. The purpose and need is fully documented in Chapter 1. It was developed and shared as a draft for comments, revised, and submitted as final in the 2006 Final EIS and again in the Draft and Final SEIS. As is required, DOT&PF and FHWA published comments related to the purpose and need and their responses, providing full disclosure and transparency. Supporting documentation (appendices and technical reports) have been published and are available for review by the public and agencies.

Of note, safety is not an element of the purpose and need for the project. Safety is included in the purpose and need statement for a project only if there is a demonstrable safety problem on the transportation link being considered. An example would be where there is a

higher number of accidents than the State average for similar transportation links. Safety is not a problem with the current system; therefore, safety is not a stated purpose and need for this project.

The road alternatives are expected to function like other rural Alaska highways, which are designed to meet specific safety standards, and to be as safe as other roads in the State. Regarding efficient Juneau access, each of the alternatives were comprehensively evaluated in Chapter 2 of the SEIS, particularly in regards to capacity, travel times, flexibility, improved opportunity for travel, and costs.

Group 515

Topic/Subtopic: Purpose and Need/Relationship to SATP

Group Comment Text:

Alternative 2B does not help preserve ecosystem integrity, limit adverse environmental impacts, and provide safe and reliable transportation infrastructure as directed by the SATP.

Group Comment Response:

Alternative 2B is fully consistent with the SATP and its goals of preserving ecosystem integrity, limiting adverse environmental impacts, and providing safe and reliable transportation infrastructure. The Statewide Long Range Transportation Plan (LRTP), *Let's Get Moving 2030*, provides policies that direct statewide transportation development. The SATP is a component of the LRTP and as such makes recommendations consistent with the policies contained within the LRTP. These policies cover System Development, System Preservation, System Management and Operations, Economic Development, Safety, Security, Environment and Quality of Life, and Good Government: Openness and Accountability for Transportation System Performance.

The SATP recommends the JAI Project because a road connection can provide a higher frequency of service to the traveling public than is currently available and in a cost effective manner. Marine alternatives do not have the scalable capacity to provide access at costs affordable by both the State and user, especially when considering latent demand. All transportation alternatives have impacts, positive and negative, including impacts to mobility, access, the economy, and the environment. The SATP provides a plan that includes capital improvement recommendations that will improve resident mobility and access to essential goods with due consideration of a set of conflicting goals. While the SATP takes a high level assessment of projects, it does so with an understanding that every project will go through a stringent environmental process, which will ensure that projects are developed in such a way to address all policies included in the LRTP. The purpose of the environmental document that follows the plan is to vet the recommendations of the plan by identifying in detail the purpose and need, the impacts to the human environment, impacts that cannot be reasonably avoided, and mitigation measures to reduce and compensate for adverse impacts that cannot be avoided.

Topic/Subtopic: Purpose and Need/Relationship to SATP

Group Comment Text:

The SATP should be revised to reflect the region's top priorities of maintaining existing roads and replacing aging mainline ferries.

Group Comment Response:

Revising the SATP is not an EIS issue unless the selected alternative is not consistent with the SATP. The SATP recommends the JAI Project because a road connection can provide a higher frequency of service to the traveling public than is currently available and in a cost effective manner. The SATP does recommend replacing some mainline ferries as they reach the end of their service lives.

Group 598

Topic/Subtopic: Purpose and Need/State Costs

Group Comment Text:

A) Alternative 2B does not meet the project purpose and need because it does not save the State money with construction, maintenance, and operations and would cost more than maintaining or even enhancing ferry service with the current connections.

B) Why was the preferred alternative in the Draft SEIS the one that costs the State more?

Group Comment Response:

A) All the reasonable alternatives studied in detail in the SEIS satisfy the purpose and need to varying degrees. Some alternatives, however, do this better than others. None of the build alternatives would have reduced State M&O costs when compared to Alternative 1 – No Action. Because of the higher traffic volumes predicted to be generated, Alternatives 2B, 3, 4B, and 4D would have cost the State less than Alternative 1 – No Action on a per vehicle basis, with Alternative 2B having the lowest cost per vehicle. DOT&PF and FHWA have been consistent over the years in proposing a purpose and need that reflects the desire of the transportation agencies to satisfy that demand. Meeting transportation demand is a legitimate purpose for pursing a transportation project. More generally, the purpose of investment in public transportation infrastructure is to improve transportation opportunities for the largest number of people in the most cost-effective manner.

B) The reasoning behind the identification of Alternative 2B as the preferred alternative in the Draft SEIS was provided in the Executive Summary and Chapter 2 (under the heading Identification of the Preferred Alternative). The decision was not made solely on cost, although cost was a consideration. The decision was strongly based on how well an alternative satisfied the purpose and need for the project, as stated in Chapter 1. As presented in Table ES-1, Alternative 2B would accommodate the highest demand, provides the greatest capacity, had the shortest travel times, provides the greatest frequency of service, has the lowest cost per vehicle transported, and has the second lowest operations and maintenance costs of any of the build alternatives. The decision balanced these benefits by taking into consideration the impacts described throughout the document and appendices. The Final SEIS identified Alternative 1 – No Action as the preferred

alternative.

Group 600

Topic/Subtopic: Purpose and Need/State Costs

Group Comment Text:

How can the State afford to have a dedicated ferry between Katzehin, Haines, and Skagway with multiple ferries per day when Skagway currently gets only get three to five ferries per week?

Group Comment Response:

A variety of factors figure into the projected service to be provided under any of the alternatives and the level of service in turn, equates to costs. DOT&PF has projected demand for each link, for each of the alternatives, and has planned service levels and ferry capacity to match.

The trip from Katzehin to Haines is approximately 8 miles and to Skagway is approximately 16.4 miles. In contrast, from Auke Bay, it is approximately 83.3 miles to Haines and an additional 15.1 miles to Skagway. As the sailing distance from Katzehin is much shorter, a ferry is able to make multiple trips in the same time it takes for a ferry to make one round trip from Auke Bay.

The Day Boat ACFs can be operated by fewer crew and offer fewer amenities than the mainliners. For example, the Day Boat ACFs do not have cabins, restaurants, crew quarters, etc., because they are not needed for the short sailings from Katzehin. This means the Day Boat ACFs have lower operating costs than the existing mainliners. As a result, they could provide more hours of service for the same cost.

By making operational efficiencies and capital improvements, each alternative is able to provide additional service at a better cost. See the Transportation section for each alternative in Chapter 4 for more information on costs. See also Appendix BB, *Revenues and Expenditures Report for Lynn Canal, Fiscal Years 2005–2015*, which presents State revenues and expenditures for the AMHS 2005–2015 as a basis for examining costs of the alternatives.

Group 593

Topic/Subtopic: Purpose and Need/Transportation Demand

Group Comment Text:

The Draft SEIS is based on an assumption that there is unmet demand in the Lynn Canal corridor that does not correlate with historic AMHS data. AMHS historical travel data does not correlate with the purpose and need elements (e.g., travel opportunity, travel time, and user costs). When these elements have been modified in the past, demand did not respond accordingly.

Group Comment Response:

Several commenters took one or two years of historic data from AMHS, attempting to make the argument that when costs or schedules changed in the past, demand did not

respond accordingly. It is not within accepted modeling practice or statistical analysis to rely on one or two years of data to surmise a statistically valid correlation (or the lack of one). Moreover, none of the past modifications by AMHS to schedule, cost, or travel time has replicated the kind of substantive changes being proposed by the alternatives in the SEIS. To try to equate AMHS experimental changes to one or two variables that ran for short periods, to the SEIS alternatives, is not a valid comparison.

All traffic demand models attempt to predict future demand based on assumptions and data available in the present. The total demand model used for this project was developed based on empirical data derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. The model input analysis included Anchorage, Fairbanks, and Whitehorse (as regional centers like Juneau), and included analysis of similar coastal communities, including Prince Rupert and Port Hardy, British Columbia, and Seward, Homer, Valdez, Haines and Skagway, Alaska (see Appendix AA, *Traffic Forecast Report*). Based on the results from the communities listed above, a very strong correlation was found between the distance traveled from the edge of the community and the traffic volumes.

This predictive model was used, among other sources, to develop an unconstrained demand model for Lynn Canal. It is based on the assumption that people in Juneau, Haines, and Skagway would exhibit similar travel patterns given the opportunity to travel by road as other similarly situated communities. Based on the project team's research, there are no indicators that travel behavior in Juneau, Skagway, and Haines would differ substantially from that of other Alaskan and Canadian communities if full highway access were available. Based on the data collected, the project team is confident that Juneau residents would travel in a similar manner to other Alaskan residents.

The forecast only used the unconstrained demand as an upper bound to bracket the overall demand in the corridor. Each forecast, for each of the alternatives, scales down from the unconstrained demand based on factors of cost, travel time, schedule convenience, etc. Using such factors to predict traveler's choices and behavior amongst competing alternatives is a common modeling practice and is used in nearly every traffic model. By factoring the demand down from the unconstrained demand based on costs, travel time, and convenience the model predicts reasonable estimates of travel behavior based on the relative merits of the alternatives.

The results of the model were validated against the existing transportation system. In other words, as is standard modeling practice, the team developed the model and tested it to see how well it predicted travel on the existing system for a known year. Because the model was able to predict existing traffic within an acceptable range, it is considered valid as a starting point for use in predicting future conditions. This is a standard approach to truth-testing a model and its assumptions. The methodology and results of both approaches were fully disclosed in the associated technical report and summarized in the Draft SEIS.

Topic/Subtopic: Purpose and Need/User Costs

Group Comment Text:

Alternative 2B will not reduce user costs for transportation in the corridor, especially for independent, walk-on passengers because they will be forced to drive a vehicle.

Group Comment Response:

For passengers who currently walk-on, the change in user cost depends on whether or not they remain a walk-on passenger. The Draft SEIS showed that, for most travelers, while some costs may be shifted to the individual, the cost of driving their own vehicle and paying a fare for the Alternative 2B short shuttle ferry would be lower than the cost of riding the ferry under Alternative 1 – No Action. Due to the reduced cost of taking a vehicle, many existing walk-on passengers would likely change their travel pattern and take their own vehicle. If an existing walk-on passenger chooses to remain a walk-on passenger, their cost depends on how they travel to/from the ferry terminals. For example, if they chose to use a privately operated bus service, their cost would be slightly higher than under Alternative 1 – No Action. However, if they chose to ride with family, friends, or acquaintances, their cost would be lower than under Alternative 1 – No Action.

The impacts to walk-on passengers for Alternatives 2B and 3, including costs, were addressed in Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS under the subheadings "Pedestrians and Bicyclists." Based on the comment, additional information about the anticipated cost for the various travel markets (walk-ons, single drivers with a vehicle, etc.) were added to the Final SEIS.

For all alternatives, passengers would continue to be able to walk onto the ferry if they chose to do so. Similar to today, walk-on passengers would been responsible for finding transportation to/from the ferry terminals. Because of the distances to reach the remote ferry terminals, particularly at Katzehin, these alternatives would be less conducive to passengers walking onto the ferry (i.e., friends, shuttle or a cab would be needed to drive someone to Katzehin to catch the shuttle ferry). This would be a change in travel patterns. For some travelers, this would be an adverse impact, and for others it would be a beneficial impact.

7.20 Socioeconomic Resources

Group 451

Topic/Subtopic: Socioeconomic Resources/Community Infrastructure Impacts

Group Comment Text:

A) There is no cost estimate for infrastructure or services provided by DOT&PF or for the cost to others to keep services going. The project needs to consider and account for the costs of infrastructure improvements along the road corridor (e.g., fiber optic cable, electric service, cell towers, weather sensors, and gas stations), including utility and right-of-way needs for infrastructure.

B) The plan should outline critical path infrastructure and how the project will address the planning and permitting requirements for that infrastructure.

- C) Infrastructure should also be designed (in-ground if possible) to protect against damage from avalanches and other hazards.
- D) Having safe communication and electrification along the route will make it safer for the traveling public.
- E) Planning for transmission and electrification along the highway will lead to increased communications that creates a positive cumulative effect.
- F) Will be there be adequate safe pullouts and parking for buses and vehicles?

- A) The cost for infrastructure provided by DOT&PF is included in the 2017 Update to Appendix D Technical Alignment Report, Attachment E. Annual maintenance costs for DOT&PF provided infrastructure is also included in the Technical Alignment Report, Attachment C. Costs related to other services such as private utilities and private improvements are not DOT&PF related infrastructure, are not a part of the proposed action, and have not been evaluated.
- B) Other than bridges, no provisions for communication or electrical facilities, such as buried conduit, are included in the road alternatives. Although there are no known plans for public or private electrical service installations, DOT&PF policy and practice requires that all new bridges be provided with the ability to accommodate at least two 8-inch diameter utilities—one in each exterior girder bay. Specifically, 8-inch diameter utili-ducts (pipes) are provided under the approach slabs and through the concrete abutments, and 8-inch diameter holes are provided through the intermediate and pier diaphragms to accommodate future utilities. This approach has been included in the project bridge plans.
- C) Utility owners would be responsible for utility infrastructure designs if they determined a need to construct. DOT&PF would work with utility owners to determine the most suitable installation for utility infrastructure to avoid known hazards.
- D) Communication and electrification are not DOT&PF required infrastructure, are not a part of the proposed action, and have not been evaluated since there are no known plans for service to be installed. For emergency situations, the public may contact DOT&PF personnel at the proposed maintenance station who will be present full time, except when personnel are inspecting the highway. DOT&PF would then contact the appropriate response agencies via satellite phone to notify them of the situation. It is anticipated that no cell service will be available along the middle portions of the route, similar to other remote rural arterial highways throughout the State.
- E) Utility operators will be able to permit their utilities within the road right-of-way if the need arises. Since these improvements are not DOT&PF related infrastructure, they have not been evaluated.
- F) Locations for pullouts and scenic overlooks have been identified in consultation with USFS for the highway alternatives on the east and west sides of Lynn Canal and were

described in Sections 4.3 and 4.4 of the Draft SEIS.

Group 452

Topic/Subtopic: Socioeconomic Resources/Community Infrastructure Impacts

Group Comment Text:

- A) Who would be responsible for routine police patrols and emergency response?
- B) To meet the additional demand, do the responsible parties anticipate the need for additional resources?
- C) Who will be responsible for non-emergency services such as trash collection?

Group Comment Response:

A) Statewide, the Alaska State Troopers are responsible for general policing, patrols, and emergency response along rural roads, particularly outside of the areas associated with individual local governments. Alternative 2B falls partially in the CBJ (approximately 30 road miles north of Echo Cove to Eldred Rock) and partially in the Haines Borough (from Eldred Rock northward). Within the CBJ, the Juneau Police Department (JPD) would be responsible for the primary response. The Alaska State Troopers based in Juneau would provide the primary response for the segment of road north of the CBJ boundary. The Alternative 3 road on the west side of Lynn Canal lies within the Haines Borough. Under Alternative 3, the primary response would come from State Troopers based in Haines.

The SEIS indicates it is likely that emergency medical response would come from these communities. Section 3.1.4 and corresponding Socioeconomic Resources sections in Chapter 4 for each alternative provide basic information about services provided at each community and disclose the potential impacts to the service providers of having more road miles and more traffic within their areas of responsibility. See also Appendix EE, *Socioeconomic Effects Technical Report*, Section 3.3. Fire protection outside local fire service areas (i.e., along these road routes) is by the Alaska Division of Forestry and Tongass National Forest. Haines, Skagway, and Juneau all have search and rescue capabilities either through separate organizations or through their fire/rescue departments or both. Overall, staffing of public safety is anticipated to remain the same as it is today under all alternatives. The text of the Final SEIS has been reviewed and clarifications made to ensure the information above is clearly represented.

B) The agencies with the most resources available (State Troopers, JPD, and Capital City Fire and Rescue [CCFR]) say they are operating at minimal staffing levels given the extent of their current responsibilities and service areas. The SEIS and Appendix EE disclose the potential that local agencies may require further resources to continue to provide the same level of service.

Alternative 2B falls partially in the CBJ (about 30 road miles north of Echo Cove to Eldred Rock) and partially in the Haines Borough (from Eldred Rock northward). Within the CBJ, the JPD would have been responsible for the primary response. The Alaska State Troopers based in Juneau would have provided the primary response for the segment of road north of the CBJ boundary. The Alternative 3 road on the west side of Lynn Canal lies within the

Haines Borough. Under Alternative 3, the primary response would come from State Troopers based in Haines.

C) DOT&PF sponsors an Adopt-a-Highway program in which organizations volunteer to pick up litter several times per year along a segment of road in exchange for postings/signs giving the organizations credit for their stewardship. Alaska State Troopers have responsibility for cases of dumping. While many areas of Alaska's most rural highway have little problem with litter, it is acknowledged that some areas have been used for dumping or are otherwise not kept clean. There is no program for monitoring, cleaning, or enforcement along every part of every road. At formal DOT&PF rest stops and facilities, DOT&PF would be responsible for all maintenance.

Additional detail regarding non-emergency services has been provided in Appendix EE of the Final EIS.

Group 453

Topic/Subtopic: Socioeconomic Resources/Community Infrastructure Impacts

Group Comment Text:

- A) The Draft SEIS did not include costs to the communities from increased traffic, congested roads, limited parking, or for the additional demand for clean water and sanitation. How will those costs be evaluated, and who will be responsible for them?
- B) What will the project's impacts on livability and sustainability be when Juneau is already at a saturation point for noise, traffic, and other pressures caused by tourism.
- C) There is no parking or roadway capacity in the Juneau area to accommodate increased numbers of commercial vehicles, RVs, and cars.

- A) The SEIS discusses indirect traffic impacts qualitatively in Section 4.7.8, "Traffic," and the indirect effects of improved access on Municipal revenues and expenditures in Section 3.1.1.7 of Appendix EE, *Socioeconomic Effects Technical Report* (including a discussion on demand for parking and public utilities). The traffic, congestion, parking, and demand for public utilities are considered indirect effects, meaning they are anticipated to happen later in time and further removed from the project itself. The indirect effects commented on here are difficult to quantify, because it is unknown how local governments or other entities responsible for dealing with these impacts will respond. For instance, an entrepreneur could decide to build a parking garage, costing Municipalities nothing; or the city itself could decide to build a parking structure, charge money for parking, and cover its costs and even return revenue to city coffers. To try to quantify the resultant indirect costs would be speculative at best. The impacts are, however, discussed qualitatively in the sections of the SEIS referenced above.
- B) The SEIS discusses the quality of life impacts for each of the alternatives, including the kinds of impacts caused by tourism growth pressures. See Section 4.1.4, Socioeconomic Resources, in the SEIS. Additional impact analysis on quality of life in Juneau is found in Appendix EE, *Socioeconomic Effects Technical Report*, Section 3.3.1.4, "General Effects

on Quality of Life," and quality of life impacts to Juneau in Section 2.3.1.4. Specific requested information can be found under the subheading "Traffic Impacts" and "Other Quality of Life Impacts." Regarding highway access, The East Lynn Canal Highway would have a much larger impact on traffic, but the impact would still be small relative to overall traffic in Juneau. The impact would be most noticeable in particular areas of town. Negative effects of traffic are most likely to be felt in the sparsely populated areas north of Auke Bay. The incremental increase in more populated areas, such as downtown Juneau, would be much less important. Indirect noise impacts are discussed in Section 4.7.7.3. The analysis indicates that exterior and interior noise exposure at sensitive receptors along Glacier Highway and Egan Drive would be the same as estimated for Alternative 1 – No Action. Alternative 2B would increase peak hour noise at the Adlersheim Wilderness Lodge near Yankee Cove.

C) The SEIS discloses the impacts associated with the limited parking in Juneau. Detailed information can found in Appendix EE, *Socioeconomic Effects Technical Report*. The SEIS indicates that Alternative 2B would increase the number of summer vehicles and would, therefore, exacerbate the problem. For instance, traffic on Main Street is estimated to rise by approximately 2 percent, and the additional vehicles, particularly RVs, would increase the parking problem. Related to RV parking, the Draft SEIS reported that there is more RV capacity in Juneau than was anticipated to be needed under the road alternatives. Moreover, the private sector would respond to an increased demand, either through enlarging current parks or building new ones, and developing additional RV-related services, including increasing capacity, RV rental businesses, and RV supply services. See Section 3.1.4.2 in Appendix EE for more information.

Group 455

Topic/Subtopic: Socioeconomic Resources/Community Infrastructure Impacts

Group Comment Text:

There should be plans for emergency ferry service and for maintaining existing terminals.

Group Comment Response:

This comment appears to be largely premised on the concept of the East Lynn Canal Highway being extended all the way to Skagway, and ferry service being eliminated entirely north of Juneau. This project expressly rejected Alternative 2, which would have extended the road to Skagway, because historic landmark property around Skagway is protected by Section 4(f) of the Federal DOT Act and cannot be used for transportation projects when other prudent and feasible alternatives exist. All alternatives considered in the Draft SEIS would maintain ferry terminals at Haines, Skagway, and Auke Bay. For Alternatives 2B and 3, there would be provisions for providing ferry service between Juneau and Haines/Skagway in winter when avalanches close the road or when other emergencies make ferry service necessary.

Topic/Subtopic: Socioeconomic Resources/Crime

Group Comment Text:

- A) Road accessibility will increase crime, vandalism, and drug/alcohol related incidents in all three communities and along the road.
- B) Vandalism and petty crime is a concern for the unattended terminal area.
- C) People would be out of cell phone range and unable to call police to report damage.
- D) Police resources would not be able to monitor the area or respond quickly.

- A) The Draft SEIS addressed impacts of each of the reasonable alternatives in Chapter 4, and specifically, subsections titled "Socioeconomic Resources" addressed crime. For example, Section 4.3.5 addressed Alternative 2B, and under the subheading "Utilities and Public Services" addressed crime, indicating that the JPD had discussed the potential for increased crime and believed "there is not enough evidence or precedents to suggest that simply improving access would affect the nature and rates of local crime." The Final SEIS has been modified to add additional detail related to the concerns expressed.
- B) There is the potential for petty crime and vandalism at proposed remote ferry terminal sites. While the ferry terminals may not be staffed continuously, they would be visited frequently. At the Katzehin Ferry Terminal under Alternative 2B, for example, in summer ferries (with staff) would arrive eight times per day from Haines and six times per day from Skagway, for a total of 14 visits per day. AMHS currently operates other unattended terminals and deals with vandalism. Final design and operating plans would address ways to minimize vandalism, littering, and loitering.
- C) The GCI Inc. talk and text coverage map indicates service is available at the proposed Katzehin Ferry Terminal site and much of the Alternative 2B alignment. For Alternative 3, the map indicates service at the proposed Sawmill Creek and William Henry Bay Ferry Terminal sites. The map indicates coverage for Alternative 3 alignment is sparse. Sections of highway under Alternatives 2B or 3 with no phone coverage would be like any other remote rural highway in Alaska that does not have access to immediate communication. This is not unusual. If demand warranted, mobile phone service providers may provide service along the highway.
- D) Alternative 2B falls partially in the CBJ (approximately 30 road miles north of Echo Cove to Eldred Rock) and partially in the Haines Borough (from Eldred Rock northward). Within the CBJ, the JPD would have been responsible for the primary response. The Alaska State Troopers based in Juneau would have provided the primary response for the segment of road north of the CBJ boundary. The Alternative 3 road on the west side of Lynn Canal lies within the Haines Borough. Under Alternative 3, the primary response would have come from State Troopers based in Haines. The ferry terminal areas under Alternatives 2B and 3 are much less remote than some other parts of Alaska. Nonetheless, it is acknowledged that response to those areas could take time.

Topic/Subtopic: Socioeconomic Resources/Method of Analysis

Group Comment Text:

The use of the AASHTO methodology in the user benefit analysis was inappropriate as it was not intended to be used on projects that involve a new road in an undeveloped area or modes of travel other than roads and highways.

Group Comment Response:

Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, acknowledges the challenges of employing a traditional AASHTO methodology in evaluating projects involving modes of transportation other than roads. However, the AASHTO methodology, customized for the JAI Project with the specific modifications noted in the User Benefit Analysis, remains the best available approach for measuring user benefits associated with each alternative. Further, sensitivity analysis allowed for testing of model inputs and results most closely related to problematic aspects of the AASHTO methodology, such as frequency delay costs.

Group 402

Topic/Subtopic: Socioeconomic Resources/Method of Analysis

Group Comment Text:

- A) If the anticipated life of a ferry is 50 years, why is the economic study only 36 years?
- B) Is the cost of replacing ferries and the associated lifetime upgrades/overhauls included in economic study?

Group Comment Response:

- A) The economic analysis period of 36 years (under Alternative 2B, 6 years of construction and 30 years of operation) is based on the inability to project traffic substantially beyond 30 years.
- B) The economic studies for the Draft SEIS include all costs within the 36-year period, including vessel maintenance, refurbishment, and replacement as well as highway maintenance.

Group 404

Topic/Subtopic: Socioeconomic Resources/Method of Analysis

Group Comment Text:

The economic and traveler statistics resulting from a flawed travel demand model are biased and unverifiable.

Group Comment Response:

The traffic forecast model is not flawed or biased. It was developed based on empirical data derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. It was validated against

existing travel demand by ferry within Lynn Canal. To forecast traffic demand for each of the alternatives, the model considered various factors relating to travel time, cost, and convenience of travel. The impact analysis is not based on mere assumption. The analysis is done by professionals with expertise doing this type of analysis, is based on sound methodologies, and uses updated baseline data. Section 3.1.4.2 of Appendix EE, *Socioeconomics Effects Technical Report*, describes the methodology used to estimate the number of new visitors, and the resultant indirect effects are described throughout the document.

Group 654

Topic/Subtopic: Socioeconomic Resources/Method of Analysis

Group Comment Text:

The socioeconomic impacts in the Draft SEIS are out of date and not fully captured, and the methodology is not adequately explained. Specific issues include:

- A) The household survey data that is the basis for the socioeconomic effects is nearly 20 years old and does not capture online shopping.
- B) The survey conducted in 2003 asks the residents about their preferences of three potential access options, one of which is no longer viable under this project, and it does not ask about the preferred alternative identified in the Draft SEIS.
- C) Recreational and summer travel are stated uses for the project, but the survey did not include tourists or non-car/walk-on travelers.
- D) The *Socioeconomic Effects Technical Report* (Appendix EE) does not provide updated survey data, has vague methodology, and it does not point out what questions were asked and in what platform they were asked.

- A) The results of the 2003 household survey were provided as background information. These results were not used in developing the travel model for the Draft and Final SEIS, nor was the household survey used as the basis for the socioeconomic effects. As part of the preparation of the Draft SEIS, all socioeconomic baseline data and impacts were reviewed and updated where appropriate. As evidence, see the updated Appendix EE, *Socioeconomic Effects Technical Report*. This report is a revised assessment of the 2004 *Socioeconomic Effects Technical Report* documenting the potential socioeconomic effects of improved access to Juneau. It includes detailed socioeconomic baseline data for Juneau, Haines, and Skagway. This report was updated based on the latest U.S. Census information, comprehensive plans, and other relevant socioeconomic information.
- B) The results of the 2003 household survey were provided as background information. These results were not used as the basis for the socioeconomic effects.
- C) The commenter seems to be objecting to the use of survey data that was relied upon in the 2006 Final EIS. At that time, a household survey was used to provide information for the traffic forecast. In the 2014 Draft SEIS, a different methodology was used to forecast

traffic. As a result, no new surveys were conducted for the Draft and Final SEIS as they were not needed.

D) The commenter seems to be confusing interviews conducted for updating socioeconomic data with the more formal household survey method undertaken in 2003. It is true that the formal survey in 2003 had a more detailed methodology. Nonetheless, Section 1.2 of the 2014 *Socioeconomics Effects Technical Report* (Appendix EE of the Draft SEIS) describes the methodology used to conduct the interviews. It states "Primary research includes interviews with Juneau, Haines, and Skagway businesses, government, and other community representatives. In addition, executive interviews were conducted with State and local government agencies throughout the research process in order to gather data and assess the effects of the various transportation alternatives." Moreover, in sections where direct interviews were cited, additional information is presented on what type of information was asked and gleaned from the interviews. Interview materials are cited in the reference list and are a part of the administrative record for the project.

Group 552

Topic/Subtopic: Socioeconomic Resources/Population/Income/Housing Impacts

Group Comment Text:

Senior citizens are an increasing demographic:

- A) It is a hardship to expect them to drive the long distance on the road to get to things like medical appointments. What happens to senior citizens who cannot drive anymore?
- B) Mainliners with accommodations for sleeping, eating, and shopping for miscellaneous over-the-counter medicines and comfort needs are important for seniors making the trip.

- A) Living in rural communities nationwide involves driving, sometimes long distances, to hub communities that typically have larger populations and greater services. Roads generally have been considered an improvement in access between communities that allow people access to the services and social outlets they need. For those who do not own cars or who no longer drive, alternate transportation services are typically available. Private transportation companies would have likely provided service on the road alternatives should demand have developed. Based on the comments, additional detail has been added related to senior citizens and other travelers that may not be able to drive. See Section 3.1 of Appendix EE, *Socioeconomic Effects Technical Report*, and Sections 4.3.5 and 4.4.5 of the SEIS for more information on the social effects from the road alternatives.
- B) The change in mode from primarily ferry service to primarily road service in Lynn Canal would have had an effect on the conveniences to which ferry travelers have become accustomed. Similar to road travel elsewhere in Alaska, travelers would have needed to plan ahead and bring medications, food, and other personal items with them as those services would not have been available on the short ferry runs associated with the road alternatives. Sleeping arrangements will not be provided on the Alaska Class Ferries operating in Alternatives 2B and 3. It should be noted that mainliner ferries would still have operated routes between Juneau and points south and would have continued to

provide the same conveniences they do now.

Group 554

Topic/Subtopic: Socioeconomic Resources/Population/Income/Housing Impacts

Group Comment Text:

Haines population and services are at their limit. How will community services be able to accommodate the additional 90 people forecast?

Group Comment Response:

Section 4.3.5.3 of the SEIS discusses population, economics, housing, and municipal revenue for Haines and indicates a projected population increase of approximately 90 people as a result of Alternative 2B. The same discussion indicates an increase of 60 jobs, and those jobs would be expected to meet the needs of new residents for services. With the additional jobs, population, and economic activity, additional tax revenues are anticipated to rise commensurately to cover increases in service demand.

Group 555

Topic/Subtopic: Socioeconomic Resources/Population/Income/Housing Impacts

Group Comment Text:

Developable land is in short supply, as is residential housing. The project would destroy houses. Competition for land use will be high, especially between resident housing in Juneau versus need for increased RV camping infrastructure. The SEIS needs to reconsider limited current land use and housing issues before stating that "the private sector would respond to an increased demand and develop additional RV-related services, including increasing capacity..."

Group Comment Response:

An examination of Juneau housing stocks for this project indicated that there were several hundred vacant housing units, sufficient to accommodate the modest population increase that might occur under Alternative 2B. The project under any alternative would not destroy housing or relocate any people from their homes. The SEIS indicates that greater visitation to Juneau by RVs likely would result in greater demand for RV parks, discloses that current capacity is unlikely to meet demand, and discloses that suitable land for new RV parks may not be easy to find. The SEIS text has been modified slightly to further indicate that if the private sector were unable to develop enough new RV park capacity, the impacts likely would include (1) greater use of pullouts and commercial parking lots by RVs, and (2) an eventual reputation for lack of capacity (e.g., in online reviews and in guidebooks) that likely would dampen demand and reduce visitation by visitors in RVs. See the "Industry/Commercial Sectors" subheadings in the Socioeconomic Resources sections for each alternative in Chapter 4.

Topic/Subtopic: Socioeconomic Resources/Population/Income/Housing Impacts

Group Comment Text:

The availability of ground-based ambulance service will be a time and cost benefit, as private air ambulance service from Haines or Skagway is prohibitively expensive. This cost savings is a quality of life benefit.

Group Comment Response:

The SEIS indicates that patients from outlying communities often are evacuated to Juneau for medical treatment and indicates that such transport from Haines and Skagway would be made easier with a road, although air evacuation may remain the method of choice when time is critical. This topic is addressed under "Utilities and Public Services" in the Socioeconomic Resources sections of Chapter 4, for each alternative.

Group 660

Topic/Subtopic: Socioeconomic Resources/Population/Income/Housing Impacts

Group Comment Text:

The Draft SEIS claimed that "improved access" from the project would make it "somewhat easier and faster to transport patients." Helicopters or planes are utilized in emergency situations, so a road would provide no additional benefit in those situations. The Draft SEIS did not demonstrate how road access better meets the healthcare needs of people in Haines and Skagway.

Group Comment Response:

The quoted material is from the Socioeconomic Resources sections of Chapter 4. Implementation of all project alternatives would improve access to the communities in Lynn Canal; therefore, all of the alternatives would improve access to health care facilities. Most emergency medical situations are handled by air in Lynn Canal, and this would continue regardless of the alternative selected for the proposed project. The "easier and faster" sentence has been altered in the SEIS to clarify that the road would benefit the transport of patients more often on a routine basis than in emergency situations.

Group 440

Topic/Subtopic: Socioeconomic Resources/Quality of Life

Group Comment Text:

- A) How is quality of life defined? What are its measures?
- B) How is quality of life included in the economic case?
- C) How are intrinsic qualities such as quality of life evaluated and considered?

Group Comment Response:

A) Quality of life is not defined for purposes of the SEIS but, as indicated by the text, is defined differently by different people. The SEIS discloses the socioeconomic impacts. Under the subheadings "Quality of Life" in Chapter 4 of the SEIS, results of surveys

conducted by others and the general trade-offs in values held by residents of affected communities are discussed. Whether the changes and tradeoffs are positive or negative to the quality of life will vary by reader.

- B) Quality of life is not directly represented in economic discussion, such as the User Benefit study in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*.
- C) The entire SEIS is essentially a presentation of quality of life issues, allowing the public and decision makers to better understand and weigh the factors of adverse impacts and benefits of the various alternatives. Monetary costs of transportation, the quality of views, the ability to see or hunt wildlife, cultural attachment to places (and many other topics discussed in the SEIS) are all aspects of quality of life. The SEIS discusses the broad issues of quality of life inherent in a community's relative isolation under the subheadings "Quality of Life" referenced above.

Group 450

Topic/Subtopic: Socioeconomic Resources/Quality of Life

Group Comment Text:

How were costs/value of wild/undeveloped spaces and wildlife considered in estimating the cost of the road?

Group Comment Response:

DOT&PF and FHWA have disclosed the environmental consequences of the proposed alternatives in the Draft and Final SEIS, including the indirect effects described in the comment. A cost-benefit analysis that attempts to compute a dollar figure for the types of impacts identified above would be highly speculative and not a wise use of public funds. Consistent with NEPA regulations, the indirect impacts analysis provided in Chapter 4 discloses the potential impacts quantitatively when possible, and qualitatively when not. See in particular the discussion under Land Use, Visual Resources, Socioeconomic Resources, Noise, and Wildlife under the discussion of environmental consequences for each alternative in Chapter 4.

Group 550

Topic/Subtopic: Socioeconomic Resources/Safety - Highway/Ferry

Group Comment Text:

Increased access would prevent quarantine in case of disease.

Group Comment Response:

Quarantine would typically confine people to homes or health care facilities, not shut off an entire community from all contact with the outside world. If controls were necessary, they would be instituted by governments on advice of public health officials regardless of the transportation modes available at any given community. Increased access for each of the alternatives still includes a ferry link, so controlling a quarantine by limiting access would not be vastly different than the current situation.

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

Alternative 2B would improve/increase access to the Kensington Mine, resulting in future growth/expansion of the mine and increased opportunities for associated businesses, providing economic benefits to local communities.

Group Comment Response:

Section 4.3.1.3 of the Draft SEIS described changes to the Kensington Mine anticipated to result from road access under Alternative 2B. The anticipated effects are mostly related to improved access for workers. Conversations with the mine owners indicated that the presence of the road is unlikely to be the sole reason for development of new mineral deposits at the mine. Section 4.3.5.2 of the Draft SEIS, under the "Industry/Commercial Sectors" subheading, indicated no change to the overall operation of the mine was expected because barging in supplies and barging out mine products directly is likely to remain most cost-efficient.

Group 494

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

The Draft SEIS statement that the road alternatives create more jobs is misleading:

- A) Ferry jobs are longer term than construction jobs.
- B) The road alternative would reduce the number of ferry jobs available for Alaska residents.
- C) Other than potential construction and maintenance jobs, the road would not result in overall economic benefits.

Group Comment Response:

The Socioeconomic Resources subsections of Chapter 4 address jobs. Section 4.3.5 addresses jobs for Alternative 2B (Section 4.3.5.2 for effects in Juneau).

- A) The document bases economic effects on projected traffic volumes and known spending patterns to determine that the additional traffic is likely to translate to additional permanent new jobs to serve the additional traffic. Likely new residents also would be based on the same numbers. These new jobs and new residents would occur after construction was complete and Alternative 2B was in operation. See also Response B, below.
- B) The concept that Alternative 2B would reduce the overall number of ferry jobs is not accurate. Table 12 in Appendix GG, *Marine Segments Technical Report*, indicates that the number of crew hours served in northern Lynn Canal under Alternative 1 No Action would be fewer than the number of crew hours on the shuttle ferries (Day Boat ACFs) under Alternative 2B, and that overall ferry operating costs (of which staff time is a large component) would be higher under Alternative 2B than under Alternative 1 No Action.

This indicates jobs would not be reduced under Alternative 2B. The locations of some jobs may change, as indicated in Section 4.3.5.

C) The analysis in the Draft SEIS has been re-examined and found to be reasonable. Increased traffic is expected to lead to a modest increase in jobs and population due to greater economic activity in Juneau, Haines, and Skagway. See responses above and Section 4.3.5 under subheadings for each community. Note that the purpose of the project, as stated in Section 1.4, is related to transportation demand, travel opportunity, travel times, and State and user costs of transportation in the corridor. The purpose of the project is not to provide explicit economic benefits to the State economy or to the economies of the communities served. The impacts are reflected in the Draft and Final SEIS.

Group 511

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

The analysis in the Draft SEIS that the road will decrease freight costs is flawed and does not fully disclose information:

- A) It is inconsistent with what is reported in Appendix EE, *Socioeconomic Effects Technical Report*.
- B) It does not address changes in cost to items like groceries.
- C) It does not adequately address transportation costs as it does not recognize the reduction in marine transportation with the purchase of Northland and the lack of competition that has resulted in higher shipping costs to all of Southeast Alaska.
- D) It does not recognize that it costs twice as much in freight charges to ship via Alaska Marine Lines (AML) down the highway from Anchorage as it does to ship the same commodities from Seattle on the AML barge.
- E) It does not recognize that the availability of different modes of transportation can drive down the cost of shipment.
- F) It does not cite any specific evidence that the project will improve the transport of freight up and down Lynn Canal.
- G) It does not disclose existing rates for shipping goods via the AMHS.
- H) It does not estimate what the costs would be to deliver freight to Haines along the highway.
- I) It has an unrealistic assumption that hauling freight by truck for 91 miles to Katzehin and then transferring the freight to a day boat for final delivery to Skagway is cheaper than utilizing the current AMHS.

- J) It fails to disclose and evaluate the fuel and time costs associated with loading and trucking freight from Juneau to Katzehin for transfer to a ferry for delivery to Skagway.
- K) There should be a study of these distances from the ferry terminals to towns and how they affect the cost of living in these towns. The more centralized the shipping and receiving ports are, the lower the cost of living.
- L) Freight from Juneau to Haines would not be a lower cost because AMHS does not require a driver for every container, while road transport would. The SEIS needs to consider the cost of the driver in the analysis.
- M) A number of statements are not supported by any financial or analytical data.
- N) Backhaul assumptions are not supported by data and are questionable.

Group Comment Response:

General Response: The Draft SEIS does evaluate the effects of the alternatives on freight movement. The Draft SEIS and the *Socioeconomic Effects Technical Report* (Appendix EE) explain that most freight would continue to move by barge under these alternatives. Barge transport has the advantage of being relatively low cost but has the disadvantage of being slow. Alternatively, air shipment is faster but has a higher cost. Highway transport under Alternatives 2B and 3 offers a third option with faster delivery times than a barge to Seattle or locations in other Lower 48 states at a lower cost than air freight. Neither of the highway alternatives evaluated in the SEIS (Alternatives 2B and 3) would provide a direct highway connection to the continental highway system. However, it is anticipated that the higher frequency and low costs of the short shuttle links associated with these alternatives would be advantageous to trucking some freight and would generate truck shipping of fresh fish and other products. Additional information regarding freight shipment changes resulting from the road alternatives has been added to Sections 4.3.7 and 4.4.7 of the Final SEIS and Sections 3.1.4 and 3.1.5 of the *Socioeconomic Effects Technical Report*.

- A) The analysis and text has been checked and inconsistencies were not identified. The *Socioeconomic Effects Technical Report* (Appendix EE) and SEIS are consistent and have been updated with new information.
- B) Based on the comment, additional information has been added to address changes in cost to items like groceries. The analysis indicates that for the more than 97% of containers shipped by barge, none of the alternatives will change those shipping costs. The SEIS inaccurately indicated that freight shipping costs would go down for containers shipped in Lynn Canal by ferry. For Alternatives 2B and 3, unaccompanied containers will not be allowed on the ACF shuttle ferries, requiring those containers to be driven on the proposed highway, and drivers would need to accompany those containers on the shuttle ferry. Because of the labor, this could increase costs by 5% to 10% for Alternative 2B (to Haines and Skagway, respectively) and 10% to 58% for Alternative 3 (costs to Skagway are higher, accounting for the need to take the Haines-Skagway shuttle ferry). These potential cost increases are for the 2.6% of containers that would be shipped in this manner.

- C) Consideration has been given to reflect the lack of marine transportation competition that has resulted in higher shipping costs to all of Southeast Alaska. The commenter is correct that the analysis does not address changes to freight competition because none of the alternatives are anticipated to create a substantive change in the methods of freight shipment. Therefore, little effect to freight shipment competition is anticipated.
- D) The SEIS does not identify a cost advantage for shipping over the road as compared to barging freight. In fact, the SEIS anticipates that freight delivery to Juneau will continue to be primarily by barge, with little change predicted even for Alternatives 2B and 3.
- E) Analysis was included to reflect that the different modes of transportation (air, trucking, and barge) have different cost structures. The SEIS anticipates that the proposed alternatives will have little effect on freight shipment modes.
- F) The SEIS does not predict that the alternatives will result in major changes to how freight is shipped in Lynn Canal. To the contrary, the SEIS anticipates that barges delivering container vans from Seattle will continue to be the primary mode of freight shipment to Lynn Canal communities under any of the alternatives.
- G) Existing rates for shipping goods via the AMHS have been included in Appendix EE, *Socioeconomic Effects Technical Report*.
- H) Estimates of costs to deliver freight to Haines via the highway and shuttle ferry have been included, with the most detail in Appendix EE (*Socioeconomic Effects Technical Report*) under discussion of the transportation industry.
- I) Evaluation of hauling freight by truck to Katzehin and then transferring the freight to a Day Boat ACF for final delivery to Skagway as compared to use of the current AMHS has been supplemented, with most detail in Appendix EE, *Socioeconomic Effects Technical Report*.
- J) Information has been added to disclose and evaluate the fuel and time costs associated with loading and trucking freight from Juneau to Katzehin for transfer to a ferry for delivery to Skagway, with most detail in Appendix EE, *Socioeconomic Effects Technical Report*.
- K) The JAI Project SEIS is addressing very specific transportation needs in Lynn Canal and is not a general study of effects ports may have on the cost of living in Southeast Alaska. The distance that freight needs to be trucked from the ferry terminals to town has been included in the analysis in Appendix EE, *Socioeconomic Effects Technical Report*. The SEIS indicates that none of the alternatives will have a major impact on how freight is shipped in Southeast Alaska or in Lynn Canal. Barging of containerized vans will continue to be the dominant method of freight shipping under any of the alternatives. Because freight shipment methods are not anticipated to change substantially, there would be little to no change in cost of living due to freight shipments.
- L) Discussion has been added to consider the cost of the driver in the analysis, with most detail in Appendix EE, *Socioeconomic Effects Technical Report*.

- M) Where possible, the analysis has been updated to include financial or analytical data.
- N) Appendix EE, *Socioeconomic Effects Technical Report*, does not indicate that "Lots more freight will be going by road instead of by air and instead of by a barge, and, therefore, backhaul rates should go down." To the contrary, the SEIS predicts that barging would continue to be the dominant method of freight distribution. Similarly, the SEIS does not predict that lots of freight that currently travels by air would shift to trucking over the road. The SEIS does not indicate that back-haul rates would be reduced. What the SEIS anticipates is that for the fish processing industry, which currently flies fresh fish out of Juneau (or for other industries with time sensitive products), the ability to truck that product to markets would be less expensive than air freight and quicker than barging. This would create an opportunity and potential benefit to these industries (primarily anticipated to be the fresh fish market).

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

- A) Alternative 2B will draw businesses from Haines and Skagway to Juneau.
- B) Haines and Skagway would experience reduced tourism.

- A) The SEIS discloses the types of impacts described by the comment. See Section 4.3.5.3 for economic impacts to Haines and Section 4.3.5.4 for economic impacts to Skagway. The SEIS reports that on a regional basis, improved access would result in a net gain to Juneau's local retail industry, and Haines and Skagway could realize some loss in certain types of retail sales such as durable goods. For Alternative 2B, increased spending in Juneau may be offset by increased visitor spending in Haines and Skagway, though a shift in consumer type may have an impact on the types of retail businesses in Haines. Additional information is presented in Appendix EE, *Socioeconomic Effects Technical Report*.
- B) Economic impacts related to tourism are disclosed in the SEIS, primarily in Section 4.3.5, Socioeconomic Resources. Alternative 2B would substantially increase access to the east Lynn Canal coastline for recreation and tourism, and increase visitation to Haines and Skagway. Tables 4-20 and 4-21 report the "Projected Traffic and Resulting Visitor Economic Impacts" due to Alternative 2B to Haines and Skagway in 2020, respectively. The analysis suggests 89,000 new visitors annually in 2020 will visit Haines over the visitation anticipated with Alternative 1 No Action (Table 4-20). For Skagway, new visitors in 2020 are anticipated to be 105,400 annually over the visitation estimated with Alternative 1 No Action (Table 4-21). As discussed in the Draft SEIS, all of the project alternatives are projected to increase independent tourist visits to Lynn Canal communities; however, Alternatives 4A and 4C are anticipated to have the least effect on independent visitor traffic (Section 4.5.5). Alternatives 2B and 3 are projected to result in the largest increase in independent tourist visits (Section 4.3.5 and 4.4.5). Regarding concerns that the Haines-Skagway shuttle will affect the "Golden Circle Tour." The ferry would be sized to

accommodate the forecast demand for this link. Additional information is presented in Appendix EE, *Socioeconomic Effects Technical Report*.

Group 551

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

How will local hire be incorporated, especially when it is larger, Lower 48 construction firms that have the ability to construct projects of this magnitude?

Group Comment Response:

Section 4.8.4, Construction Impacts, Socioeconomic Resources, addresses the workforce. The Draft SEIS indicated the percentage of the workforce assumed to be from outside Juneau, Haines, or Skagway for Alternative 3 and not for others (for example 75% of the workforce is assumed to be from outside of Haines, for Alternative 3). For the Final SEIS, this kind of information has now been included for Alternative 2B, and a paragraph has been added to explain that the construction effort is not great enough under the other alternatives to create a substantial influx of construction workers from outside the region. In general, the Draft SEIS acknowledged that a large influx of workers from elsewhere would be likely for construction of the alternatives with substantial road components. Neither the Draft SEIS nor the Final SEIS suggest that the work could be completed entirely by a local workforce.

Moreover, there are restrictions on the use of local hiring when using FHWA funds. First, the Common Grant Rule contains a regulation prohibiting the use of geographic preferences. Thus, the USDOT does not allow grant recipients to use geographic hiring preferences in FHWA-assisted projects. Second, FHWA has general statutory mandates requiring full and open competition in the award of contracts. These statutes have been interpreted and applied as prohibiting all economic and social contracting requirements on FHWA federally-assisted projects that do not relate to the cost-effective use of federal funds.

Group 559

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

The Draft SEIS underestimated the long-term economic benefits of the project. The ability to access and provide goods and services more rapidly and cheaply to and from Juneau will benefit all businesses and consumers in the Lynn Canal region. This will, in turn, expand the economy and provide opportunities for even more new businesses to flourish. The analysis needs to consider the cumulative economic benefits from the following activities:

- Independent traveler and/or visitor industry indirect growth and development;
- Social, cultural, commercial, and recreational interactions among Juneau, Haines, Skagway, and Whitehorse, including economic benefits from providing more options for shopping, cultural events, school, and general travel;
- Increased utilization of businesses and organizations along the road as a result of improved access;

- Opportunities for additional enterprises and employment in Juneau, Haines, and Skagway;
- Seafood industry access to markets and decrease in shipping costs;
- Shorter ferry lengths that are the most restrictive part of the transportation route;
- Reduction in prices and freight shipment for goods due to competitive shipping options; and
- Increased Municipal sales tax revenues (plus hotel, liquor and tobacco taxes).

Group Comment Response:

The Socioeconomic Effects Technical Report (Appendix EE) and the Socioeconomic Resources section of each alternative discussion in Chapter 4 of the SEIS explain the possible economic impacts of project alternatives. DOT&PF and FHWA have reviewed the suggestions and believe that the benefits described are already captured in the cited material. The alternatives that have the highest proportion of new roadway (Alternatives 2B and 3) are projected to have a greater beneficial effect on the economies of Lynn Canal communities than the predominately marine alternatives. This would result from a projected increase in tourist traffic, which would increase spending and jobs in Lynn Canal communities. Highway alternatives would also reduce transportation costs. Improved transportation resulting from Alternative 2B may impact some small businesses by providing access to competing businesses in other locations, but would also provide more potential customers for new and existing businesses. It is likely that the higher frequency and low costs of the short shuttle links associated with these alternatives would generate some truck shipping of fresh fish and other products. Both highway alternatives would have permanent ferry and highway jobs in addition to the temporary highway construction jobs created. Both alternatives would have a three-vessel shuttle system in Lynn Canal with permanent ferry crews in addition to permanent highway maintenance jobs and seasonal avalanche control jobs.

Group 560

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

Would the terminal be better located closer to downtown Juneau? This would lower the cost of shipping more than the current proposed terminal location.

Group Comment Response:

Part of the purpose of the project (Section 1.4) is to reduce costs to users and costs to the State while better meeting demand in the corridor. Providing shorter ferry runs allows for more frequent ferry service at lower costs to users and reduces operating costs to the State per vehicle served. Reducing the ferry run time allows for use of Day Boat ACFs rather than ships that must house the entire crew and pay expensive overtime for shifts greater than 12 hours. It is for these reasons that the ferry terminals are moved north under the road alternatives. Most shipping (e.g., groceries and household goods) is by barge, not by ferry, and this would be expected to continue for all affected communities under all alternatives. Moving the Auke Bay Ferry Terminal south to the downtown Juneau area would add extra construction costs to the alternatives and extra operating costs because of the longer run up Lynn Canal.

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

- A) The proposed road would ultimately reduce jet service to/from Juneau, shrinking an existing economy and increasing the cost of living in the project area even more.
- B) The Draft SEIS claims that improved access to Lynn Canal is likely to have a negative impact on air taxi operators. This contradicts the previous claim that improved access will create a closer link to the communities. Currently, communities are as close as a 45-minute plane ride.

Group Comment Response:

- A) The proposed road under Alternative 2B is not anticipated to have a measurable effect on jet service to/from Juneau. While the road would compete with commuter air travel between Juneau and Haines or Skagway it would not be an attractive modal option for travelers flying in and out of Juneau by jet. Jets do not serve Haines or Skagway, and the communities that are served by jet service from Juneau are too great a distance and the trips leaving Juneau by jet are likely too time sensitive to be affected by the road.
- B) A statement that improved surface transportation in Lynn Canal would reduce business for air taxi operators does not contradict a statement that improved surface transportation would improve linkages for the affected communities. An important aspect of the SEIS is to describe both beneficial and adverse impacts. It is possible to have an overall benefit to travelers in general, while also having an adverse effect on one transportation industry, in this case, air taxi operators. As is explained in Section 4.4.7.5 of the Draft SEIS, construction of any of the build alternatives would divert some traffic from air taxis to the improved Lynn Canal surface transportation. The improved access in Lynn Canal would facilitate the movement of goods and people through and to the northern Southeast Alaska region. This would create closer social, cultural, and economic links between the communities of Juneau, Haines, Skagway, and Whitehorse. However, air taxi operators could see reduced activity and business.

Group 570

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

- A) What are the economic impacts to the commercial and sport fisheries due to the potential adverse effect to the five species of Pacific salmon?
- B) How will impacts to local commercial fishermen be mitigated?

Group Comment Response:

A) Per the comment, Section 4.3.13 of the Final SEIS describes the effects of Alternative 2B on fish habitat and potential impacts to the commercial and sport fisheries. The five species of pacific salmon were identified as potentially affected species during preliminary consultation with NMFS to determine the scope of field surveys in 2003 (Section 3.3.2.1 of the Draft SEIS). The impact analysis for marine and freshwater habitat and species,

including EFH, under the build alternatives determined there would be no measurable effect on regional populations of any fish species.

B) The analysis provided in the Draft SEIS indicates that no loss to the commercial or sport fishery would occur (Sections 4.3.13, 4.4.13, 4.5.13, and 4.6.13 of the Draft SEIS); therefore, no additional mitigation is proposed beyond the measures agreed to by the NMFS related to impacts to EFH.

Group 571

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

- A) How will the proposed road result in economic gains/losses for Juneau, Haines, and Skagway?
- B) Under Alternative 2B, the increase in trade and commerce in the region could provide significant new revenue into the local governments of Juneau, Haines, and Skagway.

- A) The economic impacts of the alternatives, both positive and negative, are disclosed in the SEIS. See in particular Section 4.3.5 and 4.8.4, "Socioeconomic Resources." The improved access in Lynn Canal that would result from Alternative 2B would facilitate the movement of goods and people through and to the northern Southeast Alaska region. On a regional basis, improved access would result in a net gain to Juneau's local retail industry, and Haines and Skagway could realize some loss in certain types of retail sales such as durable goods. Population and the overall demographics of Juneau, Haines, and Skagway would not be substantially affected by the improved access resulting from Alternative 2B. As presented in Section 4.8.4 of the Draft SEIS, all project alternatives would create construction jobs, with Alternatives 2B and 3 creating the most jobs. All project alternatives except Alternatives 4A and 4C are projected to increase employment in Juneau (Section 4.8.4.3 of the Draft SEIS), and, depending on the alternative, Haines and/or Skagway primarily as a result of increased visitors (Sections 4.3.5, 4.4.5, and 4.5.5 of the Draft SEIS).
- B) The effects of Alternative 2B related to local government revenues are discussed in the SEIS and Appendix EE, *Socioeconomic Effects Technical Report*. See SEIS Section 4.3.5.2 for Juneau impacts, Section 4.3.5.3 for Haines impacts, and 4.3.5.4 for Skagway impacts. Appendix EE, Section 3.1.4.2 reports the effects of the East Lynn Canal Highway on Juneau, Section 3.1.4.3 reports effects on Haines, and Section 3.1.4.4 reports the effects on Skagway. In 2020, as reported in the Draft SEIS total additional visitor spending in Juneau would generate approximately \$630,000 in additional sales tax revenues, approximately \$380,000 in Haines, and approximately \$190,000 in Skagway.

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

In regards to impacts to Skagway from the proposed project:

- A) How was the figure of 105,000 more visitors determined? These are likely summer visitors only. Are they tourists or Alaskans?
- B) What is the source of the projected \$3 million in new payroll and the 85 new jobs?
- C) Why does the Draft SEIS assume all additional ferry crew personnel and families would choose to relocate from Juneau to Skagway?

Group Comment Response:

- A) The increase of up to 105,400 annual visitors is extrapolated from the annual average daily traffic projection for Alternative 2B. Appendix EE, *Socioeconomic Effects Technical Report*, describes how the figure was calculated. The term "visitors" refers to non-local trips and includes trips made by tourists from out of State and Alaska residents that do not reside in the community being visited. Like the general distribution of all trips across the year, more "visitors" are anticipated in summer months (May to September) and fewer in winter months. The Draft SEIS reported (Appendix AA, *Traffic Forecast Report*) that summer average daily travel demand is anticipated to be 1.61 times the annual average daily travel demand.
- B) The 85 new jobs and \$3 million in new payroll in Skagway are economic calculations based on the traffic projection and the pattern of spending by visitors. These are projections based on assumptions and visitor spending data, and the multiplier effect of such spending experienced in Southeast Alaska. Such calculations are fairly typical and are tools for comparing alternatives using a consistent system. Details on the calculations and sources of information can be found in Appendix EE, *Socioeconomic Effects Technical Report*.
- C) Alternative 2B would change the home port of a Day Boat ACF from Auke Bay (Juneau) to Skagway. There would not be crew quarters on the vessel, and the expectation would be that crew would need to find their own lodging in Skagway. The economic assumption is that the crew would no longer find it conducive to live in Juneau and pay for a hotel or other lodging in Skagway.

Group 665

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

A) Ferry service will be reduced to a point where Juneau will be extremely difficult to reach for outsiders, and Southeast Alaska residents will find it more inconvenient and expensive to buy in Juneau stores. Online buying will take out another piece of Juneau's economy.

B) Cost of goods coming into Juneau have risen anywhere from 10 to 20 percent. These costs are not mentioned or considered in the Draft SEIS.

Group Comment Response:

A) This comment is made based on the assumption that the road under Alternative 2B will not be available for most of the months of the year (presumably due to winter conditions), and that ferry service, being reduced, will make Juneau more difficult to reach. The basic assumption is flawed. DOT&PF and FHWA believe the SEIS accurately discloses the most likely scenario—that the highway may be closed limited days each winter, and that if such closures were expected to be lengthy, one or more ferries would be available for transportation in Lynn Canal (at levels similar as Alternative 1 – No Action). The project would not affect ferry services currently offered outside Lynn Canal to and from communities to the south and west. Overall, under Alternative 2B, Juneau would be easier to reach. It is unlikely that this project would be responsible for a shift to online buying instead of visiting Juneau.

B) Barge service and the changes in costs of items barged to Juneau would be unlikely to be affected by the project. These changes are driven by market forces and the decisions of barge and transportation companies. The Socioeconomic sections of Chapter 4 indicate that barge service would likely remain the mode by which most freight would be shipped to Juneau under any alternative.

Group 669

Topic/Subtopic: Socioeconomic Resources/Tourism/Economic Impacts

Group Comment Text:

The Draft SEIS claimed that with the project's improved access, there will be an increased demand for public services (at a greater cost to local governments), but it will be offset by higher property tax revenues (at a greater cost to the local residents). How would that benefit anyone?

Group Comment Response:

The Draft SEIS discloses impacts on local government, including the demand for public services. It does not claim this is a benefit. Benefits are derived by travelers who would use the project alternatives in the form of lower costs, increased flexibility and opportunities to travel, and shorter travel times. See Appendix EE, *Socioeconomic Effects Technical Report*, for more detailed information on impacts to local government expenditures. Appendix EE estimates the amount of additional sales tax revenue that could be generated by each alternative, but other expenditures are not quantified.

The SEIS does not indicate the proposed alternatives result in a "great cost" to local governments. In Section ES 1, describing effects common to all alternatives, Appendix EE of the SEIS explains that "local governments would be affected by improved access in several ways. These include increased demand for public services in remote areas of the Juneau and Haines boroughs as well as outlying Skagway areas, and increased demand for public utilities associated with increased traffic and population growth. Expenditures in these areas would be offset by increases in sales tax revenues from travel-related spending and increases in property tax revenues an increased cost to residents. Other tax revenues,

such as bed taxes, would also increase."

7.21 Subsistence

Group 545

Topic/Subtopic: Subsistence/Existing Conditions

Group Comment Text:

The Draft SEIS lacks sufficient subsistence harvest and use data for herring and other subsistence resources.

Group Comment Response:

The Draft SEIS relied on the latest available information and data. Reporting of subsistence use in the Draft and Final SEIS is based on the USFS *Tongass Resource Use Cooperative Survey* (1988), ADF&G, Division of Subsistence, *Subsistence Resource Use Patterns in Southeast Alaska: Summaries of 30 Communities* (1994), and Scoping comments. Existing levels of subsistence harvest are discussed in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD, *Land Use Technical Report*, of the Draft SEIS.

Customary and traditional use of herring is noted in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD. Except where specifically called out, herring is included on the subsistence figures and in the text under the general category of finfish.

Project impacts to subsistence resources are discussed in Section 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 of Appendix DD. FHWA has determined that none of the reasonable alternatives would significantly restrict subsistence uses.

Group 544

Topic/Subtopic: Subsistence/Method of Analysis

Group Comment Text:

FHWA has not fulfilled its obligations under the Alaska National Interest Lands Conservation Act of 1980 (ANILCA).

Group Comment Response:

FHWA has met its obligations under ANILCA. Section 810 of ANILCA (16 USC Section 3120) requires an evaluation of the effects on subsistence uses of projects located on federal lands. ANILCA (Section 803) defines subsistence uses as the "customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicrafts articles out of non-edible byproducts of fish and wildlife resources taken for family or personal consumption; for barter, or sharing for personal or family consumption; and for customary trade." As defined in ANILCA, "rural" residents live in a community or area that is "substantially dependent on fish and wildlife for nutritional and other subsistence uses."

Title VIII of ANILCA (Section 810(a)) requires that an evaluation of subsistence uses and needs be completed as part of any federal agency determination to "withdraw, reserve,

lease, or otherwise permit the use, occupancy, or disposition of public lands." Specifically, ANILCA 810(a) requires an evaluation based on three specific issues:

- 1) the effect of use, occupancy or disposition on subsistence uses and needs;
- 2) the availability of other lands for the purpose sought to be achieved; and
- 3) other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 USC § 3120).

The Draft SEIS evaluated potential impacts to subsistence uses protected under ANILCA and concluded that no alternative would significantly restrict subsistence usage. Project impacts to subsistence resources were discussed in Sections 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 in Appendix DD, *Land Use Technical Report*, of the Draft SEIS. FHWA has determined that none of the reasonable alternatives would significantly restrict subsistence uses.

Group 546

Topic/Subtopic: Subsistence/Operation/Maintenance Impacts

Group Comment Text:

- A) What regulatory changes are DOT&PF and other agencies recommending to address increased competition for subsistence and recreational hunting and fishing resources that will result from Alternative 2B?
- B) How will these regulations be enforced?
- C) What will enforcement cost the municipalities/boroughs and the State?
- D) How will already problematic/restrictive harvest regulations further target indigenous people harvesting resources in the area?

Group Comment Response:

Note: regulatory/management changes for recreational/commercial hunting/fishing is discussed in Group #126.

A) FHWA and DOT&PF are not aware of any agency proposing regulatory changes. It is not anticipated that regulatory changes will be needed to address increased competition for subsistence and recreational hunting and fishing resources as a result of Alternative 2B. Communication with ADF&G in January 2016 confirmed that no additional staff will be required to manage additional harvests that may occur as a result of Alternative 2B. Section 4.3.15.3 of the Final SEIS has been updated to address ADF&G management of several wildlife species due to the Alternative 2B road.

As discussed in Section 4.1.4.2 of Appendix DD, *Land Use Technical Report*, increased access from the project could result in ADF&G considering management actions to ensure sustainable harvests of some species (e.g., moose). Possible management actions could include shortening of seasons, reduction in bag limits, the use of drawing permits, and more active monitoring and enforcement duties by State and federal agencies. It is unknown at this time if these actions would occur or exactly what they would entail.

- B) Harvests in Alaska are dually managed by the State and federal governments, and both have their own legislation and enforceable regulations (see Section 3.1.6 of the SEIS and Section 3.2.4 of Appendix DD, *Land Use Technical Report*). However, as discussed under Response A, no new regulations have been identified at the time of this SEIS, so additional enforcement is not foreseeable.
- C) As no new regulations have been identified at the time of this SEIS, the change in cost of regulation enforcement cannot be quantified.
- D) The Draft SEIS and Appendix DD, *Land Use Technical Report*, note that some resources are already strictly regulated. This will not change as a result of this project. As there have been no new regulations proposed at the time of this SEIS, the potential impact to users from this project are not reasonably foreseeable.

Topic/Subtopic: Subsistence/Operation/Maintenance Impacts

Group Comment Text:

How will construction, increased traffic, and access from the road alternatives affect competition and impacts to subsistence resources?

Group Comment Response:

The Draft SEIS and Appendix DD, *Land Use Technical Report*, provide a summary of subsistence analysis completed for the project. Section 3.1.6 of the Draft SEIS and Section 3.2.4 of Appendix DD includes a discussion of subsistence harvests and use areas for each community. Project impacts to subsistence resources are discussed in Section 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 of Appendix DD. FHWA has determined that none of the reasonable alternatives would significantly restrict subsistence uses.

7.22 Terrestrial Habitat

Group 47

Topic/Subtopic: Terrestrial Habitat/Operation/Maintenance Impacts

Group Comment Text:

- A) Construction of a highway alternative would increase invasive species and damage habitat. Once invasive species are established, eradication can be expensive and difficult.
- B) The Draft SEIS did not address/incorporate information on the current presence or effects of invasive species and fungal and insect-vectored diseases, or provide measures to prevent their spread. Invasive plants such as reed canarygrass and knotweed are spreading in Southeast Alaska
- C) The SEIS should examine the potential for invasive species to spread as a result of project activities and identify management measures to prevent the spread of invasive species.

- D) How will roadside vegetation and invasive species be controlled during construction and operation of the highway alternatives?
- E) The SEIS should include a commitment to controlling roadside vegetation and invasive plants.

Group Comment Response:

- A) As stated in the Draft SEIS in Section 4.3.14, 4.4.14, 4.6.14, and 4.8.10, invasive plant species could be introduced from visitors, vehicles, and pets for the road alternatives during construction and operation. Sections 5.4 and 5.12.1 of the Draft SEIS included measures employed during construction to reduce the spread of invasive species. Once the project is complete, road maintenance activities would be subject to the DOT&PF BMPs for controlling the spread of invasive species.
- B) The Final SEIS addresses invasive plant species in Section 3.3.3. DOT&PF's commitment to mitigating, reducing, or eliminating vectors for invasive species to colonize areas affected by project activities is included in Section 5.4. Per the comment, NMFS's personal observation of infestations of reed canarygrass and Japanese knotweed have been incorporated into Section 3.3.3.
- C) The potential for invasive species spread during construction is discussed in Section 4.8.10 of the Draft SEIS. As standard practice during construction, equipment and materials are expected to be free of invasive species. All road materials are expected to be generated from within the project limits. Any new materials brought into to the site would be from a quarry or commercial processing yard and would be free of invasive species. Once the project is completed, road maintenance activities would be subject to the DOT&PF BMPs for controlling the spread of invasive species.
- D) During construction, DOT&PF would employ mitigation measures to avoid and minimize the potential for invasive species encroachment by not utilizing soils or seed mixes containing invasive species and cleaning construction equipment prior to use on the project. DOT&PF employs an integrated vegetation management plan to control vegetation along the highways post construction. The plan provides for the use of herbicides in locations where they may be cost effective and safe for the environment. Any use of herbicides by DOT&PF would be done in accordance with all applicable State and federal rules and would use BMPs to protect the environment. DOT&PF would provide advanced notice to the public prior to using herbicides on any highways.
- E) DOT&PF commitments to controlling vegetation and invasive plant species during construction and long-term use of the highway are provided in Chapter 5 of the Draft SEIS.

Topic/Subtopic: Terrestrial Habitat/Operation/Maintenance Impacts

Group Comment Text:

A road running through the root system of the Tongass National Forest will damage the health of the forest and endanger all living things in it.

Group Comment Response:

The potential effects of alternatives with highway development on the overall health of the Tongass National Forest ecosystem are evaluated and disclosed in the Draft SEIS under the section headings for Terrestrial Habitat (Sections 4.3.13, 4.4.14, and 4.6.13). As noted in those sections, FHWA and DOT&PF did not determine that the proposed highway through forest lands would damage the overall health of the forest or endanger all living things in it. In addition, USFS, the agency charged with the management of the forest, has accounted for the possibility of a road along Lynn Canal in their forest planning. Management direction for the forest is set forth in the 2016 *Tongass Land and Resource Management Plan* (TLMP). The 2008 TLMP and its predecessor, the 1997 TLMP, designated two possible road corridors (one on the west side and one on the east side of Lynn Canal) as Transportation and Utility Systems.

7.23 Threatened and Endangered Species

Group 150

Topic/Subtopic: Threatened and Endangered Species/General

Group Comment Text:

USFWS has determined that the Alexander Archipelago wolf may have to be listed as endangered under the ESA due to a dwindling population, reduced habitat quality, and availability of their primary prey, Sitka black-tailed deer. The Draft SEIS did not adequately address these impacts to Alexander Archipelago wolf populations.

Group Comment Response:

On January 5, 2016, the USFWS published a "not warranted" 12-month finding in the Federal Register. The finding determined that the Alexander Archipelago wolf does not warrant federal protection under the federal ESA.

Section 4.3.15 of the Draft SEIS provided an assessment of project effects on terrestrial mammals, including wolves and Sitka black-tailed deer, due to habitat loss, avoidance of roads, and vehicle collisions. Per the comment, Section 4.3.15 of the Final SEIS includes the pertinent information from the 2004, 2005, and 2014 wildlife technical reports and incorporates recent information on the effects of increased hunting and trapping pressures on Alexander Archipelago wolves, as well as wolf habitat use and loss as a result of Alternative 2B.

Topic/Subtopic: Threatened and Endangered Species/General

Group Comment Text:

Berners Bay is world-renowned for spring runs of eulachon and Pacific herring, and attracts record numbers of marine mammals like humpback whales and Stellar sea lions. Areas of Berners Bay have been designated by Congress as special management areas because of their critical importance to wildlife and human recreation. The project will put that in jeopardy.

Group Comment Response:

The potential impacts of project alternatives to the Berners Bay ecosystem are documented in the Draft SEIS. Sections 5.6, 5.9, and 5.12 of the Draft SEIS included mitigation measures to minimize and offset potential impacts to eulachon, Pacific herring, and marine mammals. These measures include timing in-water work activities to avoid critical timing for spawning and migrating fish species, as well as monitoring marine mammals during construction.

Group 55

Topic/Subtopic: Threatened and Endangered Species/Mitigation

Group Comment Text:

- A) What monitoring and mitigation measures are in place for Steller sea lion displacement at Gran Point and Met Point during construction?
- B) What measures will be taken to prevent public access to Gran Point and Met Point post construction?
- C) Will real-time reporting results be available to the public during noise monitoring for Steller sea lions?
- D) Why does the Draft SEIS provide a specific number of days listed to "record noise levels"?

Group Comment Response:

- A) Measures described in Section 5.12 of the Draft SEIS were intended to minimize and mitigate potential displacement of Steller sea lions at the haulouts during construction of Alternative 2B. These measures included: not allowing barge landings within 1,000 of the haulouts; monitoring noise levels from blasting; and visually monitoring during blasting within 3.135 feet of the haulouts.
- B) Sections 4.3.17.1 and 5.12 of the Draft SEIS noted that highway design elements have been incorporated into Alternative 2B to prevent motorists from leaving the highway corridor and approaching the haulouts. Post construction video monitoring at Grand Point would continue for 5 years to determine the extent of human access to the haulout and disturbance of Steller sea lions.

- C) The noise monitoring proposed for Alternative 2B in Section 5.12 of the Draft SEIS would not involve real time reporting to the public. Information would have been recorded and reported to NMFS.
- D) Noise monitoring proposed in Section 5.12 of the Draft SEIS for Alternative 2B that would have occurred at the haulouts during blasting would be conducted to verify the boundaries of the airblast zone of influence (the area where noise levels could disturb sea lions). The 10 days of monitoring would be sufficient for this verification.

Topic/Subtopic: Threatened and Endangered Species/Sea lions - Impacts

Group Comment Text:

- A) The Draft SEIS did not adequately consider environmental effects to Steller sea lions:
- (1) The effects to estuarine habitat supporting prey species; and
- (2) Impacts of blasting and other loud construction noises on sea lions hauled out in the Gran Point critical habitat area.
- B) Acoustic effects of Day Boat ACFs on marine mammals in Berners Bay are a concern, especially during the spring months.
- C) Evaluations of Alternative 3 should include an assessment of effects to marine mammals from acoustical disturbances from helicopter use, marine vessel use, pile driving, and construction noise near the coast or in marine waters. Impacts will be greater during the spring months when large aggregations of humpback whales and Steller sea lions occur in Berners Bay in association with schooling/spawning forage fish (e.g., eulachon and herring).

Group Comment Response:

- A) FHWA and DOT&PF have been consulting with NMFS regarding the project and potential effects to Steller sea lions since 1994. Information and collaboration from consultation with NMFS is incorporated into the Final SEIS. The Final SEIS addresses impacts to Steller sea lions from Alternative 2B, including effects to prey species from impacts on estuarine habitat (Section 4.3.13) and effects from blasting and other loud construction noise at the Gran Point haulout (Section 4.8.12.7). Industry standard methods have been used to determine the potential impacts from blasting and other construction activities on Steller sea lions at Gran Point. Monitoring during blasting activities and underwater pile driving for the construction of Alternative 2B, as described in Section 5.9 of the Draft SEIS, would be used to minimize the potential effects to Steller sea lions.
- B) Per the comment, Sections 4.4.15.1 and 4.6.15.1 of the Final SEIS address the impacts of acoustic disturbances to marine mammals from ferry vessel operations in Berners Bay. Alternative 3 would operate year round in Berners Bay while Alternatives 4B and 4D would operate in Berners Bay only in summer (May 15 to September 30).

C) Sections 4.4.15.1, 4.4.17, and 4.8.12 of the Draft SEIS addressed the impacts of noise disturbances to marine mammals. Per the comment, impacts related to noise from ferry operations are addressed in those sections of the Final SEIS. Impacts of construction of facilities in Berners Bay for Alternative 3 are addressed in the Section 4.8.12 of the Draft SEIS.

7.24 Transportation

Group 116

Topic/Subtopic: Transportation/Ferry Foot Passengers

Group Comment Text:

- A) The Draft SEIS did not adequately address the impacts to walk-on passengers.
- B) The Draft SEIS did not adequately consider costs to foot passengers. The SEIS analysis should consider the travel time and costs for walk-on passengers as well as vehicles.
- C) Walk-on traffic is not addressed equally under all alternatives.
- D) The analysis should include a forecast of walk-on traffic.
- E) How is access improved for walk-on passengers?
- F) Information about the projected change in the number of walk-on passengers is not provided.
- G) The Draft SEIS analysis highlighted the disproportionate treatment of federally mandated multi-modal solutions. Those choosing to walk-on or whoever cannot afford a vehicle will have fewer fare incentives. Pedestrian-transit traffic will be further displaced from multi-modal options as vehicle owners/users are advantaged via fare elasticity.
- H) Alternative 2B would have an adverse impact on a segment of the population that relies on pedestrian access. How will the transportation system support those who are unable to drive?
- I) The SEIS should address how walk-on passengers will get to the proposed Katzehin Ferry Terminal. While the Draft SEIS suggested private shuttles may be available, what will happen if they are not? Will they be safe, reliable, convenient, and affordable?
- J) DOT&PF should provide a shuttle and consider the additional expense of a shuttle bus (with driver).
- K) The Draft SEIS did not address impacts to airport travelers, including the logistics of traveling from Katzehin to the airport, parking at the airport or storage of vehicles, and scheduling issues for coordinating ferry and flight schedules.
- L) Using a family of four in a 19-foot vehicle as the basis for analysis ignores walk-on passengers. The reasons for walk-on travel can be very different than family travel (e.g., medical appointments, sports team travel, business trips, etc.).

M) The McDowell 2000 study estimated 45 percent of ferry passengers were foot passengers. This is the percentage that should be used in the SEIS as it is the most recent data.

Group Comment Response:

- A) DOT&PF and FHWA recognize that Alternatives 2B and 3 will change how walk-on passengers will access and use the transportation system and that these changes will have impacts. The impacts to walk-on passengers for Alternatives 2B and 3 are addressed in Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS under the subheadings "Pedestrians and Bicyclists." Based on the detailed comments and questions related to walk-on passengers, additional information has been included in the Final SEIS.
- B) The impacts to walk-on passengers for Alternatives 2B and 3, including costs, are addressed in Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS under the subheadings "Pedestrians and Bicyclists." Based on the comment, additional information about the anticipated fares for the various travel markets (walk-ons, single drivers with a vehicle, etc.) have been added to the Final SEIS.

The User Benefit Analysis reasonably accounts for walk-on costs. For example, an estimate of 2 to 4 percent of daily users for Alternative 2B would be walk-on passengers. Doubling or tripling the user cost (to account for shuttle service cost) of this small segment of the total traffic would have no consequential effect on the results of the User Benefit Analysis.

For Alternatives 2B and 3, DOT&PF and FHWA anticipate that current walk-on passengers will be in vehicles and are represented by the travel times reported in SEIS. For those who continue to choose to travel as walk-ons, they will need to obtain a ride to Berners Bay or Katzehin (whether via taxi, bus, or a friend), and thus are also represented by the travel times reported in the SEIS. Some commenters suggested that waiting for cabs, or friends, etc., to pick them up should be reported as part of the travel time for Alternatives 2B and 3. Under the current system and Alternative 1 – No Action (in fact, all the alternatives), walk-on passengers need to get to or from the terminals (whether via taxi, bus, or a friend), and therefore would have similar wait times.

- C) From a walk-on passenger perspective, the marine alternatives (1B, 4A, 4B, 4C, or 4D) will operate very similar to Alternative 1 No Action. Walk-on passengers are not anticipated to experience substantive changes or impacts under the marine alternatives as compared to the roadway alternatives (2B and 3), and therefore the discussion of impacts focuses on Alternatives 2B and 3 (Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS). Clarification has been added to the SEIS to make these distinctions clearer.
- D) Estimates of numbers of walk-on passengers affected by the changes anticipated under Alternatives 2B and 3 are reported in Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS. The total amount of demand in the corridor (both walk-ons and vehicles) is captured and represented in the forecasts. As is discussed in the SEIS, DOT&PF and FHWA anticipate that with the primarily road alternatives, most of the travel would be via vehicle (i.e., not walk-on) and those that were accustomed to making their trip as a walk-on passenger

would use a vehicle. Under Alternative 2B, a substantial segment of current walk-on traffic would be expected to convert to personal vehicle travel.

Cost is currently the principal deterrent for ferry travel with a vehicle. As described in the Draft SEIS User Benefit Analysis, under the No Action and Enhanced Service alternatives, the roundtrip cost for a driver and standard vehicle is \$242. Under Alternative 2B, round-trip ferry costs for a driver and vehicle would be \$39 (Table A-13). Adding vehicle operating costs to the comparison results in \$244 for No Action and Enhanced Service and \$80 for Alternative 2B. This substantial decrease in the cost of travel would prompt many more travelers to take their own vehicles. Further, the substantial increase in overall traffic associated with Alternative 2B would represent many more opportunities for walk-ons to travel with family, friends, and acquaintances. Additional explanation has been added to Appendix AA, *Traffic Forecast Report*.

E) The road alternatives (2B and 3) represent a shift in the way transportation would be provided in the corridor—away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles provide most of the transportation (shorter, publicly owned shuttle ferries would provide links connecting the roadways). It is true that DOT&PF and FHWA do not anticipate that walkon passengers would continue to find it as convenient to travel as a walk-on. Passengers that want to continue to travel as walk-ons would need to drive or be driven for most of the route. The Draft SEIS anticipated that many current walk-on passengers that own vehicles would likely choose to travel by car if a highway were available in the Lynn Canal corridor. While they would need to drive or get a ride to the ferry terminal, they would benefit from the improved frequency of service (14 round trip ferries leaving from Katzehin) and travel times that are roughly half of Alternative 1 – No Action travel time. While it might be possible to assess in more detail how walk-on passenger costs could vary between the project alternatives, the analysis would have no meaningful impact on overall measures of each alternative's economic efficiency or cost effectiveness because the number of walk-ons would be a small portion of overall traffic for the road alternatives. The number of walk-ons would be a relatively small part of Alternative 2B traffic because if that alternative truly represents a diminishment of service quality for walk-on travelers (as asserted in the comments), then none of the increase in traffic would be walk-on passengers.

F) For the marine alternatives, DOT&PF and FHWA expect that walk-on passenger levels would be similar under the build and no build alternatives. For the road alternatives, DOT&PF and FHWA do not anticipate that walk-on passengers would continue to find it convenient to travel as walk-on passengers, and therefore they anticipate most would drive. The vast majority of Lynn Canal region households have cars. For example, according to the U.S. Census Bureau's 2010–2014 American Community Survey 5-Year Estimates, 7.6 percent of Haines households do not have a vehicle available, 33 percent have one vehicle, 37 percent have two vehicles, and 23 percent have three or more vehicles. In Juneau, 8.5 percent of households do not have a vehicle available, 35 percent have one vehicle, 39 percent have two vehicles, and 18 percent have three or more vehicles. Moreover, because the cost of taking a vehicle would be considerably less (because the trip length is so much shorter), there would not be the same economic incentive as there is now to travel as a walk-on passenger, and therefore few parking spaces are planned for Katzehin. For all of

these reasons, few walk-on passengers are anticipated.

- G) While multi-modal solutions are not federally mandated, all of the build alternatives presented in the SEIS are multi-modal options. The anticipated fares for those choosing to walk-on or those who cannot afford a vehicle have been updated and disclosed in the Final SEIS. Based on the comments, the social impacts to those who cannot drive, including those to low income travelers who may not be able to afford a vehicle, have been updated in the Final SEIS.
- H) DOT&PF and FHWA recognize there would be an adverse impact on passengers that do not or cannot drive. These impacts are disclosed in Sections 4.3.7.5 and 4.4.7.5 of the Draft and Final SEIS and in Appendix EE, *Socioeconomic Effects Technical Report*. For those unable to drive, the potential for bus/van service to develop between Katzehin and Juneau with Alternative 2B was evaluated and DOT&PF finds it likely that Alternative 2B would result in daily summer coach service linking Juneau, Haines, Skagway, and possibly Whitehorse. Winter service would be less frequent, with bus service offered perhaps every other day between Juneau, Haines, and Skagway.
- I) As is disclosed in in Sections 4.3.7.5 and 4.4.7.5 of the Draft and Final SEIS and in Appendix EE, *Socioeconomic Effects Technical Report*, passengers that want to continue to travel as walk-on passengers would need to drive or be driven to the Katzehin Ferry Terminal. Travelers without vehicles would be required to rent vehicles (or get a ride with a taxi or a friend), or travel on private carriers (if they develop). For those unable to drive, the potential for bus/van service to develop between Katzehin and Juneau with Alternative 2B was evaluated, and DOT&PF finds it likely that Alternative 2B would result in such service as the market develops.
- J) DOT&PF will not provide a shuttle bus. FHWA and DOT&PF acknowledge that the highway alternatives would change an AMHS system that currently operates much like a public transportation system; however, as is explained in Section 1.4.1.1 of the Draft SEIS, the State's primary responsibility is to provide a transportation facility for vehicles, not the transportation itself. In summary, regarding the impact of Alternative 2B on walk-on travelers, ultimately if the number of unaccommodated walk-ons were a significant portion of the traveling public, the private sector would respond with commercial service. If the number of unaccommodated walk-ons were relatively small, commercial service may be less convenient and more costly. It is DOTPF's responsibility to provide infrastructure that serves the largest number of travelers in the most efficient way possible, not fully serve the needs of every member of every segment of the traveling public. The user costs for Alternative 2B includes base mileage costs for the roadway component of that alternative.
- K) Per the comment, additional information has been added to the SEIS in Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS and in Appendix EE, *Socioeconomic Effects Technical Report*, discussing impacts to travelers who currently use the ferry as walk-on passengers to get to the Juneau Airport.
- L) A family of four in a 19-foot vehicle was used as an example in the Draft SEIS to illustrate the relative out-of-pocket costs of alternatives. It was not the basis of calculating all user costs, nor was it the basis for the impact analysis. In Chapter 4, under the State and

User Costs section of each alternative discussion, the Final SEIS has been updated to show costs for other travelers, including walk-on passengers.

M) Walk-on passengers are included in the forecast of traffic in Appendix AA, *Traffic Forecast Report*, and the impacts to walk-ons are described in Appendix EE, *Socioeconomic Effects Technical Report*. The estimate of walk-on traffic suggested by commenters (45 percent) is from a study that is 16 years old. A comparison of the 2000 and 2015 AMHS *Annual Traffic Volume Reports* indicates vehicle traffic declined 14 percent between those years and pedestrian traffic declined 26 percent. These changing traffic levels result in a 2015 Lynn Canal walk-on rate of approximately 30 percent for the calendar year and approximately 34 percent for the summer.

If the same raw number of passengers that walked on in 2015 were to walk on under Alternative 2B, the resulting walk-on rate would be only 7 percent. It is anticipated under Alternative 2B that a number of current walk-on passengers will travel with their vehicle, reducing the percentage of walk-on passengers further.

Group 238

Topic/Subtopic: Transportation/Flexibility and Opportunity for Travel

Group Comment Text:

- A) The proposed alternative would be more weather dependent and less reliable than existing AMHS service. No one can be certain how often the road will be closed.
- B) The Draft SEIS failed to acknowledge potential road closures other than those caused by avalanches.
- C) The Draft SEIS was misleading when it stated "Flying...is often the most practical way of getting around the region" because it failed to mention that flying is often not possible, even in summer.
- D) Alternative 2B would not make travel more convenient, especially in winter.
- E) If the Katzehin ferry sails on a space available basis, it may result in lineups and long delays. Can ferry service be adjusted to meet peak demand and avoid long delays? How can the system respond to changes in demand?
- F) DOT&PF should reconsider the lack of reservation system because users are now at risk of missing flights, events, etc. as there is no guarantee they can board a specific sailing.
- G) How will travelers know when to properly queue into the staging lanes prior to boarding?
- H) Drivers will not be able to predict accurate arrival times to make a schedule deadline. This will result in hastened travel to reach the new terminal on time and will cause dangerous driving conditions, especially during inclement weather.

- I) Because of Juneau's remote location, improved roadway access may not alter travel logistics or induce more frequent travel.
- J) Alternative 2B unnecessarily complicates travel for thru-travelers (off loading at Auke Bay and then traveling to Katzehin).
- K) The 12-day avalanche closure is untested/unknown.
- L) There is no explanation in the Draft SEIS for moving from 35 closure days to 12 closure days.
- M) Winter driving would reduce travel opportunities because people would likely choose to stay home.

Group Comment Response:

- A) DOT&PF and FHWA have disclosed the anticipated road closure effects due to weather and avalanches. Section 4.3.7.2, "Travel Flexibility and Opportunity," of the SEIS describes the effects for Alternative 2B. The Draft SEIS reported that Alternative 2B could be closed an average of approximately 12 days per year. Service to and from Juneau during a road closure would be by one or more of the Day Boat ACFs that would be part of Alternative 2B.
- B) The Draft SEIS does acknowledge and evaluate the potential for the road to be closed for other reasons. Landslides and other geological hazards for the roadway alternatives are discussed in Sections 4.3.8.3 and 4.4.8.1 of the SEIS. The likelihood of a slide event has been assessed and would be mitigated to the extent possible during highway design. Geotechnical studies during detailed design would identify appropriate locations for further alignment adjustments, rockfall barriers, and slope stabilization. These measures, along with the normal maintenance action of removing slide material from catchment ditches and shoulders, would make road closure due to slides an infrequent event. DOT&PF is staffed and equipped to repair damage from slides and to maintain the highway in operable condition.
- C) The Draft SEIS does not indicate that flying is the "most practical way of getting around the region." In fact, the Draft SEIS identified the very issues with air travel mentioned by the commenter. Section 1.2.4 stated: "Because of the relatively short travel times and schedule frequency, business travelers generally prefer air travel to the ferry system. Air service in the Lynn Canal corridor plays an important role in transporting passengers, freight, and mail; however, travel is often constrained by fog, high winds, or snowstorms and can be delayed up to several days in the fall, winter, and spring."
- D) The SEIS purpose and need does not specifically use the term "convenient." However, an aspect of the purpose and need is to improve the flexibility and opportunity for travel. Under Alternative 2B, travelers would be able to make 8 round trips per day to Haines and 6 round trips per day to Skagway. In winter, 6 round trips per day are planned to Haines and 4 to Skagway. This flexibility to travel is compared to Alternative 1 No Action, which has 1 round trip per day, 6 days per week (plus two mainline trips) to Haines, and in winter, three trips per week are anticipated to Haines (the second day boat travels between

Haines and Skagway). Essentially, travelers would be able to get to Haines the same number of times each day as they can get to Haines each week under Alternative 1 - No Action.

- E) The Draft SEIS indicated that for the shuttle ferries at Katzehin, "some ferries may be at maximum capacity, resulting in travelers having to wait for the next ferry or change their preferred ferry time." This is anticipated to occur during peak times (e.g. Friday afternoon on a 3-day weekend in the summer). The Draft SEIS indicated that during peak times and for specific events, additional sailings would be provided to meet the demand. In such cases, AMHS would add ferry trips by operating on longer daily schedules.
- F) A reservation system is not proposed for Alternative 2B because it would increase cost and travel time. To accommodate reservations, Alternative 2B would require an AMHS staff person to be at Katzehin to check in travelers. It would also increase travel time because the ferry would have to load all reservations to determine how many standby travelers it could accommodate. This would have to be done late in the boarding process to accommodate late arrivals. The number of late arrivals is expected to increase because of the frequency of service. If a traveler misses their planned ferry connection, they would only have to wait a few hours for another sailing. Similarly operated systems throughout North America (e.g., in Washington State and British Columbia) and elsewhere typically do not use reservations on short ferry links like those in Alternative 2B and 3.
- G) Because of the frequent, drive through loading and unloading nature of the ferry trip under Alternatives 2B and 3, travelers would not need reservations and would not need to arrive as early. It is anticipated that the ferries would operate on a first-come, first-serve basis, and travelers would queue as they arrive. Signage and instructions on queuing at the terminal would explain the procedures.
- H) DOT&PF anticipates that ferries would be full only during peak times in summer. This may require those that miss the ferry to wait for the next shuttle. Drivers would need to plan their trips with sufficient time in their schedules.
- I) The demand model used for this project was developed based on empirical data derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. The model was based on the assumption that people in Juneau, Haines, and Skagway would exhibit similar travel behavior, given the opportunity to travel by road, as other similarly situated communities. Based on the project team's research, there are no indicators that travel behavior in Juneau, Skagway, and Haines would differ substantially from that of other Alaskan and Canadian communities. Based on the data collected, DOT&PF and FHWA are confident that Juneau residents would travel in a similar manner to other Alaskan residents. Even today, Juneau residents travel only slightly less on a per household basis than the average Alaskan household, even though they do not have full road access.

Moreover, more than one approach to predicting future travel behavior was used by the study team. Two methods were selected as being most representative of likely conditions along Lynn Canal. Each of these two different models was developed independently and resulted in similar estimates of travel volume along Lynn Canal.

- J) Chapter 2 of the Draft SEIS described Alternatives 2B and 3 as discontinuing mainline service in Lynn Canal and disclosed the effects caused by those travelers as a component of the overall traffic demand. Additional explanation has been added to Sections 4.3.7 and 4.4.7 of the Final SEIS to more clearly define the change in travel patterns that would be experienced by thru-travelers using mainline vessels in Alternatives 2B and 3.
- K) DOT&PF has examined the maintenance issues and risk associated with avalanches using the best information available and appropriate analysis techniques, and has included avalanche risk mitigation in its design (avalanche sheds) and in its operating plan for Alternatives 2B and 3. DOT&PF and FHWA have disclosed the impacts of potential road closures and would mitigate those effects to the extent necessary so that travel delay would be minimized. DOT&PF and FHWA believe the SEIS discloses the most likely scenario—that the highway may be closed limited days each winter, and that if such closures were expected to be lengthy, one or more ferries would be available for transportation in Lynn Canal (at levels similar to Alternative 1 No Action). Thus, even during road closures, travel flexibility and travel time would be no worse than currently, and at all other times would be a substantial improvement.
- L) The estimated days of road closure was reduced for the Draft SEIS because the threat of road closures from some of the largest and or most frequent occurring avalanches has been mitigated by including snow sheds and other features in the design.
- M) Adverse weather conditions makes any highway driving challenging. The project road alternatives would be similar during adverse weather conditions to many other highways in Southeast Alaska. Alternative 2B includes a new maintenance station facility that would be staffed full time, which would improve maintenance response times to address adverse weather conditions. DOT&PF and FHWA have disclosed the impacts of potential road closures and have mitigated those effects to the extent that travel delay should be minimized. DOT&PF has committed to running ferries in Lynn Canal if the road were to be closed for extended periods.

Topic/Subtopic: Transportation/Flexibility and Opportunity for Travel

Group Comment Text:

The Draft SEIS did not discuss the link between Bellingham and Haines or Skagway. Will the existing ferry terminal still be used for ferries traveling south of Juneau?

Group Comment Response:

This project is focused on travel in Lynn Canal from Juneau northward. Mainline service south to Bellingham would be unaffected. The Draft and Final SEIS describe the alternatives in Chapter 2 and indicate that mainline ferry service would continue but would end at the Auke Bay Ferry Terminal and would no longer operate in Lynn Canal for Alternatives 2B and 3. Mainline ferry service would continue in Lynn Canal under Alternatives 1–No Action, 1B, and 4A through 4D.

Topic/Subtopic: Transportation/General

Group Comment Text:

A) Why was the fast ferry taken off the northern Lynn Canal route?

B) How can DOT&PF be sure the Day Boat ACFs will succeed where the fast ferries failed?

Group Comment Response:

- A) The engines of the FVFs (*Fairweather* and *Chenega*) were not designed to run at the speeds needed to make the two runs between Juneau and Haines/Skagway in a 12-hour window, seven days a week, as needed for day boat service in Lynn Canal. Having an FVF make only one round trip per day (which it could easily do) was considered unreasonable since there are other vessels that can also make one trip per day and there are other routes that need the speed of the FVF. Extending the operating day beyond 12 hours is not possible without crew quarters. Also, the FVFs were not designed for Lynn Canal and did not provide sufficient capacity.
- B) The Day Boat ACFs are being designed to better meet AMHS needs in Southeast Alaska and can be used on several different AMHS routes. Following the AMHS's decision to construct the ACFs, each ferry segment was evaluated to determine if the Day Boat ACF could successfully function as a part of any of the alternatives developed for this project. Following this evaluation, the Day Boat ACFs were incorporated as components of alternatives where they would function appropriately. Also, the FVFs incorporated new technology resulting in ongoing maintenance challenges. The Day Boat ACFs are conventional ferries that rely on proven existing technology.

Group 525

Topic/Subtopic: Transportation/General

Group Comment Text:

How much more ship traffic can the Lynn Canal sustain? With water taxis, tiny tour ships, large cruise ships, barges, and ore ships, is there room for many more ship sailings on the canal?

Group Comment Response:

The travel frequency of ferries proposed to be operating in Lynn Canal is reported in Chapter 2 for each of the alternatives (under the subheading "Travel Frequency"). Lynn Canal is a large body of water and can sustain more vessel traffic than it receives today from a capacity standpoint. The impacts of the proposed ferry service under each of the alternatives are discussed throughout the Draft and Final SEIS. No alternative proposed ferry service frequency that would jeopardize or limit current uses in Lynn Canal.

Topic/Subtopic: Transportation/General

Group Comment Text:

Was there a plan to tie Southeast Alaska together with roads and use short route ferries where bridges could not be built?

Group Comment Response:

The 2004 SATP was adopted by the Murkowski Administration and remains the current adopted SATP as DOT&PF continues to work on an update. The 2004 SATP does focus on extending roads where practicable, allowing for shorter ferry routes.

Group 279

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

- A) The methodology for assigning fares is never explained in the Draft SEIS.
- B) The supporting marine highway fare document referenced in the *Traffic Forecast Report* (Appendix AA) is not included in the Draft SEIS.
- C) The Draft SEIS should have used the AMHS fare equalization study when developing the fares.
- D) DOT&PF should consider reducing fares as it may increase ridership.

Group Comment Response:

- A) The methodology for assigning fares is described in Appendix C of the *Traffic Forecast Report* (Appendix AA of the Final SEIS).
- B) The Draft SEIS *Traffic Forecast Report* (Appendix AA) cited an "HDR Ferry Fares Memo" as an attachment. The cover page indicating this memo was to be an attachment was in error. The memo in question was not intended to be published as it was an internal HDR record of a telephone meeting between the DOT&PF project manager and HDR staff. The intention of the memo, written by an HDR staff member, was to provide internal communication to other project team members on the direction provided.

The original basis for all project fares was a referenced document available in the 2006 FEIS. The methodology was not changed for the 2014 Draft SEIS. A Marine Segment Fare Structures memo documenting the ferry fares has been developed and included in Appendix C of the *Traffic Forecast Report* (Appendix AA of the Final SEIS).

C) The AMHS Tariff Analysis was not finalized at the time of the public release of the Draft SEIS. The tariff analysis has been reviewed and considered in setting ferry fares in preparation of the Final SEIS. The tariff analysis may be viewed at www.dot.state.ak.us/amhs/doc/reports/rate study 15.pdf.

D) DOT&PF has considered reducing fares to increase ridership in the past but has concluded that increased ridership would not offset revenue lost. The 2015 AMHS Tariff Analysis determined AMHS fares were low compared to other ferry systems. Failure to raise fares to reflect inflation resulted in the need for increased State funding as the revenue to cost ratio decreased. Due to this result and the insistence of the Legislature that users bear a greater share of the costs, DOT&PF has raised fares. The Final SEIS reflects fare increases with the exception of Alternative 1B, which includes a 20 percent fare decrease to illustrate the likely effects of this approach.

Group 296

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

A) The 2014 McDowell *North Lynn Canal Ferry Service Analysis* indicated that the permile Lynn Canal costs for the *FVF Fairweather* fast vehicle ferry were lower than any other Lynn Canal vessel, but the Draft SEIS indicated that the fast vehicle ferry is the most expensive. Furthermore, the cost differential should be more carefully scrutinized; it seems unlikely that the *M/V Malaspina* wage per hour cost would be less than half that of the *M/V Matanuska*.

- B) Different methods were used to estimate costs for mainline segments in the Draft SEIS; therefore, alternatives cannot be compared.
- C) In Appendix GG, *Marine Segments Technical Report* (page 1 of Attachment A "AMHS Mainline Operating Costs"), the results for the Comparison of Vessel Operating Days Chart appear to be incorrect. The chart lists a total of 40.9 Mainline Days for the number of days the mainliners operate in North Lynn Canal. The number should be 55.5 days.

Group Comment Response:

A) The 2014 McDowell study indicating a low cost per mile for the *FVF Fairweather* is in error due to faulty data. The data is from year 2012 supplied by AMHS. Specifically, the *FVF Fairweather* is credited with 2,728 nautical miles in 5.8 days, resulting in approximately 470 miles per day. This inflated mileage for 6 days of expenses results in an artificially low cost/mile. The Final SEIS incorporates data supplied by AMHS for 2013. The *FVF Fairweather* is credited for 2,838 miles in 22.8 days for a daily average of 140 miles in Lynn Canal.

The commenter compared the M/V Matanuska's hourly operating rate (wages and the operating expenses) against the M/V Malaspina's hourly operating wage rate only.

B) Cost calculations for mainliner and day boat operations require separate methods because they are two different types of systems. The day boats are dedicated to project alternatives and can be thought of as stand-alone systems. The mainline vessels (part time operating in Lynn Canal) are tied to a much larger system and operate on schedules not necessarily optimized for Lynn Canal traffic. For calculating the dedicated day boat operating costs, cost estimate models were created that estimated annual vessel costs components, including crew cost, fuel cost, maintenance cost, vessel lay-up, and administrative overhead costs (see Chapter 5 of Appendix GG, *Marine Segments Technical*

Report). For the mainliner cost analysis, the cost component categories are non-fuel operating expenditures, fuel expenditures, shoreside costs and overhaul costs (see Chapter 6 of Appendix GG, *Marine Segment Technical Report*).

C) After the Draft SEIS was issued, it was discovered that the AMHS supplied data did not include a full 12 months of data. New mainline operating costs calculations using data from a complete fiscal year have been included in the updated Appendix GG, *Marine Segments Technical Report*.

Group 313

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

- A) The Draft SEIS did not include an objective cost-benefit analysis. The assumptions and methods of the analysis are not valid.
- B) The use of a "typical family of four" as the unit of analysis in the Draft SEIS does not reflect the majority of travelers.
- C) Ferry travel time is only considered a cost when it should be considered a benefit. The Draft SEIS did not differentiate between the quality of time spent on a ferry versus time spent driving.
- D) The User Cost discussion in Chapter 1 and Appendix FF (*User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*) of the Draft SEIS are at variance with each other.
- E) The benefit-to-cost for Alternative 2B would be much lower if the analysis included a more realistic cost contingency calculation, AMHS capital and operating costs affected by taking Lynn Canal service out of the system, external costs, and the cost to ADF&G for fish and game management.
- F) The analyses of user benefit, demand, and subsidy identification were skewed and favorable fares were selectively applied in the Draft SEIS to justify the selection of Alternative 2B.
- G) The Draft SEIS overstated user costs.
- H) A cost-benefit analysis or return on investment evaluation should be done in the SEIS. It needs to take into account whether indirect benefits (e.g., taxes from mining) outweigh indirect costs (e.g., increased costs of emergency services).
- I) The cost-benefit analysis needs to take into account quality of life experiences for visitors and residents.
- J) How does DOT&PF justify their selection of Alternative 2B as the preferred alternative in the Draft SEIS based on the results of the cost-benefit analysis?
- K) Why was cost-effectiveness not used as an evaluation criteria in the Draft SEIS?

L) Contrary to law, it appears that FHWA gave no weight to cost benefit in its decision.

Group Comment Response:

A) The economic analyses in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, were completed by professionals using AASHTO methods as a starting point, but the analysis notes clearly that there were limitations because of the types of alternatives in this project. The analysis states how the methods were modified and why. DOT&PF and FHWA believe that such analyses represent the most valid approach to analyzing the economics of the alternatives given the challenges described. The assumptions and methods used in the analysis were reasonable and valid and were not biased toward the road alternatives.

DOT&PF and FHWA did not identify the Draft SEIS preferred alternative based solely on the economic analyses, nor are they required to. The analysis acknowledges that none of the action alternatives shows that economic benefits outweigh costs, and the alternative identified in the Draft SEIS as preferred is not better on this measure than other alternatives.

B) The cost scenario for a family of four was meant as an example of the travel costs; it was not meant to suggest that was the majority of the users. The word "typical" has been removed in Chapter 1. To help clarify, additional information about the anticipated fares for the various travel markets (e.g., walk-ons, single drivers with a vehicle, etc.) has been added to the Final SEIS. This appears under the "State and User Costs" subsections under Transportation for each alternative in Chapter 4.

Of note, user costs were calculated for all users, not just a family of four. Regarding the cost/value of travel time, assigning dollar costs to travel time is a reflection of the fact that all time has value. And all time has a cost in terms of trade-offs with other ways that time could be spent. If ferry travel were purely a benefit, then slower trips would have greater value than faster trips. Clearly, many Lynn Canal ferry travelers enjoy aspects of the ferry ride, but it is also true that most travelers prefer shorter travel times (fast ferry) to longer travel times (conventional ferry), all other things being equal. It is also true that some travelers would prefer driving their own vehicles to riding a ferry over the same route.

C) People value travel times differently based on various factors: work versus pleasure, weather conditions, etc. As used in the travel model coefficients, ferry travel time was not penalized the same as automobile travel time. The model gave 20 percent less weight to the ferry travel time compared to automobile travel time. In other words, the model coefficient was adjusted to account for the benefits of riding the ferry described by the comments. This relationship was derived from other regions that have ferry service and driving options and was used to validate the travel model results to existing ferry demands within the corridor. While tourists and some recreationalists may ride the ferry strictly for the pleasure of the ride, it is unlikely that people pay to ride the ferry in order to have a social experience or to do office work on their computer. They may enjoy the social aspects of the ferry or may get work done, but these are side benefits of ferry travel when the direct benefit is transportation between locations. Nonetheless, the 20 percent adjustment was made to account for differences in the perceived costs of time spent on ferries versus automobiles.

- D) There is not a contradiction between the User Cost discussion in Chapter 1 and the analysis in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*. Chapter 1 is designed to set the stage for discussion of adverse and beneficial impacts of the various alternatives in later chapters and is not derived from or connected to the detailed economic analyses in Appendix FF. The out-of-pocket family of four expenses shown in Chapter 1 is meant to illustrate the relative costs of ferry service and costs to drive one's own car and does not distinguish between alternatives. Table 33, Evaluation Summary, in Appendix FF, compiles data for all of the alternatives and is a much more detailed calculation than the material in Chapter 1. Examining all of Appendix FF, it is possible to see that each of the alternatives ranks higher or lower than others on different measures. None of the action alternatives is consistently "good" or consistently "bad." DOT&PF and FHWA took this into account when identifying a preferred alternative in the Draft SEIS.
- E) Cost-benefit analyses could include a very wide array of inputs. Many of them are very difficult to monetize and would potentially make the cost-benefit analysis more controversial and more difficult to understand rather than less. The project used a reasonable approach consistent with accepted economic practices. DOT&PF and FHWA believe the cost-benefit analysis is a reasonable approach for comparing the economics of the alternatives, but it is just one consideration among an array of others addressed qualitatively and quantitatively in the SEIS. Benefit cost ratios described in the Draft SEIS are not intended to represent a full measure of all benefits and costs associated with project alternatives. In fact, benefit cost ratios described in Appendix FF, *Use Benefit, Life-cycle Cost, and Total Project Life Cost Analysis*, of the Draft SEIS are narrowly based on user (traveler) benefits alone and do not consider a wide range of other potential household, commercial, industrial, and community benefits associated with improved Lynn Canal access. The purpose of the economic efficiency and cost-effectiveness analysis conducted as part of the Draft SEIS was to determine which alternatives serve the largest number of travelers and the lowest possible cost.
- F) DOT&PF and FHWA employed professionals and had them conduct economic analyses using accepted practices and reasonable assumptions. No favorable fares or other "skewed" inputs were used to favor Alternative 2B. Note, Appendix C of Appendix AA, *Traffic Forecast Report*, which describes the fare methodology. All "action" alternatives are shown to have a negative net present value, as shown in tables in the Transportation sections of Chapter 4, with greater detail in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*. In fact, Alternative 2B does not rank best on most of the economic metrics reported in Appendix FF; if the economic analysis were skewed, one would expect a better outcome to have been reported for Alternative 2B. Please refer to the documentation added to Appendix AA.
- G) Commenters indicate that the Draft SEIS overstated user costs for the ferry alternatives and understated user costs for the road alternatives, especially because of use of a hypothetical family of four. The Draft SEIS and Appendices AA and FF (*Traffic Forecast Report* and *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*) assessed costs for all users and were not dependent on a "hypothetical family of four." The family of four was only used as an example to illustrate user costs. Additions to the Final SEIS

present a broader range of example cost scenarios. See State and User Costs subsections in Sections 4.2B.7.4, 4.3.7.4, 4.4.7.4, 4.5.7.4, and 4.6.7.4.

- (H) A cost-benefit analysis was completed for the Draft SEIS. However, it did not attempt to monetize every possible input. The SEIS addresses many topics qualitatively because they are difficult and controversial to monetize. DOT&PF and FHWA have disclosed the environmental consequences of the proposed alternatives in the Draft and Final SEIS, including the indirect effects described in the comments. A cost-benefit analysis that attempts to compute a dollar figure for the types of indirect effects identified in the comments would be highly speculative and not a wise use of public funds. Consistent with NEPA regulations, the indirect impacts have been disclosed quantitatively where possible, and qualitatively elsewhere.
- (I) Quality of life is a broad concept without a standard and accepted definition and is difficult to monetize in a cost-benefit analysis (see also Response I, above). In general, the entire SEIS is meant to address topics relevant to quality of life. Regarding time spent on the ferry versus time spent in an automobile, see Response C, above. Minimizing time spent and costs incurred for travel are also elements that figure into quality of life for many.
- (J) DOT&PF and FHWA considered the entirety of the Draft SEIS to identify their preferred alternative in the Draft SEIS. The decision was not made solely on the basis of the benefit-cost analysis.
- (K) The cost-benefit analysis (see Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*) is one part of the entire SEIS, and it was considered in identifying the preferred alternative. The primary considerations are the elements of the purpose and need statement discussed in Chapter 1. The preferred alternative identified in the Draft SEIS balanced these benefits, taking into consideration the impacts described throughout the document and appendices. These are among the measures DOT&PF was looking for in this project, as identified in Chapter 1, Purpose and Need.
- (L) NEPA and its regulations do not require a benefit-cost analysis to be completed but indicate that if such an analysis is completed, it must be attached to the EIS, and the EIS must treat it in context with other, non-quantified discussion. The Draft SEIS did attach the analysis in Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*, and included discussion in the "State and User Costs" subsections under Transportation for each alternative in Chapter 4. The material from Chapter 4 was summarized in the Executive Summary and Table ES-1. For greater clarity, the Final SEIS has been revised to include reference to Appendix FF (e.g. in footnotes to tables) in the "State and User Costs" subsections. The Final SEIS also has been revised to discuss in Section 4.1 ("Methods for Analyzing Impacts") the relationship between the cost-benefit analysis and the Final SEIS analyses of other unquantified environmental impacts, values, and amenities.

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

A) What price of gasoline was used to calculate the trip costs in the Draft SEIS?

B) Did DOT&PF consider increases in gas prices since 2009 in the Draft SEIS analysis (i.e., higher gas prices might affect traffic volumes)?

Group Comment Response:

A) Appendix AA, *Traffic Forecast Report*, was prepared in 2014 and used American Automobile Association (AAA) nationwide data from 2012 inflated to reflect Alaska gasoline prices. Vehicle operating costs were also tailored for local conditions. The final vehicle operating cost used was 26 cents per mile. The Final SEIS was updated using AAA 2015 data resulting in an operating cost of 25.7 cents per mile.

B) Economic modeling is sensitive to changeable costs such as gasoline costs and makes a reasonable assumption based on available data and trends. Even though gas prices have dropped as of late, the forecasting takes into consideration trends over the long term. Section 2.3 of Appendix AA, *Traffic Forecast Report*, notes limitations on predicting traffic for multiple alternatives over a 30-year timeline. The process uses traffic projection as a tool—a method that is as consistent as possible across alternatives for comparing alternatives at the time the decision needs to be made. Note that fuel prices affect not only the cost of travel by automobile but by ferry. If fuel costs increase or decrease substantially, it would affect the price of ferry passage as well, which in turn would affect demand for travel. However, the relative differences among alternatives are anticipated to remain generally consistent.

Group 614

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

The meteorological analysis' use of wind data from Eldred Rock in the Draft SEIS is wrong due to an equipment malfunction. The data from 2007 and 2008 should not have been included in the analysis as the data is likely to be inaccurate.

Group Comment Response:

Based on the comment, the project team contacted the National Weather Service (NWS). NWS does not have any records of the Eldred Rock Weather Station malfunctioning in the 2007-2008 time frame. The NWS indicated that invalid data is typically removed from the published data sets prior to it being published. In addition, wind data from Eldred Rock was not the only dataset used in the analysis. Published wind data from Skagway Airport, Eldred Rock, Point Retreat, and Cape Decision were all used as the basis to consider extreme value wind speed extrapolations to gauge sailing conditions. Because multiple data sets for multiple years have been used, DOT&PF and FHWA are confident that the resulting analysis acceptably describes the conditions for the purpose it was presented. Additional information would be collected as part of the final design process for the ferry terminals should the project's final design go with that solution. Project engineers would

consider new data from nearby wind stations in context of local topographic effects, and may set up project specific instrumentation to collect design-level data, if warranted.

Group 619

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

Why was "average daily ridership" used? It does not reflect which days there were ferries on a given route.

Group Comment Response:

"Average daily traffic" is a standard unit of measurement in traffic studies and helps to make commensurate comparisons between intermittent service options (ferries) and continuous service options (roads). Appendix AA, *Traffic Forecast Report*, addresses existing Lynn Canal traffic in Section 3, and "link volume" appears in Table 3-3 for the Juneau-Haines, Juneau-Skagway, and Skagway-Haines links. Volume of passengers and vehicles is given as an annual traffic total and as average daily passenger and average daily vehicles. Data also are shown in total for summer and summer peak week, and these too are broken down into average daily values. See also Table ES-1 in the Executive Summary of Appendix AA.

Group 620

Topic/Subtopic: Transportation/Method of Analysis

Group Comment Text:

Instead of using a model to predict how demand changes as a result of lowering fares, why were actual fares not lowered to test demand?

Group Comment Response:

Modifying fares only to generate data for an EIS is not justifiable or responsible stewardship of the AMHS. Over the years, AMHS has modified fares with incentives like a 30 percent discount for round trip purchases and driver goes free promotions. Increase in ridership was generally consistent with demand models. However, the percent increase in ridership was not enough to offset the fare discount, resulting in less revenue and, therefore, increased net cost. Recently the legislature mandated that fares be increased, as fares have not kept up with inflation and the State support required to keep the system operational has increased, even as ridership has grown.

Group 66

Topic/Subtopic: Transportation/Safety

Group Comment Text:

- A) Why does DOT&PF want to pursue an alternative that is less safe and reliable than the existing AMHS?
- B) The analysis in the SEIS should include greater detail on safety and the hazards and risks associated with traveling the proposed roadway.

- C) Projections for fatalities and injuries on the proposed road are understated. The calculated death total is incorrect. Please provide the corrected information and revise to include fatalities and injuries associated with avalanches and other conditions.
- D) The cost of fatalities needs to be considered in the cost-benefit analysis. What value does DOT&PF put on an individual life?
- E) The analysis did not account for major and minor accidents and property damage.

Group Comment Response:

A) The purpose and need for the project was presented in Chapter 1 of the Draft SEIS and indicated why DOT&PF is pursuing this project. DOT&PF and FHWA have evaluated a range of alternatives to meet transportation needs that are designed to provide for safe and reliable transportation. The road portions of alternatives are expected to function like other rural Alaska highways and be as safe and reliable as other roads in the State. However, roads and ferries operate differently, and often due to human error, vehicle crashes do occur. The SEIS acknowledges that AMHS operations have historically resulted in fewer fatalities than Alaska roads.

Regarding reliability, the Draft SEIS acknowledges that adverse driving conditions would occur on the East Lynn Canal Highway in winter, but anticipates that State maintenance crews would keep the highway open under all but the most severe conditions. Such severe weather conditions may call for road closures. DOT&PF and FHWA have disclosed the impacts of potential road closures and have mitigated those effects to the extent that travel delays and closures would be minimized. In the event of road closures, ferries would be available for transportation in Lynn Canal at levels similar to Alternative 1 – No Action. Therefore, even during road closures, the reliability for travel under the proposed road alternatives would be at least as good as Alternative 1 – No Action.

B) The Draft and Final SEIS disclose the expected safety implications of driving, including fatalities and crashes. It also presents discussion of risks from avalanche, terrain, winter weather, and rockfall. The Final SEIS provides updates and corrections where necessary and discloses impacts that decision makers need to be aware of when ultimately selecting an alternative for funding and construction. Comments about safety have made clear that this is an issue the public is concerned about and that decision makers should consider carefully. Some commenters suggested that an information system and signs should be part of Alternative 2B to indicate ferry cancellations or winter driving conditions. DOT&PF already has a 511 road conditions system that the road alternatives would use. Other commenters suggested that the Seward Highway south of Anchorage and the East Lynn Canal Highway would be quite similar and that the East Lynn Canal Highway should have the safety features of the Seward Highway built in. DOT&PF identifies formal safety corridors based on use statistics. The Seward Highway had years of use with growing traffic before additional safety enhancements were installed. The East Lynn Canal Highway is projected to have 10 times less traffic than the Seward Highway; the much lower traffic would make for a statistically safer road. DOT&PF would continually monitor the new road and make safety improvements if warranted. The level of safety upgrades planned for the Seward Highway are not anticipated to be needed for the project given the much lower traffic forecasted.

C) Information on traffic related accidents and fatalities has been updated for the road alternatives in the Final SEIS. Sections 4.3.7.5 and 4.4.7.5 discuss traffic safety associated with Alternatives 2B and 3. The Draft SEIS contained a calculation error computing the number of fatalities that has been corrected for the Final SEIS. In 2025, Alternative 2B is anticipated to have approximately 39 crashes per year in the full 76 miles between Auke Bay and the Katzehin Ferry Terminal. During the 30-year operating period (2025–2055), it is estimated that Alternative 2B would result in approximately 1,156 crashes and 14 traffic fatalities in this area. Similar updates have been made for Alternative 3.

Trained, experienced avalanche technicians would monitor the project route on a daily basis. The technicians would use observations, weather station data, weather forecasts, and snow telemetry data to determine the hazard. The technicians would identify times when avalanche hazard is high and recommend avalanche control operations or preventative road closures when the hazard is high. Careful monitoring of avalanche conditions and preventative closures of the highway should prevent people from being in danger. Identified high risk avalanche locations have been effectively mitigated with the use of bridges, snow sheds, and elevated fills. All avalanche sites have been individually evaluated, and appropriate mitigation is proposed for each. Avalanche mitigation measures are described in the *Update to Appendix J – Snow Avalanche Report*.

- D) There is no generally accepted "value" of an individual life in transportation economics or public policy economic analysis, in general. However, the cost of fatalities is considered in the Draft SEIS use benefit analysis. The cost of fatal accidents is one component of the 14.8 cents per vehicle-mile used to model traveler accident costs (see page 47 of Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses* in the Draft SEIS. This figure is a national average for all vehicle and accident types, including fatal accidents, injury (non-fatal) accidents, and property damage-only accidents. Incorporated into this cost per vehicle-mile average, the cost of a fatal accident is \$5.2 million, as measured in 2013 dollars.
- E) The analysis does account for all accident types. As noted on page 47 of Appendix FF, *User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses* in the Draft SEIS, accident costs are calculated at 14.8 cents per vehicle-mile traveled. This figure is a national average for all vehicle and accident types, including fatal accidents, injury (nonfatal) accidents, and property damage-only accidents. (Sources: USDOT, National Highway Traffic Safety Administration, *Traffic Safety Facts 2008* and USDOT, FHWA, *Highway Statistics 2000*. Data are provided in AASHTO's 2010 *User and Non-User Benefit Analysis for Highways*. Costs figures were adjusted for inflation to 2013 dollars.)

Topic/Subtopic: Transportation/Safety

Group Comment Text:

- A) How will people be able to contact help along the road? Will there be cell phone coverage along the route?
- B) The proposed road should include safety enhancements, including: (1) cellular phone service along the route, (2) additional avalanche barriers and tunnels, and (3) DOT&PF web cameras to report road conditions.
- C) Is the design appropriate for the type of vehicles that will use the road (e.g., oversized vehicles)?
- D) When there is an accident in the tunnels, will there be enough room for movement and repairs?

Group Comment Response:

- A) The published GCI cellular phone coverage map indicates there is talk and text coverage for approximately 80 percent of the Alternative 2B route. In addition, as a component of Alternative 2B, DOT&PF is proposing to construct a new maintenance station at Comet (MP 66) that will be staffed full time. Emergency services will be able to be contacted from the station.
- B) (1) Cell phone service is not be provided by the State. The private sector could elect to provide additional service based on demand.
- (2) Avalanche mitigation measures are described in the Update to Appendix J-Snow Avalanche Report. All avalanche sites have been individually evaluated and appropriate mitigation proposed for each. Identified high risk avalanche locations will be effectively mitigated with the use of bridges, snow sheds, and elevated fills. The high cost of additional snow sheds or avalanche barriers are not cost effective for the remaining avalanche sites.
- (3) Two weather stations are included with road Alternatives 2B and 3, and their construction would be included in the highway construction contract. The weather stations include web cameras. The details on locations have not been identified; however, the costs for these stations have been included in the cost estimates for Alternatives 2B and 3, as shown in Attachment E to the *Update to Appendix D Technical Alignment Report*.
- C) The design proposed is appropriate for the type of vehicles that would use the road and could accommodate vehicles that exceed legal size or load limits. All elements of the roadway have been designed to support legal size and load limits. Vehicles that exceed legal limits require a permit issued by DOT&PF. The limiting road component for excessive weight is bridges. All bridges in Alaska are designed in accordance with the national bridge design code, the AASHTO *Bridge Design Specifications*. The current bridge design load is approximately 125 percent greater than the State's legal highway load as defined in the Alaska Administrative Code (17 ACC 25.013, Legal Vehicle Weight). As

such, DOT&PF is able to permit, on a case by case basis, loads that exceed State legal limits.

D) If an accident occurred within the tunnels, the road may be closed depending on the extent of the accident. The width and height of the tunnels would be designed in accordance with the AASHTO *Technical Manual for Design and Construction of Road Tunnels*. Based on this reference, the pavement width within the tunnel would be a minimum of 2 feet wider than the pavement width at the highway, for a total pavement width of 34 feet. Pavement width includes travel lanes and shoulders. An additional 1.5-foot buffer would be included from the edges of pavement to the tunnels' edges. This is sufficient room to manage an accident site or perform tunnel repairs.

Group 78

Topic/Subtopic: Transportation/Safety

Group Comment Text:

A) The SEIS should provide additional information about how wind and/or waves have been addressed as there are concerns about the ferry and its ability to operate safely during high winds and winter months.

B) There is no information on the number of days that the ferry would not be able to dock at the Katzehin Ferry Terminal due to weather.

Group Comment Response:

A) Significant research was conducted on the wind and wave climatology in the Lynn Canal, as seen in the referenced "Lynn Canal Wind and Wave Climatology Study for Vessel Operations." This study is based on the results of software that uses historical wind and geographic data to forecast nearshore wave heights.

The wind and wave data was used to analyze vessel operation in the referenced "Seakeeping and Motion Sickness Incidence" study. This study examined the chance of seasickness occurring on different sized vessels operating in Lynn Canal during the worst month of the year using a 95th percentile maximum wave height. (Vessels running between Auke Bay-Sawmill Cove-Katzehin and Haines-Skagway). Study results indicate, for vessels the size of the Day Boat ACFs, vessel motions would result in an acceptable level of seasickness, and at no time would vessel safety be compromised.

A third study, "Seakeeping and Motion Sickness Incidence - Sawmill Cove to William Henry Bay," evaluated vessel operation on the Sawmill Cove to William Henry Bay route during the worst month of the year using the 95th percentile maximum wave height. Results of the study indicate that operation in the most severe weather would result in seasickness concerns and at no time would vessel safety be compromised. Specific to the Katzehin Ferry Terminal, a preliminary ferry terminal layout is presented in Attachment D of the *Update to Appendix D – Technical Alignment Report*. The design contains a breakwater to protect vessels from waves. The final terminal design will use the climatology study as a design basis for aligning and protecting the terminal. The three noted studies can be found on the JAI Project website.

B) For Alternative 2B, missed ferry sailings would likely be the result of wind and wave conditions in the middle of Lynn Canal and not at the ferry terminal sites. From the current data, an assumption of 1 to 6 days per year can be reasonably expected for days vessel cancellations may occur.

The upper magnitude wind speeds (1 minute average) in the middle of Lynn Canal in the Haines/Katzehin vicinity can vary 30 to 68 knots, causing mid-canal wave conditions that could potentially prevent ferry sailings. Based on the Glosten reports, these wind events can be expected to occur 1 to 5 percent of the time, primarily during the months of November through February. Assuming a period of 4 months, or 120 days, for the worst weather conditions, it can be assumed that 1 to 6 days per year may be subject to weather conditions that could prevent a ferry crossing. The projected number of sailings that would be missed depends on the number of sailings per day and if the inclement weather occurs during those sailing times.

Current data for the north and south wind directions suggests relatively low wave height (under 2 feet) near the Katzehin Ferry Terminal regardless of the magnitude of the wind event. The Katzehin Ferry Terminal is somewhat exposed to the westerly direction. There is no current data presented for the westerly direction. However, the fetch distance is short and wave heights should be relatively low.

While winds may be strong, causing difficulty in berthing, the ferry mooring structures at the Katzehin and Haines Ferry Terminals would not likely be significantly affected by wave and wind conditions from any direction. The ferry can safely weather storms at either port assuming the moored vessel is properly safeguarded and monitored during extreme storm events.

Group 79

Topic/Subtopic: Transportation/Safety

Group Comment Text:

- A) Does the proposed road meet AASHTO standards?
- B) The SEIS should analyze the costs/benefits of making the road to Katzehin a divided highway.
- C) DOT&PF should consider wider travel lanes (12 feet), wider shoulders, slow vehicle turnouts, passing lanes, or scenic pull outs.
- D) DOT&PF should change the road design as the proposed design is not adequate for safety or for other users (e.g., cyclists).
- E) Has the design of the road where it will link into the Juneau road system been addressed? For example, the length of the turning lane from Egan Expressway onto the Loop via the north entrance is inadequate.
- F) As currently planned, the road will need additional enhanced safety features in the future similar to what is occurring on the Seward Highway.

Group Comment Response:

- A) Regulations require that the design of highways on the NHS meets AASHTO standards. The highway design for all alternatives meets the AASHTO standards for rural arterials for the traffic volumes projected, with the exception of shoulder width for Alternatives 2B and 3. For Alternatives 2B and 3, AASHTO recommends a minimum shoulder width of 6 feet, and 4 feet was proposed. The proposed travel way and shoulder width matches the recently reconstructed portion of Glacier Highway from Amalga Harbor Road to Bessie Creek. This deviation from the standard will require a design exception. Exceptions to design standards are allowed for an individual project element or a segment of the project where design criteria does not satisfy applicable design standards. Justification for an exception may include: high cost of construction, negative environmental impacts, difficulty or cost of obtaining right-of-way, and sensitivity to context or community values. In this case, justification for an exception to the shoulder width includes a higher cost of construction and more impacts to the environment. A more detailed discussion of the design standards is included in the *Update to Appendix D Technical Alignment Report*.
- B) A cost-benefit analysis for a divided highway will not be performed. The main criterion for considering a separated highway is traffic volume, closely followed by speed. Crash frequency is also a consideration. The projected traffic volume on the JAI Project does not warrant a separated highway, so the SEIS does not evaluate this design. Portions of the Seward Highway and Egan Drive are good examples of when separated highways are warranted.
- C) The additional 4- to 6-foot increase in roadway width (widened travel way and shoulders) suggested by the commenter would unnecessarily increase the construction cost of the project and would result in an increase in environmental impacts. The commenter's proposed 12-foot travel lanes exceed the 11-foot AASHTO recommended standard as proposed for the project. The highway design for all alternatives meets the AASHTO standards for rural arterials for the traffic volumes projected, with the exception of shoulder width for Alternatives 2B and 3. The commenter's suggestion for widened shoulders is consistent with AASHTO recommendation of a minimum shoulder width of 6 feet (Alternatives 2B and 3) as opposed to the 4 feet proposed. However, AASHTO guidelines note that 4 feet is the minimum recommended shoulder width to accommodate bikes and pedestrians. The paved shoulders are wide enough for use by bicyclists given the projected traffic volumes for the project.

Safety amenities such as widened embankments, guardrail, recessed pavement markers, paint, and signage are also incorporated into the design and cost estimate. The widened embankment would extend 8 feet beyond the paved shoulders at a grade of 4:1 to 6:1 in non-guardrail areas. Slopes in this range are considered traversable and would allow errant vehicles to safely recover to the road. The paved shoulders and traversable slope are wide enough for emergency pull-off.

Slow vehicle turnouts were considered, but are not proposed. Turnouts are most frequently used on lower volume roads where passing lanes are rare, steep grades are present, and more than 10 percent of the vehicle volumes are large trucks or recreational vehicles. None of these criteria apply to Alternatives 2B or 3. Passing lanes were considered, but are not

included in the project. However, DOT&PF estimates that passing zones that include broken yellow centerline stripes would exist on approximately 25 percent of the Alternative 2B route. No estimate has been done for Alternative 3, but it is assumed that Alternative 3 would provide more opportunities for passing. Pullouts and scenic overlooks are proposed with Alternatives 2B and 3. The location of these features is discussed in Sections 4.3 and 4.4 of the SEIS.

D) The proposed design is adequate for the safety of all users. 23 CFR 625.3 requires design of highways on the NHS to meet AASHTO standards. The highway design for all alternatives meets AASHTO standards for rural arterials for the traffic volumes projected, with the exception of shoulder width for Alternatives 2B and 3. For Alternatives 2B and 3, AASHTO recommends a minimum shoulder width of 6 feet, and 4 feet is proposed. However, AASHTO guidelines note that 4 feet is the minimum recommended shoulder width to accommodate bikes and pedestrians. The paved shoulders are wide enough for use by bicyclists given the projected traffic volumes for the project. As an example of application, Glacier Highway (Tee Harbor to Besse Creek) has similar shoulder width and has no recorded accidents involving bikes or pedestrians between 2011 and 2015. The future traffic growth projection is anticipated to be static and enhancements are not likely to be needed.

Safety amenities such as widened embankments, guardrail, recessed pavement markers, paint, and signage are also incorporated into the design and cost estimate. The widened embankment for the road would extend 8 feet beyond the paved shoulders at a grade of 4:1 to 6:1 in non-guardrail areas. Slopes in this range are considered traversable and will allow errant vehicles to safely recover to the road. The paved shoulders and traversable slope are wide enough for emergency pull-off.

- E) The existing Juneau road system south of the proposed project road extension would not require any improvements as a result of this project to function as intended.
- F) The highway design for the alternatives meets the AASHTO standards for rural arterials for the traffic volumes projected for the proposed project, with the exception of shoulder width for Alternatives 2B and 3. The highway design does include safety measures such as widened embankments, guardrail, recessed pavement markers, paint, and signage. The Draft SEIS Alternative 2B 2050 traffic projection was 825 average daily traffic (ADT). The roadway design being used on the project are appropriate for a rural arterial highway with less than 2,000 ADT—substantially more traffic volume than forecast. Extensive safety upgrades are not anticipated. Further, to compare Seward Highway, which carries close to 10,000 vehicles per day, to Alternative 2B, which would carry less than 1,000 vehicles per day, is not an equitable comparison.

Topic/Subtopic: Transportation/Safety

Group Comment Text:

A) The road will not be safe during adverse weather conditions.

- B) The Draft SEIS did not adequately address the hazards of icing, high tides encroaching on the road, freezing rain, avalanches, rock slides, icing on bridge decks, and wind conditions.
- C) DOT&PF should use fixed, automated, anti-icing technology (FAST) and use the most effective, least toxic de-icing agent.

Group Comment Response:

- A) Any road during adverse weather conditions makes driving challenging. The project road alternatives will be no different during adverse weather conditions than any other road in Southeast Alaska. Alternatives 2B includes a new maintenance station that will be staffed full time, which will improve maintenance response times to address adverse weather conditions. Alternative 3 includes a maintenance staging site. Further details of these locations is discussed in Attachment C to the *Update to Appendix D Technical Alignment Report*.
- B) Sections 4.3.7.5, 4.4.7.5, and 4.6.7.5 of the Final SEIS have been updated to explain the hazards of icing, high tides, freezing rain, icing on bridge decks, and wind conditions with respect to the road segments included in Alternatives 2B, 3, 4B, and 4D. Avalanche hazards and mitigation are discussed in the 2017 Update to Appendix J Snow Avalanche Report. The 2017 Update to Appendix D Technical Alignment Report has been updated to include a detailed discussion of the geologic hazards, such as rock slides, and the proposed mitigation measures to address the hazards. Impacts due to icing, freezing rain, icing on bridge decks, and wind conditions on the highway alternatives are no different than for any other road in Southeast Alaska. These conditions are difficult to predict and evaluate. The road alternatives will be maintained by DOT&PF when these hazardous conditions are encountered. High tides are not a concern as the driving surface elevation for the road alternatives has been designed to account for extreme high tides and extreme storm events.
- C) The use of automated de-icing systems on bridges will be considered during the design phase based upon the technical and economic feasibility. However, FAST systems are not common in Alaska, and there is no crash data in Alaska that suggests icing on bridges causes a higher crash rate than other portions of the roadway. Through an experimental project, de-icing systems were installed on two of the Knik River bridges in Southcentral Alaska. These systems were expensive to install and even more so to maintain. It is unlikely that any project road component will include these installations. The roadway and bridges will be treated similarly to other roads throughout Alaska. This treatment includes applying salt for de-icing and sand for traction.

Topic/Subtopic: Transportation/Safety

Group Comment Text:

The proposed road will improve disaster preparedness for Juneau residents by providing an alternative means of leaving Juneau.

Group Comment Response:

This potential evacuation benefit was mentioned for Alternatives 2B (private properties adjoining the road and for Juneau) and 3 (for properties adjoining the road and for Haines) under Hydrology and Water Quality-Floodplains in Sections 4.3.9 and 4.4.9 of the Draft SEIS. The benefit would also occur for emergency evacuation scenarios besides flooding.

Group 227

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

A) If AMHS is no longer the NHS-designated route between Auke Bay and Katzehin or other future ferry terminal locations, does this reduce the percentage of NHS funds that DOT&PF will allocate to AMHS?

B) How does DOT&PF allocate NHS funds for AMHS?

Group Comment Response:

A) DOT&PF's allocation of NHPP funds to AMHS is based on identified need. There are no formulas determining this allocation. All of the alternatives have an AMHS component, and all alternatives would be considered an NHS-designated route. Information on the NHPP is available at http://www.fhwa.dot.gov/map21/factsheets/nhpp.cfm.

B) There is no formula for allocation of NHPP funds to AMHS. Allocation of funds is based on system needs analyses as a part of the transportation planning process. AMHS receives Ferry Boat formula funds and is also eligible for other types of FHWA funding.

Group 229

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

The cost estimates do not accurately reflect the true cost of the project. Specific concerns include:

- A) The contingency assumed is too low.
- B) Safety costs and the cost of potentially required safety upgrades are not fully disclosed.
- C) Cost information is outdated.
- D) The cost estimate is not transparent.

- E) The cost estimate does not include costs associated with the Day Boat ACFs, terminal modifications, etc.
- F) The project will be a High Risk Rural Road (HRRR), so the cost of safety improvements should be considered.
- G) DOT&PF should analyze the State cost of each alternative based on the cost per vehicle multiplied by the capacity of the alternative.
- H) Costs associated with controlling invasive species needs to be addressed.

Group Comment Response:

A) The construction contingency for Alternative 2B is appropriate given the level of design development. The segment from Echo Cove to Sweeny Creek was developed through final design in 2006 after the 2006 ROD, which justifies the 5 percent contingency amount.

A geotechnical investigation that identified all geologic hazards for Alternative 2B within the segment from Independence Creek to the south bank of the Katzehin River was completed in 2006, and was subsequently updated in 2012 in support of the Draft SEIS. Preliminary geotechnical recommendations were developed to address all identified geologic hazards in response to comments and are reflected in the updated cost estimate in Attachment E of the 2017 Update to Appendix D – Technical Alignment Report in the Final SEIS. Although additional costs due to geotechnical hazard mitigation have been included in the cost estimate, the final design has not been completed, so a 10 percent contingency is appropriate.

From the south bank of the Katzehin River to the proposed Katzehin Ferry Terminal, the contingency amount of 5 percent is appropriate because this section of roadway is located on relatively flat terrain, and the potential for unforeseen circumstances is low. The greatest portion of the cost for this segment is the Katzehin Bridge. The bridge amounts to more than 70 percent of the cost estimate for this segment. Bridge superstructures are well defined with a low potential for unforeseen conditions that would impact cost. The bridge piling size and length estimates are based upon preliminary geotechnical results within the corridor. In addition, there is substantial historic cost data throughout the State that was used to estimate bridge construction costs. This further justifies the 5 percent contingency amount.

The original survey data collection for Alternative 2B was completed in 2002. DOT&PF elected to collect updated survey data for the entire Alternative 2B alignment in 2013 and 2014 to strengthen final design activities. Since 2002, there have been substantial improvements to LiDAR sensors and collection/processing techniques that improve the bare earth surface modeling for design. This updated data collection effort further validated the estimated quantities contained within the construction cost estimate for Alternative 2B. For this reason, the contingency amounts were left unchanged from the Draft SEIS.

- B) Appropriate safety amenities such as widened embankments, guardrail, recessed pavement markers, paint, and signage are fully disclosed in the design and cost estimate. The Draft SEIS 2050 Alternative 2B traffic projection was 825 ADT. The roadway design being used on the project is appropriate for a rural arterial highway with less than 2000 ADT, which is substantially more traffic volume than forecast. DOT&PF does not anticipate Alternative 2B would need substantial additional safety improvements during the 2025 to 2055 timeframe. Adequate safety features and mitigation have already been incorporated into the preliminary design of Alternative 2B.
- C) The cost estimate included in the Draft SEIS reflects 2012 costs. In 2008, the cost estimate was updated to reflect 2008 construction costs. In 2009, a cost report was completed which included an independent estimate completed by FHWA's Western Federal Lands Highway Division that validated the estimate. This report is available for public viewing at www.juneauaccess.alaska.gov. In 2012, prior to the release of the Draft SEIS, the cost estimate was updated to 2012 construction costs. This was done by applying an inflation rate to the unit prices in the engineer's estimate. The inflation rate was obtained by comparing the Construction Cost Indices for years 2008 and 2012 provided by the Washington State Department of Transportation. The Final SEIS has been updated to reflect 2016 costs using the same methodology. A detailed discussion of the engineer's estimate is included in Section 4.1 of the *Update to Appendix D Technical Alignment Report*.
- D) The detailed cost estimates for the ferry terminal components and road components of all alternatives are disclosed in Attachments D and E to the *Update to Appendix D Technical Alignment Report*.
- E) The Day Boat ACFs and proposed modifications to the Haines Ferry Terminal were not included in the cost estimates for the project's alternatives because they were proposals that were programmed independent of the JAI Project. Their design and/or construction is currently in progress at the time of this Final SEIS. As is typical in transportation NEPA analyses, all reasonable alternatives incorporate programmed and existing elements of the transportation system.
- F) The road is not defined as a HRRR per the FHWA definition. FHWA defines HRRR as "any roadway functionally classified as a rural major or minor collector or rural local road:
 - A. on which the accident rate for fatalities and incapacitating injuries exceeds the statewide average for those functional classifications or roadway; or
 - B. that will likely have increases in traffic volumes that are likely to create an accident rate for fatalities and incapacitating injuries that exceeds the statewide average for those functional classifications of roadway."

The road is not classified as a collector or local road and neither of the conditions A or B listed above apply. In addition, per 23 CFR 625.3, design of highways on the NHS are required to meet AASHTO standards. The highway design for the alternatives meets the AASHTO standards for rural arterials based on the traffic volumes projected for the proposed project, with the exception of shoulder width for Alternatives 2B and 3. DOT&PF does not anticipate Alternative 2B would need substantial additional safety

improvements during the 2025 to 2055 timeframe.

- G) For each alternative, the Final SEIS does present an estimated State Net Cost Per Vehicle. The vehicle count for each alternative is output from the traffic model. To use the alternative capacity count is speculative, as capacity is greater than anticipated demand in all but peak demand days. Also, State costs are not dependent on vehicle numbers but on highway and ferry operational costs.
- H) Costs for controlling invasive species are included in the highway operational and maintenance costs.

Group 230

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

- A) How can DOT&PF justify Alternative 2B? It would cost users and the State more than the existing system. It is too expensive and fiscally irresponsible. It is not economically feasible as it costs more money, has a negative net present value, and does not have the lowest life cycle cost.
- B) Alternative 2B is a detriment to the rest of the AMHS by directing construction funds to building a road rather than vessel replacement and reducing the annual system revenue. The revenue needed to support the road option and maintain ferries that cannot be eliminated will divide an already limited revenue stream.
- C) DOT&PF should consider spending the money that would be used for the project for other transportation purposes.
- D) DOT&PF should consider spending the money that would be used for the project for other non-transportation services (e.g., education, public safety, prisons, etc.).
- E) What other projects would be negatively impacted?
- F) As the State does not have dedicated revenues, the Draft SEIS incorrectly reported that revenues from gas taxes and licensing/registration fees would reduce the overall State cost for road and highway maintenance.
- G) The population forecast in the Draft SEIS showed clear bias in stating how revenue should be raised in the State of Alaska and the politics in the State should be directed, and by claiming that the State is not able to properly provide for the safety of the public in remote areas.

Group Comment Response:

A) The reasoning behind the identification of Alternative 2B as preferred in the Draft SEIS was provided in the Executive Summary and in Chapter 2 under the heading, "Identification of the Preferred Alternative." Alternative 2B does not cost users more and costs the State considerably less per vehicle transported. The out-of-pocket user cost under Alternative 1 – No Action for a one-way trip would be \$216 between Juneau and Haines

and \$286 between Juneau and Skagway. The State cost per vehicle would be \$286. The out-of-pocket user cost for Alternative 2B for a one-way trip would be \$47 between Juneau and Haines and \$67 between Juneau and Skagway. The State cost per vehicle would be \$52. The decision, however, is not made solely on cost. Regarding the net present value and life cycle costs, DOT&PF and FHWA did not identify the preferred alternative based solely on the economic analyses, nor are they required to. The analysis indicates that none of the build alternatives show that economic benefits outweigh costs, and the alternative identified in the Draft SEIS as preferred is not better on every measure.

The decision was strongly based on how well an alternative satisfies the purpose and need for the project as stated in Chapter 1. As presented in Table ES-1, Alternative 2B accommodates the highest demand, provides the greatest capacity, has the shortest travel times, provides the greatest frequency of service, has the lowest cost to users, has the lowest cost to the State per vehicle transported, and has the second lowest operations and maintenance costs of any of the build alternatives. The decision balanced these benefits, taking into consideration the impacts described throughout the document and appendices.

B) Alternative 2B is not a detriment to the rest of the AMHS and would not reduce the annual system revenue. There is a misconception in the region that the Lynn Canal service covers its costs and generates excess revenue that helps to subsidize other less profitable runs in the system (and therefore taking that service away would somehow be a detriment to revenues in the system). While traffic and revenue studies indicate higher demand in Lynn Canal, and therefore higher revenues, the current ferry system in Lynn Canal still requires a State subsidy. Thus, while Lynn Canal service may come closer to covering its costs than some other routes, it still requires State funds each year to subsidize that service. Directing transportation funds to build a road under Alternative 2B is forecast to increase revenue compared to Alternative 1 – No Action (\$10.7 million per year versus \$7.7 million per year) and would reduce the required State subsidy by \$0.5 million per year (see Table 4-26 of the Draft SEIS).

In addition to the above information presented in the Draft and Final SEIS, an update to the Lynn Canal Corridor Revenues and Expenditures reports was included in the Draft (Appendix BB, *Revenues and Expenditures Report for Lyn Canal, Fiscal Years 2005–2012*) and Final (Revised Appendix BB, *Revenues and Expenditures Report for Lyn Canal, Fiscal Years 2005–2015*) SEIS. This report details revenues, costs, and subsidies. Of note, the referenced document by one commenter is from the 1970s—it is outdated and does not provide relevant information.

C) Prioritizing the use of NHS transportation funds is the responsibility of the DOT&PF. That prioritization is done through the four-year STIP, which is published in draft form for public review and comment before approval. The STIP is modified each year to account for shifting priorities and project schedules around the State. The STIP is approved by the DOT&PF Commissioner and federal funding partners. The Legislature provides DOT&PF with authority to spend federal money and allocates funding for the State's match through the capital budget. FHWA funds are not available to be spent on routine maintenance on existing highways. AMHS receives Ferry Boat formula funds and is also eligible for other types of FHWA funding. It is not possible to indicate specifically which other State transportation projects may be postponed or cancelled if STIP funds had been allocated for

the construction of the JAI Project. Alternative 1 – No Action has been selected as the preferred alternative and programmed funding will be allocated to other projects. DOT&PF's 2016–2019 STIP (Amendment 3, June 28, 2017) does not include funding for any JAI Project build alternatives.

- D) This project is a federal-aid highway project, which can include the AMHS and highways. The federal government would fund approximately 90 percent, with the State matching the balance. The federal highway funds may be used only for surface transportation (i.e., capital expenditures). They cannot be used for non-transportation expenses (e.g., education or public safety). If the State wishes to receive the federal funds, it must match them with State funds. DOT&PF prioritizes the limited funding available through an ongoing evaluation process; see response C, above.
- E) See Response C, above, for background. It is not possible to indicate specifically which other State transportation projects may be postponed or canceled if STIP funds were allocated for the construction of Alternative 2B for the JAI Project.
- F) The Draft SEIS stated on page 1-17: "Revenues from gas tax receipts and licensing/registration fees were about \$84.5 million in 2011, some of which reduces the overall State cost for road and highway maintenance." This has been rewritten in the Final SEIS to make clearer that the State receives motor fuel taxes into the General Fund from purchases of gasoline for highway travel, and allocations from the General Fund pay for highway maintenance and operations. Elsewhere in the Draft SEIS, reference to the State motor fuels tax were already clear.
- G) FHWA and DOT&PF have undertaken the SEIS for the JAI Project in an objective and unbiased manner. The quote pulled from Appendix EE, Socioeconomic Effect Technical Report, does not describe a "bias" or "elude [sic] to the report writer's preference as to how revenue should be raised...." The sentence merely describes the challenge in forecasting Juneau's population given the current difficult budget situation. The sentence quoted is not stating a preference, but rather is reporting the kinds of remedies that have been discussed to stem the budget shortfall for funding State government. In Alaska, there is a strong connection between economic activity and population. Because Juneau's economic activity is heavily tied to State government, the Draft SEIS acknowledged the potential for certain issues to result in substantial changes to the City's population. The population forecast used for the project was founded on a base case population developed by the Alaska Department of Labor and Workforce Development. It was completed by Northern Economics, a firm that has the experience and expertise to be qualified in Alaska for conducting such a forecast. The forecast showed flat to declining population in Southeast Alaska. If there had been an attempt to bias the results, it would not make sense to identify a flat to declining population.

The report does not indicate that the "State is not able to properly provide for the safety of the public in remote areas," as is suggested by the comment. The Draft SEIS disclosed effects on local communities and described the effects to local emergency service providers. The State funding for the project would need to compete with State funding elsewhere in the State. DOT&PF and FHWA acknowledge that project alternatives would have an impact on emergency service providers; however, as has been done across the

State on other stretches of rural highway, emergency service providers respond and provide proper assistance. The Draft SEIS disclosed that this will come with a financial cost to the providers.

Any transportation project proposed by DOT&PF and FHWA must meet established engineering standards and practices for safety and reliability. Therefore, all project alternatives would be safe and reliable.

Group 231

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

The Draft SEIS did not adequately address maintenance costs, including road and recreation area maintenance, law enforcement, and snow removal. Specific concerns include:

- A) The cost is underestimated.
- B) Where will the money come from, and can the State of Alaska afford to pay for the maintenance of the proposed road?
- C) Is additional equipment and staffing proposed for the new maintenance station, or will it compete for existing resources?
- D) There will be increased maintenance cost due to geological hazards and the potential for road closures and delays associated with bad weather, avalanches, and landslides.
- E) Periodic dredging of the Katzehin Ferry Terminal area (i.e., the Katzehin delta is extremely shallow and changeable) should be included in the estimate for Alternative 2B operations and maintenance costs.

Group Comment Response:

- A) The maintenance costs included in the Draft SEIS reflect the maintenance of State assets only. Expenses borne by others, such as the USFS maintaining the adjacent National Forest or by the State Troopers is not included. The maintenance cost for the highway was estimated using actual costs incurred by DOT&PF for highway maintenance. Additional personnel, equipment, and materials were included in the estimate to provide for responses to avalanches and landslides. Because of the addition of extra resources to address conditions expected on the project highway, the estimate shows the cost per mile to maintain the highway to be approximately 190 percent higher than DOT&PF's current average maintenance cost per mile in Southeast Alaska.
- B) The maintenance would have been funded by State General Funds and administered by the Southcoast Region of DOT&PF. The funding is subject to the Alaska legislature to annually identify, allocate, and authorize.
- C) The project cost estimate proposes new staffing and equipment in addition to existing resources to maintain the project highway, and the cost of those assets is included in the

maintenance cost estimate. See Appendix D of the 2017 Update to Appendix D – Technical Alignment Report.

- D) The JAI Project's planning process included extensive study of the geological conditions and weather on the proposed route. Highway design engineering will mitigate many of the hazards. Significant additional assets have been added to the maintenance concept to provide personnel and equipment to deal with potential road closures. These assets and their associated cost are listed in the maintenance plan in Appendix D of the 2017 Update to Appendix D Technical Alignment Report.
- E) No sedimentation studies have been conducted to date. Additional design and analysis work is needed to ascertain if periodic dredging is needed or not. Design of the new basin and breakwater/jetty features would have been optimized to minimize sedimentation effects. The minimum required depth of this basin is elevation -25-feet mean lower low water (MLLW). However, the preliminary design and associated cost estimate has been revised to include the cost of dredging an additional 5 feet to elevation -30 feet MLLW to account for sedimentation over the projected life of the facility (30 years). As such, no additional cost allowances for future dredging are presently included.

Group 249

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

Has DOT&PF considered tolls on the proposed roads?

Group Comment Response:

During scoping for the original DEIS in the early 1990s, tolling was suggested as a possible revenue source for highway construction and/or maintenance. A decision was made by the DOT&PF Commissioner after the 1997 DEIS was released that tolls would not be part of the project description. The decision was based, in part, on the fact that the State had no toll roads and none were anticipated in the future. No subsequent commissioner has changed this position. There is no basis for saying a toll road is likely. The State has other road segments that have high maintenance costs due to issues such as terrain and weather, and no tolls have been instituted.

Group 250

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

- A) Would new ferries make the system cheaper to operate? The existing ferries are aging, with higher maintenance costs.
- B) If less funding is available, will AMHS not have to reduce service even further?

Group Comment Response:

A) Given the high cost of new vessels, it is not fiscally realistic to think the State can acquire all new ferries for Lynn Canal service. The selection of existing and new assets for the Draft SEIS alternatives was made to reflect the practical necessities of using available

AMHS ferries where possible, and acquiring new vessels when necessary (see Attachment B, AMHS Vessel Replacement Costs, of Appendix GG, *Marine Segments Technical Report*). The Day Boat ACFs, which are already under construction at the time of this Final SEIS, are included in Alternatives 1 – No Action, 1B, 2B, 3, 4C and 4D; thus, each of the alternatives that use these two ferries will essentially be using new ferries. For Alternatives 4A and 4B, new fast ferries would be purchased. New ferries are cheaper to maintain initially because there is little long-term repair needed. However, new ferries are not significantly more efficient from an operational standpoint, such as fuel consumption, although some efficiency can be gained by designing the new ferry to be optimized for its new service. Appendix GG includes calculations for the cost of the ferry alternatives, including impacts of vessel age. Vessel operation costs are based on a ferry's operational characteristics, and vessel capital repair costs are based on the age of a ferry using a vessel capital refurbishment program.

B) AMHS evaluates its service levels each year and adjusts them to demand and available funding. AMHS is beholden to the State Legislature to make up the gap between what is collected in fares and what it costs to operate and maintain the ferry system. If less funding is available, service levels may face further cuts. The analysis in the SEIS is based on the most current assessment of anticipated funding and service levels.

Group 688

Topic/Subtopic: Transportation/State Costs

Group Comment Text:

The Draft SEIS did not fully consider the environmental costs of the project alternatives. For example, the loss of wildlife and loss of wilderness values have a monetary cost.

Group Comment Response:

DOT&PF and FHWA have disclosed the environmental consequences of the proposed alternatives in the Draft and Final SEIS, including the indirect effects described in the comment. Transportation EIS documents are not required to and do not typically present impacts to the environment in financial terms. The "costs" to the physical, natural, economic, and social environment are the main topic of the entire EIS, however, and the EIS discloses all known impacts, both beneficial and adverse, as required by NEPA. A cost-benefit analysis that attempts to compute a dollar figure for the types of impacts identified above would be highly speculative and subjective, and not a wise use of public funds. Because the indirect impacts have been disclosed quantitatively where possible, and qualitatively elsewhere, FHWA has met its requirements under NEPA. Commitments to manage, mitigate, or avoid environmental damage are part of the project, and its costs are disclosed in the SEIS.

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

A large number of comments and questions pertained to the approach and methodology in the Draft SEIS for developing travel demand estimates for the alternatives, including the following:

- A) The traffic model and/or model development is flawed. The traffic demand forecast is overestimated/overstated, cannot be substantiated, or is too uncertain due to flawed assumptions and methodology.
- B) Ferry travel assumptions are unsupported or unrealistic.
- C) Past forecasts and assumptions are flawed. Traffic results were not consistent with past analysis or were not accurate.
- D) Incorrect baseline data was used.
- E) Model inputs are unrealistic.
- F) The reason why people travel is not valid or is disputed.
- G) The transportation demand study did not adequately address impacts.

Group Comment Response:

A) Traffic Model/Model Development Flawed

The modeling for the project was developed by travel modelers at Fehr & Peers. This firm was specifically identified and hired for its expertise in the travel modeling field, and its approach and results were peer reviewed by an independent university professor with expertise in travel modeling and travel behavior prior to the results being accepted for use in the Draft SEIS. The methodology and results are fully disclosed in Appendix AA, *Traffic Forecast Report*, and summarized in the Draft SEIS.

All traffic demand models attempt to predict future demand based on assumptions and data available in the present. To the extent that they are predicting a future, unknown condition, all demand models are "hypothetical." Because there is no road linking communities in Lynn Canal, a forecast of surface transportation demand cannot be conducted in a conventional manner. The previous forecast for the 2006 SEIS was partially based on the results of two household surveys. While surveys can provide important travel behavior inputs, in this case, they indicate people's perceived behavior but may not reflect actual travel behavior. Moreover, because of the controversy and notoriety of the project within the region, modelers were not confident they could get unbiased responses if they were to use an approach that again relied on survey data. For these reasons, a different forecasting approach was used for the 2014 Draft SEIS.

Contrary to some commenters' assertion, the modelers of the current effort used quantitative methods to validate the model and estimated demand using more than one methodology to provide greater certainty that the forecast was grounded on real data and based on repeatable, valid methodologies. The traffic demand model used for this project was developed based on empirical data derived from actual travel conditions observed in Alaska communities and similar locations.

The modeling uses multiple steps. The first step was to develop a "Total Demand Model" to estimate overall demand in the corridor, assuming there were no constraints (termed unconstrained demand). From this unconstrained demand, "Choice Models" were developed to predict the percentage of total demand that would utilize each alternative. These models work by calculating the attractiveness of each choice based on time, cost, and convenience variables. The following describes these models in greater detail.

Total Demand Model

The Total Demand Model starts out defining a condition that the modelers called "unconstrained demand." This level of demand predicts how many people would want to travel between Juneau and Haines/Skagway if there were a road the entire way. This predictive condition was based on the assumption that people in Juneau, Haines, and Skagway would exhibit similar travel behavior given the opportunity to travel by road as other similarly situated communities. Based on the project team's research, there are no indicators that travel behavior in Juneau, Skagway, and Haines would differ substantially from that of other Alaskan and Canadian communities if full highway access were available. Based on the data collected, DOT&PF and FHWA are confident that Juneau residents would travel in a similar manner to other Alaskans. Even today, Juneau residents travel only slightly less on a per household basis than the average Alaska household, even though they do not have full road access in or out of the community. Vehicle ownership per capita in Juneau, Haines, and Skagway is also comparable to other Alaska areas.

To be additionally assured of the results, more than one approach to predicting future travel behavior was used by the study team in developing the Total Demand Model. Two methods were selected as being most representative of likely conditions along Lynn Canal. Each of these two different models was developed independently and resulted in similar estimates of travel volume in Lynn Canal. The first total demand model was based on household survey data to estimate trip generation and dissipation. The second model was based on actual highway traffic volumes observed near similar communities. Fehr & Peers did not use other roads to "validate" the model. Fehr & Peers used other similarly situated communities in Alaska (both regional center communities like Juneau and other, more isolated coastal communities like Haines and Skagway) and Western Canada with similar geographic characteristics as Juneau, and examined their trip-making patterns on the highways leaving those communities. The analysis found a strong correlation between the distance traveled from the edge of the community and the traffic volumes. This predictive model was used, among other sources, to develop the total (unconstrained) demand model for Lynn Canal. That model was used to bracket an upper end (or total demand) for travel in Lynn Canal.

Choice Models

The Traffic Forecast Model was specifically designed to compare the travel characteristics among the marine and road/ferry alternatives. Two choice models were developed to predict the percentage of total demand that would utilize each alternative. The first model was a "travel choice model," followed by application of a "mode choice model." Essentially, demand was scaled down from the total demand based on factors that influence people's decisions (choices) to make a trip. These factors include items like cost, travel time, schedule convenience, etc. Using such factors to predict traveler's choices and behavior among competing alternatives is a common modeling practice and is used in nearly every traffic model. None of the alternatives would have the same level of demand as was calculated for "unconstrained demand."

By factoring the demand down from the unconstrained demand, the choice models predict reasonable estimates of travel behavior based on the relative merits of the alternatives. The models were "validated" against a known existing data point in time for the existing ferry system in Lynn Canal (i.e., travel time, cost, convenience, etc. were applied to the model, and the models were calibrated to be able to predict demand for an existing known data point). Such procedures are a standard step in every valid modeling process.

It should be noted that all of the alternatives include roads at both ends with a ferry link in the middle. The length of the road link versus the ferry link varies. For Alternatives 2B and 3, the ferry links are short shuttle ferries, with the greatest length traversed via road in a private vehicle, while the other alternatives have a long ferry link with relatively short road links at each end. For these reasons, the forecast for each alternative deals with road travel times, waiting time, ferry travel time, and transfer time, with different frequencies of service as modeling inputs.

B) Disagreement over Ferry Travel Assumptions

Regarding estimates of ferry ridership demand, the travel choice model is sensitive to several variables, including travel time, travel cost, and frequency of travel. The model was calibrated to match empirical evidence from the 1997-1998 and 2004-2007 as closely as possible. The evidence suggests that cost and convenience of travel are more likely to affect travel behavior than ferry travel time when compared with existing service levels. In response, the project team modified one of the model variables (i.e., the service index) from its initial formulation to reflect the reduced effect of travel times on the forecasted demand. While the alternatives under consideration include more substantial changes in service than have been experienced previously in Lynn Canal, it is possible that the demand forecasts are conservatively high for some of the marine alternatives. However, the fact that the model did a good job of matching existing Lynn Canal ridership means that the travel choice model was reasonably validated and applied.

Regarding the cost/value of travel time, assigning dollar costs to travel time is a reflection of the fact that all time has value. People value travel times differently based on various factors: work versus pleasure, weather conditions, etc. In selecting the choice model coefficients, ferry travel time was deemed not as onerous as automobile travel time (there is typically considered to be less stress, plus other activities can be accomplished during

the trip). For these reasons, the model gives 20 percent less weight to the ferry travel time compared to automobile travel time. In other words, the model coefficient was adjusted to account for "benefits" associated with ferry travel, described by some of the commenters in this group of comments. This relationship was derived from other regions that have ferry service and driving options, and was used to validate the travel model results to existing ferry demands within the corridor. All time has a cost in terms of trade-offs with other ways that time could be spent. If ferry travel were purely a benefit, then slower trips would have greater value than faster trips. Clearly many Lynn Canal ferry travelers enjoy aspects of the ferry ride, but it is also true that most travelers prefer shorter travel times (fast ferry) to longer travel times (conventional ferry), all other things being equal. It is also true that some travelers would prefer driving their own vehicles to riding a ferry over the same route.

C) Past Forecasts and Assumptions Flawed

Several commenters suggested that travel assumptions were not valid based on observable demand responses to past AMHS service changes or because past forecasts did not result in accurate predictions. Such assertions ignore the complexity and numerous factors that go into people's decision to travel. Pulling individual years out of past AMHS travel data, to suggest a correlation to a service change involving one factor, is not statistically valid. For example, citations to past changes in AMHS frequency of service do not take into account the other factors affecting traveler's decisions, including schedule, costs, travel time, or how the economy was doing in the given year cited. Taking a forecast prepared in 1996 for a specific alternative and comparing it to vastly different conditions in select years many years later is misleading. The alternatives identified and forecast in 1996 were not implemented. To suggest that other improvements and operational tests made in Lynn Canal should somehow have generated the same traffic forecast is inaccurate. Unless the same alternatives identified in 1996 were built and operated the same, the comparisons are meaningless. Moreover, modifications made to a schedule or fare, and only run for a year or two, would not lead to a fair comparison of the forecast estimate. As discussed above, pulling one or two years of data to try to prove a correlation is inappropriate.

D) Incorrect Baseline Data

One commenter suggested that baseline data was incorrect, and therefore overstated demand. It appears that commenter used incorrect AMHS numbers in generating their calculation. The error is related to the two types of data reported by AMHS: (1) link volume data for city pairs, and (2) on-off data for each port of call, also known as "port-to-port volume data." The link volume data includes all 'local' persons and vehicles beginning and ending in Juneau, Haines, or Skagway plus all passengers who passed through Juneau, Haines, or Skagway northbound or southbound on their way to destinations outside Lynn Canal. In contrast, on-off data only includes trips that embarked or disembarked within Lynn Canal (i.e., no through travel).

The data reported in Appendices AA (*Traffic Forecast Report*) and FF (*User Benefit, Lifecycle Cost, and Total Project Life Cost Analyses*) represent link volume data. These data are summarized as ADT in Table 3-1 of Appendix AA (and are adjusted to annual traffic in Tables A-6 and A-10 of Appendix FF). Table A-10 shows the 9,954 total annual link

volumes for Juneau-Skagway reported by the commenter (adding summer ADT of 6,732 to winter ADT of 3,222). The link volume number is the correct number for calculating the total travel between Juneau and Skagway, in that it includes the through-traffic.

It appears that the commenter used an average of 5 years' worth of port-to-port volume data. Looking at on-off data only, Fehr & Peers examined the AMHS on-off data for Juneau-Skagway for three years: 2011, 5,825 vehicles; 2012, 6,586 vehicles; and 2013, 6,558 vehicles. This produces a 3-year average of 6,323 vehicles, which is close to the commenter's value of 6,412 vehicles. Therefore, we believe that the commenter used on-off data in the calculation. These port-to-port volume data do not account for the throughtrips on the ferry within Lynn Canal. Similar comparisons account for the differences in the Juneau-Haines data.

The source of the daily link volume data was the AMHS 2011 Annual Traffic Volume Report. Fehr & Peers went back and examined comparable data from the 2010 through 2014 traffic reports. The passenger and vehicle counts are virtually unchanged on an annual basis over the last 5 years for which data is available. DOT&PF and FHWA are confident that the link volume data used in the analysis accurately reflects ferry usage within the Lynn Canal. By relying on the port-to-port data, the commenter is incorrectly under-representing the actual travel because the through-traffic is not included.

E) Model Inputs Unrealistic

Road and ferry input data into the current forecast model is based on adopted standards, policies, or observed conditions and was fairly applied to the alternatives.

- Road travel times are based on the posted travel speed and are consistently applied to all alternatives.
- Ferry travel times were based on average operating conditions, observed wait and loading times, and AMHS policies (e.g., check-in times).
- Similar to road travel being delayed by weather, ferries can also break down or have mechanical delays. No time penalty has been added to any alternatives. All alternatives are forecast based on an annual average basis, and all alternatives were treated equally.
- AMHS policy is that passengers traveling without vehicles must check in 2 hours prior to departure in Bellingham and Juneau, and 1 hour prior to departure at all other ports. These policies were used in the traffic forecast analysis for existing ferries (see Appendix AA, *Traffic Forecast Report*).
- The "Ferry Delay" values used in Appendix AA were derived from the work done for the project by contractors knowledgeable about ferry operations, as overseen by DOT&PF. The wait times are considered realistic. Note that the ferry shuttle operations under Alternatives 2B and 3 would operate differently than existing ferry service—that is, reservations would not be required, and drivers would load without check-in or long processing times. Vehicles would be accommodated on a first-come, first-served basis, as indicated under Travel Time in the description of reasonable alternatives in Chapter 2 of the Draft and Final SEIS.

F) Why people travel not valid or not understood

Motivations for travel are the typical reasons anyone would travel in other corridors—recreation/tourism, business, industry/freight, social, medical, catching a flight, shopping, etc. The "average daily traffic" numbers reported, represent point-to-point traffic—that is vehicles that make the connection between two communities (even if they started their trip north or south of the project area. Juneau, Haines, or Skagway residents who might travel only part way out the new highway for recreation/hunting/fishing without connecting to a community at the other end would be additional traffic affecting some segments and are not reported in Appendix AA, *Traffic Forecast Report*.

G) Impacts Not Addressed in Appendix AA

Appendix AA is the *Traffic Forecast Report*—it is not an impact assessment. The Draft and Final SEIS address impacts that result from the forecast.

- Impacts derived from the forecast are found in the SEIS. Tourism impacts and economic development are discussed under Socioeconomic Resources in Chapter 4 of the SEIS.
- Appendix AA addresses all traffic in Lynn Canal that uses the AMHS, including
 people who travel for all reasons, including tourism and business/industry/freight.
 Most tourism is directly related to cruise ships and is not directly traveling between
 communities on the AMHS. Barges and freight are discussed in Section 3.3 of
 Appendix AA.
- DOT&PF and FHWA have disclosed the potential for road closures and have developed a plan to mitigate those effects to the extent that travel delay would be minimized. Service to and from Juneau during a road closure would be provided by running a ferry in Lynn Canal.
- In Section 4.1.5 of the Final SEIS, in discussion of methods used for traffic forecasting and economic factors, a statement acknowledging that there is uncertainty inherent in forecasting has been added to the text. This reflects Section 2.3 of Appendix AA, which is dedicated to Notes and Limitations.
- As explained in the Draft and Final SEIS and Appendix AA, there are a number of reasons that Alternative 2B would have greater travel demand than Alternative 1 No Action. Alternative 2B offers more opportunities to travel and provides greater flexibility to leave and arrive, which coincides more closely with the time of the traveler's choosing. It provides this opportunity at a greatly reduced user cost in terms of time and money.

Group 260

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

Demand assumptions in the Draft SEIS are flawed because Lynn Canal communities are not comparable to communities in the Lower 48 or Southcentral Alaska. The selection of city pairs in Appendix AA, *Traffic Forecast Report*, is not comparable to Lynn Canal. For example, Denali National Park is a major destination between Anchorage and Fairbanks. There is no comparable destination in Lynn Canal.

Group Comment Response:

The model analysis looked at travel patterns of a number of cities, including Anchorage, Fairbanks, and Whitehorse (as regional centers like Juneau), and included analysis of similar coastal communities, including Prince Rupert and Port Hardy, British Columbia, and Seward, Homer, Valdez, Haines, and Skagway, Alaska (see Appendix AA, Traffic Forecast Report). The model did not use Anchorage and Fairbanks as endpoints as an example of city pairing. The data from these communities was only used to generate a trip dissipation model. Based on the data from the communities listed above, a very strong correlation was found between the distance traveled from the edge of the community and the traffic volumes. This predictive model was used, among other sources, to develop an unconstrained demand model for Lynn Canal. In other words, what kind of trip-making pattern would be expected if Juneau were connected to the road system? It is based on the assumption that people in Juneau, Haines, and Skagway would exhibit similar travel patterns given the opportunity to travel by road as other similarly situated communities. Based on the project team's research, there are no indicators that travel behavior in Juneau, Skagway, and Haines would differ substantially from that of other Alaskan and Canadian communities if full highway access were available.

The forecast only used the unconstrained demand estimate as an upper bound to bracket the overall demand in the corridor. Each forecast, for each of the alternatives, scales down from the unconstrained demand based on factors of cost, travel time, schedule convenience, etc. Using such factors to predict traveler's choices and behavior among competing alternatives is a common modeling practice and is used in nearly every traffic model. By factoring the demand down from the unconstrained demand based on costs, travel time, and convenience, the model predicts reasonable estimates of travel behavior based on the relative merits of the alternatives.

Data examined for traffic modeling was derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. The model does not estimate or rely on trips interchanging "between" Anchorage and Fairbanks or between an intermediate stop like Denali Park. As is explained in Appendix AA, the cities were used to gauge the edge effect of travel from these centers. Using multiple locations and several modeling approaches strengthens the modeling effort.

Group 261

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

A) The demand estimate is not realistic because it will not change travel patterns. The proposed road would generate few additional vehicular trips with origin/destination beyond Haines and Skagway because ferry or air travel provides more economical or more dependable service.

B) Traffic forecasts for the Haines-Skagway link are missing from the Draft SEIS.

Group Comment Response:

A) If Alternative 2B were built, there would not be a competing ferry option in Lynn Canal that travelers with vehicles could choose to take, so inevitably traffic patterns would change. The model used to estimate demand for this project was developed based on empirical data derived from actual travel conditions observed in Alaska and Western Canada from communities with similar geographic characteristics as Juneau. Two methods were used as being most representative of likely conditions along Lynn Canal. Each of these two different models was developed independently and resulted in similar estimates of travel volume along Lynn Canal. These approaches were developed by travel modelers at Fehr & Peers. This firm was specifically identified and hired for its expertise in the travel modeling field, and its approach and results were peer reviewed by an independent university professor with expertise in travel modeling and travel behavior prior to the results being accepted for use in the Draft SEIS. The methodology and results of both approaches are fully disclosed in the associated technical report and summarized in the Draft SEIS.

B) The purpose of the project is improved access to and from Juneau in Lynn Canal; the Draft SEIS did not evaluate the Haines-Skagway connection in detail. The Haines-Skagway shuttle information was provided to illustrate the potential impact each alternative would have on this travel link. The Haines-Skagway traffic forecast and method to accommodate the traffic is located in the 30-year Traffic Projections table located in Attachment E of Appendix GG, *Marine Segments Technical Report*. Based on this comment and others, additional information on the Haines-Skagway shuttle, including the traffic forecast, has been added to Chapter 4 of the Final SEIS.

Group 264

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

DOT&PF should consider changing the pricing system used on the ferries (e.g., dynamic, variable, or demand-based pricing).

Group Comment Response:

The reservation system used for the last 15 years was not capable of variable pricing. AMHS is renovating the reservation system and enhancing its capabilities and functionality. However, AMHS demand-based pricing must be justified on the basis of balancing service and cost.

AMHS will not be implementing a variable pricing system for the near term. However, in May 2016, as a result of the 2015 Rate Study, AMHS implemented a variable leveling tariff increase on all routes. The tariff increase will vary by route and will be divided out over a 5-year implementation period. The purpose of this action is to level the AMHS tariff structure. Once the tariff structure has been leveled, then AMHS may consider further modifying the tariff structure consistent with recommendations from the 2015 AMHS Rate Study.

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

A) How many cars/riders would it require to sustain an acceptable traffic flow?

B) Would short ferry trips always be full?

Group Comment Response:

- A) The Draft and Final SEIS describe the ferry and road alternatives and the number of vehicles projected to use each of them. Each of the alternatives are considered as "sustaining an acceptable traffic flow," and each are considered reasonable alternatives even though the numbers of users varies. Alternative 2B is projected to be used by more vehicles than the other alternatives evaluated, and this use projection makes it more "acceptable" (i.e., it would better satisfy the project purpose and need) and this contributes to it being identified as the preferred alternative in the Draft SEIS.
- B) Shuttle ferries associated with Alternatives 2B and 3 operate what would be considered "short ferry trips." It is not anticipated that the ferry would always be full. The Draft SEIS indicated that "Some ferries may be at maximum capacity, resulting in travelers having to wait for the next ferry or change their preferred ferry time." This is anticipated to occur during peak times (e.g. Friday afternoon on a 3-day weekend in the summer).

Group 340

Topic/Subtopic: Transportation/Transportation Demand

Group Comment Text:

Did DOT&PF do any substantive demand study, monitoring, or data analysis of fast ferry service? If so, what were the results?

Group Comment Response:

While there is data for the fast ferries, overall demand for improved access in the Lynn Canal corridor cannot be extrapolated from it. The current latent corridor demand projection is not based on 1994 or 2003 surveys. Nor is the current project purpose and need based on them. The biggest indication of project need is the low percentage of overall demand met by current service and the low demand relative to traffic on all other nearby routes. Monitoring for demand of fast ferry service in Lynn Canal was a recommendation from the 1986 SATP. The 1986 SATP and 1994 and 2003 telephone and household surveys were included in the SEIS to disclose what was either done or thought about the project in the past.

Topic/Subtopic: Transportation/Travel Times

Group Comment Text:

- A) The Draft SEIS travel times did not factor in sufficient time for check-in, ferry turnaround, ferry waiting, or ferry delays. The assumptions used in the analysis of wait times at the Katzehin Ferry Terminal should be reconsidered.
- B) The lack of a reservation system will result in different travel times than that used in the Draft SEIS and will be problematic for certain users such as business travelers.
- C) The project should include a reservation system to provide schedule certainty for the traveler.
- D) The analysis should consider that people will leave earlier to help ensure they can board their desired sailing.
- E) The analysis should consider travel times for passengers having to wait due to the ferry being full.
- F) The Mooring and Loading Operations (MLOPS) times used are unrealistic and should be changed to more realistic times.
- G) The travel times in the Draft SEIS did not address transportation for pedestrians or cargo.
- H) The ferry travel times cited in Appendix CC, Development of Alternative 1B Enhanced Service with Existing Alaska Marine Highway System (AMHS) Assets, of the Draft SEIS contradicted "travel time improvements." In some instances, current travel times were faster than projected times.
- I) Has DOT&PF investigated any means to reduce the 2-hour check-in time at Auke Bay?

Group Comment Response:

A) Ferry travel times are based on AMHS experience and documented wait times, loading and unloading times, and AMHS policies. The times assumed in the Draft SEIS for Alternatives 2B and 3 are based on proven examples of similarly operated ferry systems that load and unload quickly, based on terminal and vessel design and drive through loading and unloading operations. The times expressed in the Draft SEIS are achievable. The operating model for Alternative 2B and 3, in particular, would be different than existing AMHS operations. No check-in would be required. Vehicles would drive straight on without turning or backing into position and would drive straight off. Such measures coupled with simpler ticketing and security procedures would help to make loading and unloading efficient. Each of the alternatives has a ferry link and none of the alternatives' travel times were penalized for potential ferry delays. Travel times (including average wait time) were computed for average operating conditions, expected to occur most of the time.

- B) The roadway alternatives (2B and 3) would operate differently than the rest of the AMHS and would be more like the shuttle ferry to the Ketchikan Airport. People would drive a longer road with a relatively short transit on the ferry (approximately 27 minutes for the Katzehin-Haines shuttle under Alternative 2B). While it is possible that a traveler could arrive at the terminal only to find the ferry had just departed or to find the ferry full and unable to take another vehicle, such scenarios are anticipated to be rare. Once a pattern was established, it is likely that travelers would self-select to days or times anticipated to be less busy. Most of the time, space would be available. See also Response C, below. For business travelers with tight timelines and little flexibility, private air carriers are available. Even if such travelers missed their desired ferry, they would likely be able to catch the next one a short time later. Under such a scenario, the travel time would still be much less than the current system.
- C) The first-come/first-served operations model would not provide schedule certainty in the same way a reserved ticket for a specific departure time would. However, the certainty would be similar to driving virtually anywhere that a traffic jam or accident could slow progress. The ferry capacities and number of sailings were calculated to provide for the projected summer ADT on the road. It is anticipated that patterns would develop, and travelers would learn when "rush hour" would be, and enough people would avoid those times that few would be delayed. Removing the need for a reservation system speeds up the overall travel time by removing the associated check-in process. The shuttle ferries will run frequently, thereby reducing the inconvenience.
- D) The analysis in Appendix AA, *Traffic Forecast Report*, indicates that average wait times were used to account for some people arriving well ahead of the ferry sailing and some arriving just in time.
- E) The analysis of all alternatives is based on average conditions. The wait times do not consider passengers having to wait due to a full ferry. The ferry size and frequency of service are designed to accommodate projected demand on the summer average. Only at peak times in summer would the ferry be anticipated to be full. Because alternatives other than 2B and 3 have more limited frequency, their system capacity is lower, resulting in a greater chance that travelers may not be able to travel on their chosen date than under Alternatives 2B and 3. However, travel times for all alternatives are based on average conditions.
- F) The MLOPS times used in the Draft SEIS for alternatives employing a first come/first serve drive through loading approach are aggressive but achievable and realistic as demonstrated by actual measured times of existing public ferry systems. The MLOPS (as detailed in Appendix GG, *Marine Segments Technical Report*) was revised for the Final SEIS to reflect a more conservative timing given the proposed terminal and vessel configurations. Ultimately, the final configuration of terminals and ferries will be determined by the operator, AMHS, as NEPA documents do not dictate operational decisions. For the SEIS, what is important is that all alternatives be designed for realistic efficiency so they can be compared on an equal basis.

- G) Travel times for walk-on passengers and cargo trucks would be similar to those reported in the Draft SEIS. Except in very limited circumstances, AMHS does not transport cargowheeled vehicles only as it functions as a highway, not a freight shipping service. Most travelers who today are walk-on ferry passengers do not walk for the entire Lynn Canal trip; most walk-on passengers get a ride to and from the ferry terminals via a taxi or a friend, or with somebody known to be taking a car. Under Alternatives 2B and 3, they will need to do the same. Thus, they are represented in the reported travel time calculations. People who do not own a car and have little means for getting a ride because of the longer distance from Juneau to the new ferry terminal would be impacted. The Draft SEIS discloses this impact stating: "Travelers without vehicles would be forced to rent vehicles, take a commuter flight, or travel on private carriers." Because these passengers would still arrive in a vehicle, their travel time would be similar as that reported in the Draft SEIS. Some commenters suggested extra time should be added for such travelers to wait for their ride; however, such passengers currently need to wait for their ride to the ferry terminal. Alternatives 2B or 3 would not change that requirement. Under Alternatives 2B and 3, the system would operate the same for trucks hauling cargo as for other passenger vehicles. The travel times for cargo carrying trucks would be the same as those reported in the Draft SEIS.
- H) It is not clear from the comment, but it appears the commenter may be comparing personal knowledge of ferry transit times with travel times indicated in Appendix CC, Development of Alternative 1B Enhanced Service with Existing Alaska Marine Highway System (AMHS) Assets. Appendix CC documents the development and operation of the Court mandated alternative using existing assets. Note that travel times for all alternatives are presented as total travel time, including loading and unloading time, check-in time, etc., in addition to time that the ferry vessel would be underway. The times do not represent just the ferry sailing time.
- I) AMHS has investigated means to reduce the two hour check in time at Auke Bay. Current Auke Bay check in times are based on requirements developed over time to make the check-in, sorting, and loading/unloading as efficient as possible for AMHS operations. Such times are necessary to deal with ticketing and reservations, security, and allowing for sufficient loading and unloading time. Based on years of experience, AMHS has developed their check-in time into a policy to minimize delays in the operations. Cutting time out of the check-in time increases the risk of delayed departures.

Topic/Subtopic: Transportation/Travel Times

Group Comment Text:

The Draft SEIS did not factor in roadway travel time delays caused by weather, winter road conditions, public transit use, road maintenance, or traffic. This should be considered as part of the SEIS analysis.

Group Comment Response:

Travel speeds did factor in roadway travel time delays caused by weather, winter road conditions, public transit use, road maintenance, or traffic. However, the modeled traffic speed was based on average conditions and average drivers, and have been applied

consistently across all of the alternatives. For both the road and ferry links, the extreme conditions are part of the averaged modeled travel times. All alternatives are forecast based on annual average basis, and all alternatives are treated equally. Roadway travel times are based on a travel speed of 45 mph. Ferry travel times were based on average operating conditions, observed wait and loading times, and AMHS policies (e.g., check-in times). Weather also affects travel speed for marine vessels, and they can be delayed for mechanical problems or maintenance. Heavy seas or head winds can and do affect travel times for the vessels.

For Alternative 2B, DOT&PF and FHWA have disclosed the impacts of potential road closures and have developed plans to mitigate those effects to the extent that travel delay should be minimized. DOT&PF has committed to running ferries in Lynn Canal if the road were to be closed for extended periods. Travelers without vehicles would need to rent vehicles, take a commuter flight, or travel on private carriers if they develop to accommodate this demand. Information about walk-on passengers was included in the Draft SEIS and has been augmented in the Final SEIS (see Sections 4.3.7.5 and 4.4.7.5).

Group 222

Topic/Subtopic: Transportation/User Costs

Group Comment Text:

- A) The Draft SEIS cost analysis did not include all user travel costs, such as taxi or shuttle service, parking fees, fuel, travel time, vehicle maintenance, strandings, and inconvenience.
- B) The Draft SEIS was incorrect in stating road alternatives will decrease user costs. The road alternative would cost travelers more money than using the existing ferry system.

Group Comment Response:

A) Appendix FF (*User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses*) of the Draft SEIS described in detail all of the traveler costs included in the economic analysis, including travel time, fuel, vehicle maintenance, accident costs, insurance, etc. It is important to recognize that the travel cost figures used in the User Benefit Analysis are averages intended to represent a broad range of individual cost scenarios ranging from the individual sharing personal vehicle expenses with three or four other travelers to the solo traveler who might have to hire some form of ground transportation to make a trip between Haines and Juneau. It is not possible to know with any degree of certainty how many travelers will fall into these and other categories of travelers. Because it is not possible to credibly predict the number of travelers who might be seeking commercial transportation services to and from ferry terminals under various project alternatives, it is not possible to predict the cost of such services.

The Draft SEIS gave an example for purposes of illustrating user cost. It was not meant to illustrate every possible scenario of vehicle type, number of occupants, or walk-on users. DOT&PF and FHWA recognize that there would be cost implications due to changes in travel patterns like those mentioned in the comments, including: costs to individuals traveling to Juneau to access the airport using Alternatives 2B or 3; costs to those travelers who may have used the existing ferry like a bus rather than as a highway; and cost savings for travelers coming or going beyond Haines or Skagway who do not wish to spend the

night in a hotel (due to border closure or ferry schedule). Based on this comment, additional information has been added to the Final SEIS in Sections 4.3.7.5 and 4.4.7.5. See also Section 4.3.7.5, Other Transportation Impacts, under the Pedestrians and Cyclists subheading, and see parallel subsections under the other alternatives.

B) Section 4.3.7.4 and Table 4-24 of the Draft SEIS included information about the total and out-of-pocket costs (fuel and fares) for a family of four in a 19-foot vehicle for Alternative 1 – No Action and Alternative 2B. Parallel sections under other alternatives presented similar information. The out-of-pocket cost for Alternative 2B would be approximately 80 percent less than for Alternative 1 – No Action under this example. To help clarify, additional information about the anticipated fares for the various travel markets (walk-ons, single drivers with a vehicle, etc.) has been added to the Final SEIS. See also Response A, above.

Group 225

Topic/Subtopic: Transportation/User Costs

Group Comment Text:

A) The benefits of the project for travelers is not convincing. How will this plan reduce costs to the traveler? Costs will be transferred to the passenger (e.g., the cost of fuel to get to the Katzehin Ferry Terminal).

B) Why are ferry passengers subsidizing the system?

Group Comment Response:

A) Appendix AA, Traffic Forecast Report, and Appendix FF, User Benefit, Life-cycle Cost, and Total Project Life Cost Analyses, provide the underpinnings for the discussion of economic user benefits presented in the Draft and Final SEIS. The Draft and Final SEIS discuss the methods used in Section 4.5.1, Transportation, and present results under the heading "Transportation" and the subheading "State and User Costs" for each alternative in Chapter 4. The results show that, for most travelers, while some costs may be shifted to the individual, the cost of driving their own vehicle and paying a fare for the short shuttle ferry would be lower than the cost of riding the ferry under Alternative 1 - No Action. The cost per vehicle served would be lower for the State, the costs to users would be lower, and the number of vehicles served would be higher. DOT&PF and FHWA acknowledge that those accustomed to using the ferry as walk-on passengers would have to adjust. See discussion under the "Other Transportation Impacts" heading and "Pedestrian and Cyclists" subheading for each alternative in Chapter 4 for a discussion of impacts to those users. Additional discussion of walk-on passengers has been added to the Final SEIS in these same sections and in Appendix EE, Socioeconomic Effects Technical Report, in Section 3.1.4.

B) It is common at expensive links in roads—such as especially large bridges, ferries, and tunnels—to charge a fare or toll for passage. This is generally to help cover the costs of operating the expensive link, not the roads that approach the link. Section 2.5, Funding Considerations, of the Draft SEIS indicates that maintenance and operation of the road portions would be funded through the State's General Fund, which is fed by a State fuel tax. This is the same as all other DOT&PF roads in Alaska. Maintenance and operation of

the marine portion of any alternative would be funded by a combination of fares and the State's General Fund. All portions or all alternatives would continue to be subsidized by the State of Alaska. Ferry passengers' fares would not subsidize the road. Ferry passengers would not be "subsidizing" any aspect of the system. In all alternatives, ferry travelers would be paying a portion of the cost of providing ferry service.

Group 424

Topic/Subtopic: Transportation/User Costs

Group Comment Text:

The Draft SEIS did not adequately address impacts to school districts that will occur as a result of the project. Regional competitions are important to all Southeast communities, and these impacts must be assessed:

- A) There will be increased costs because students will require additional transportation for regional events as most students currently travel as walk-on ferry passengers. Costs would include the bus to and from the Katzehin Ferry Terminal and/or flights to/from Juneau.
- B) There is an additional safety risk to students as a result of the drive from Juneau to the Katzehin Ferry Terminal. Parents will be concerned about sending their kids to tournaments and competitions if it involves travelling on the road. The road would decrease opportunities for student activities, especially for Haines and Skagway due to the reliability and safety of the road.
- C) How would a road impact how many school days are included in a student's academic year? Currently, students traveling for activities spend days away from school simply because they are dependent on the ferry schedule to leave town and get back home.

Group Comment Response:

FHWA and DOT&PF acknowledge that student transportation between Southeast Alaska communities would change as a result of the project if Alternative 2B or 3 were selected. In terms of transportation to extracurricular activities, Juneau, Haines, and Skagway schools would operate more like schools in most of rest of the road-connected communities in Alaska and likely would bus students between communities. More specific responses follow.

A) Additional information on costs under Alternatives 2B and 3 has been added to the Final SEIS. This includes cost of the shuttle ferries (fares) for a wider variety of travelers, not just a family of four, and the total cost of a trip between origin and destination (including costs for operating a vehicle). Costs would depend on the specifics of the given school or district regarding transportation of students for activities, but the Final SEIS acknowledges in both Sections 4.3.5.2 and 4.4.5.2 that change would occur that may affect logistics and costs for schools, school districts, and parents sending students to interschool events. AMHS currently provides discounted tickets for school groups, and that is expected to continue. As the existing cost of students traveling to Juneau from Haines/Skagway depend on many factors such as the number of students, the need to overnight away from home, etc. it is anticipated that some trips would cost less on the existing ferry system and some trips may cost more as compared to Alternative 2B.

- B) Under Alternatives 2B and 3, the roads would increase the opportunity to travel with more frequent ferry sailings. As indicated in the Draft SEIS, road closures due to snow clearing and weather would be several days per year for relatively short durations, and ferries would be available (on a more limited schedule, more like today's service schedule) to transport travelers if extended road closures were anticipated. The road will meet all standards for road safety. Wintertime driving conditions will be similar to other Southeast Alaska roads.
- C) The road alternatives would increase the opportunity to travel and would reduce dependency on a ferry schedule. Although days in school/days out of school due to travel for extracurricular activities is outside of DOT&PF's control, the time savings and greater opportunity for travel could mean time away from school for activities and events requiring travel should be reduced. For instance, it may be possible to get back and forth between Lynn Canal communities within the same day, depending on the time of day the event is scheduled, meaning less time away from school for some events.

7.25 Visual Resources

Group 542

Topic/Subtopic: Visual Resources/Method of Analysis

Group Comment Text:

- A) The Draft SEIS did not include an analysis of visual impacts from the vantage point of the water traveler.
- B) The visual assessments, environmental consequences, and simulations in the Draft SEIS are inadequate, incomplete, and misleading because they do not account for the movement of vehicles on the roadway.

Group Comment Response:

A) The Draft and Final SEIS do include visual analysis from the vantage point of the water traveler. The Draft and Final SEIS in Section 3.1.2, and for each alternative in the Visual Resources sections of Chapter 4, describe characteristic views, and these specifically and often include views from Lynn Canal/vessels on the water.

Subheadings for the road alternatives specifically break down "Views from Lynn Canal" and "Views from the Highway."

B) DOT&PF and FHWA have reviewed the Visual Resources section of the Draft SEIS and the technical reports—Appendix G to the 2005 EIS, entitled *Visual Resources Technical Report*, and Appendix Z *2014 Update to Appendix G – Visual Resources Technical Report* in the Draft SEIS. Visual assessments, environmental consequences, and simulations do not appear to be inadequate, incomplete, or misleading. Impacts are disclosed. Environmental consequences are frequently listed as high or very high, and compatibility with Visual Quality Objectives/Scenic Integrity Objectives for lands adjacent to the Transportation and Utility Systems (TUS) corridor often are noted as unlikely. Photo simulations show a variety of views, mostly from the water, and often clearly illustrate the

line of the highway as a new element in the view. Because consequences often are noted as high even without mention of movement on the road, movement would not change the analysis. However, movement of vehicles as an element that may draw attention to visual contrasts has been added to the Visual Resources sections of Chapter 4 and in the Appendix Z 2014 Update to Appendix G – Visual Resources Technical Report and 2017 Errata in the Final SEIS

Group 541

Topic/Subtopic: Visual Resources/Operations/Maintenance Impacts

Group Comment Text:

- A) Building a road would create a visual scar that would impact the beauty of the Lynn Canal landscape.
- B) It is inaccurate that the road will hug the shoreline, blending into the coastline.
- C) Will the visual degradation of the landscape have an impact on tourism?
- D) The Draft SEIS was grossly deficient in failing to conduct a survey of visitors' impressions of the scenic landscape and to attempt to assign dollar values to the degree to which it helps draw visitors. This omission invalidates the State's economic analyses of the costs and benefits of the proposed road.
- E) What is the value to the State and the region of the natural views this scenic landscape?

Group Comment Response:

- A) Visual impacts of highway alternatives are addressed in the sections on visual resources in Chapter 4 of the Draft SEIS and Appendix Z 2014 Update to Appendix G-Visual Resources Technical Report. These documents acknowledge that a highway would be visible at numerous locations from boats, ferries, and cruise ships on Lynn Canal.
- B) As noted in the Draft SEIS and its Appendix Z 2014 Update to Appendix G Visual Resources Technical Report, portions of the proposed Alternative 2B road, viewed at key viewpoints, would blend with features of the coastline because they would occur in visual transition areas (e.g., at ELVP7 discussed in Section 5.2.2 of Appendix Z 2014 Update to Appendix G; at ELVP10 in Section 5.2.5; and Section 4.3.3.2 [Point St. Mary to Eldred Rock] in the Draft SEIS). As can be seen in the visual simulations, the closer the road is to the coastline, and the less of a cut into the mountain slopes that occurs, the more the road would blend into the natural setting. Depending on the distance from the highway, the road would either be a co-dominant or subordinate feature (with the natural setting dominant) in these areas. The Draft SEIS and Appendix Z 2014 Update to Appendix G report that there are other areas where the proposed road would dominate views over the natural setting.

As stated in Section 4.3.3.4 of the Draft SEIS, the alignment has been located to maintain a buffer between the highway and the shore, reducing the visibility of the highway from Lynn Canal. Vegetation within the buffer would be maintained and shot rock slopes would be covered with overburden and seeded to reduce their visibility to the extent practicable.

- C) The impacts to visitors due to the changes anticipated from the alternatives are described in the Draft SEIS and Appendix EE, *Socioeconomic Effects Technical Report*. The proposed alternatives are expected to have little impact on the cruise ship industry in Lynn Canal. As reported in the Draft SEIS and Appendix EE (Section 3.1.4.4), cruise operators stated that a visible highway would have little or no effect on cruise itineraries. Because the cruise ships generally sail at night and visit port during the day, the aesthetic impact of a highway would not be an issue for the cruise industry (Section 4.3.5.4 of the Draft SEIS and Section 3.1.4.4 of Appendix EE). As stated in Section 4.3.5 of the Draft SEIS, the cruise ship industry is primarily affected by facilities at points of origin and destination, and is projected to grow at an annual average rate of 1 to 2 percent over the next 20 years. In addition, it is anticipated that while the proposed project would impact independent (non-cruise) visitors, the cruise visitor market will not be impacted, and is expected to grow independent of the project (Section 4.3.5.2 of the Draft SEIS).
- D) The Draft SEIS included Alaska Visitor Statistics Program data as well as information from the Skagway and Juneau Convention and Visitor's Bureaus and the cruise ship industry. As reported in the Draft SEIS and Appendix EE, *Socioeconomics Effects Technical Report*, the proposed project would not be likely to greatly impact the visitor industry, which has already shown a decrease due to economic factors.

DOT&PF and FHWA do not intend to conduct a visitor survey, as other entities have conducted them in the past and it would be outside the scope of this NEPA analysis. It should be noted that USFS visual impacts guidance (*Landscape Aesthetics: A Handbook for Scenery Management*, Handbook 701) that was relied on in the analysis, cautions against the use of monetary estimates of value for scenic attributes in visitor surveys. In addition, the National Cooperative Highway Research Program *Evaluation of Methodologies for Visual Impact Assessment* (Report 741) states that visual impact assessments do not rely on monetary value to create a common framework because scenic qualities are not well represented or valued through an economic/market approach. This NEPA analysis does not assign a quantitative or monetary value to visual quality.

DOT&PF and FHWA have reviewed the Visual Resources sections of the Draft SEIS and the technical reports—Appendix G to the 2005 EIS (*Visual Resources Technical Report*) and Appendix Z *2014 Update to Appendix G – Visual Resources Technical Report* in the Draft SEIS. Visual assessments, environmental consequences, and simulations do not appear to be inadequate, incomplete, or misleading. Impacts were fully disclosed and analyzed. Environmental consequences were frequently listed as high or very high, and compatibility with Visual Quality Objectives/Scenic Integrity Objectives for lands adjacent to the TUS corridor often were noted as unlikely. Photo simulations in the Draft SEIS and Appendix Z *2014 Update to Appendix G* showed a variety of views, mostly from the water, and often clearly illustrated the line of the highway as a new element in the view. The Draft SEIS stated that Alternative 2B would not affect visual resources to a level that would greatly detract from scenic values and impact the visitor industry.

E) Scenic values and impacts from the project on visual resources are addressed in the Draft SEIS and Appendix Z 2014 Update to Appendix G– Visual Resources Technical Report. The NEPA analysis addresses impacts to visual resources, on a qualitative basis, per USFS guidance. As discussed under Response D, above, the NEPA analysis does not

assign a quantitative or monetary value because scenic qualities are not well represented or valued through an economic/market approach.

7.26 Water Quality, Hydrology, and Floodplains Group 60

Topic/Subtopic: Water Quality, Hydrology, and Floodplains Resources/Method of Analysis

Group Comment Text:

Appendix Z (2014 Update to K – Hydrology and Water Quality Technical Report) must have a defined, site-specific baseline to be scientifically relevant. Sampling must follow a standard protocol for sampling and analysis for water quality.

Group Comment Response:

The water quality study for the Draft SEIS (Appendix Z 2014 Update to K – Hydrology and Water Quality Technical Report) is intended to document existing conditions in the study area and identify potential impacts resulting from each alternative as well as mitigation measures sufficient for a NEPA evaluation. The study is not intended to document a baseline for future water quality monitoring that might be required as part of separate federal or State processes. As stated in Section 4.3.9.3 of the Draft SEIS, all stormwater and wastewater treatment facilities will be designed, managed, and treated to meet federal and State water quality standards.

Wastewater facilities undergo a separate permitting process under the Clean Water Act Section 402 National Pollutant Discharge and Elimination System regulations. During the permitting process, sampling protocols for the facility are established. If exceedances of federal and State water quality standards occurs, corrective action is required.

Water quality facilities for stormwater runoff also undergo a separate permitting process as part of local regulations and the Clean Water Act Section 401 regulations. Alternative 2B received a Certificate of Reasonable Assurance from the Alaska Department of Natural Resources (DNR) under the Clean Water Act Section 401.

Group 57

Topic/Subtopic: Water Quality, Hydrology, and Floodplains Resources/Mitigation

Group Comment Text:

A) Where will the ferry wastewater holding tank be emptied for Alternative 2B?

B) How will toilet waste materials be addressed along the road and at the terminal for Alternative 2B?

Group Comment Response:

A) Section 4.3.9.3 of the Final SEIS is revised to clarify that sanitary waste from the ferries would be treated at the home ports in Skagway and Haines at the existing treatment facilities for Alternative 2B.

B) At the Katzehin Ferry Terminal, sanitary waste from the terminal restrooms would be treated at a new facility constructed at the terminal. The new permitted facility would meet all federal and State water quality requirements. No restroom facilities are proposed along the road alignment.

Group 61

Topic/Subtopic: Water Quality, Hydrology, and Floodplains Resources/Operation/Maintenance Impacts

Group Comment Text:

The Draft SEIS did not evaluate the effects of vehicular road pollution on aquatic species, particularly for zinc, copper, polynuclear aromatic hydrocarbons, and mercury. Recent scientific studies show that even low levels of polycyclic and polynuclear aromatic hydrocarbons and copper are dangerous for fish such as salmon and herring, and low levels of mercury may pose greater risks when added to an environment (e.g., wetlands) predisposed to foster methylation. A full environmental review requires consideration not only of compliance with water quality standards, but also of effects that may occur at concentrations lower than existing standards.

Group Comment Response:

The Draft SEIS examined the potential effects of vehicle pollution on the environment in sections related to air quality, water quality, habitat, and wildlife. Specific to water quality, the Draft SEIS evaluated the potential effects of vehicles traveling on the East and West Lynn Canal highways in Sections 4.3.9 (Alternative 2B) and 4.4.9 (Alternative 3). The evaluation included consideration of pollutants in stormwater runoff and associated water quality of receiving waters. DOT&PF and FHWA have reviewed your comments and reference documents and maintain that the mitigation measures described in Chapter 5 of the Draft and Final SEIS provide reasonable and adequate protection of terrestrial and aquatic systems.

7.27 Wetlands

Group 63

Topic/Subtopic: Wetlands/Method of Analysis

Group Comment Text:

- A) The analysis for wetland effects should be consistent and rigorous for all alternatives.
- B) Site-specific/localized effects to wetlands were not described in the Draft SEIS.
- C) The Draft SEIS did not consider effects of the broader ecosystem, and instead segmented the review of impacts to wetlands, EFH, wildlife, and Steller sea lions.

Group Comment Response:

The analysis of wetland impacts for all alternatives in Appendix Z 2014 Update to Appendix O – Wetland Technical Report of the Draft SEIS follows established methods under NEPA. The 2004 Appendix O, Wetlands Technical Report, identified the individual wetlands potentially impacted by all alternatives, described their functions, and detailed the impacts to the functions and values of each wetland. The 2004 document provided the

basis for the analysis of all the alternatives and was updated to incorporate additional information in 2005 (Appendix W – Addendum to Appendix O Wetlands Technical Report) and 2014 (Appendix Z 2014 Update to Appendix O – Wetlands Technical Report).

After Alternative 2B was identified as the preferred alternative in the 2006 ROD, additional engineering design and field investigations occurred on Alternative 2B as required by the USACE Section 404 permit process. Because that additional analysis is available, it has been incorporated into the Draft SEIS but it does not skew the overall NEPA analysis for all alternatives.

- A) The analysis for wetland impacts is sufficiently rigorous and provided an appropriate level of information for all alternatives for a NEPA alternative comparison. The analysis presented in Appendix Z 2014 Update to Appendix O Wetlands Technical Report describes the potential impacts to wetlands from all current project alternatives. The wetland mapping refinements that occurred for Alternative 2B after the 2006 ROD were minimal and did not change the order of magnitude of wetlands present. The minor refinements made to the alignment of Alternative 2B during the USACE permitting process were based primarily on other environmental constraints (i.e., bald eagle nests, geotechnical surveys, etc.). Due to the abundance of wetland resources in the region, these changes do not alter the degree of wetland impacts. Small-scale refinements that may result from additional ground surveys of wetlands for Alternative 3 (as completed for the permitting process for Alternative 2B) would not substantially change the practicability or degree of wetland impacts for Alternative 3.
- B) Impacts to wetlands are discussed by subregion of East Lynn Canal in Section 4.2 of Appendix Z 2014 Update to Appendix O Wetlands Technical Report to provide an analysis of wetlands in their respective areas. The subregions include: Berners Bay, Slate Cove to Sherman Point, Sherman Point to Katzehin River, and Katzehin River to Katzehin Ferry Terminal. For each subregion, an evaluation of impacts to functions and values as well as footprint acreage is provided. Analysis of wetland impacts that overlaps with other natural resources is noted, and a reference to those respective reports or chapters/sections in the Draft SEIS is provided.

The additional field delineation work completed near the Lace and Antler Rivers provided more refined boundary information for the wetlands in the Berners Bay area but did not affect the assessment of functions and values of the wetlands. Functions and values of wetlands across all alternatives, in consideration of their entire footprint and not just at Berners Bay, are assessed in Section 4.2 of Appendix Z 2014 Update to Appendix O – Wetland Technical Report of the Draft SEIS.

C) Wetland impacts that overlap with other natural resource impacts were noted in the Draft SEIS, and references to those respective reports or chapters/sections in the Draft SEIS were provided. Impacts to the broader ecosystem are evaluated based on the components that make up the ecosystem itself. This provided a more detailed assessment of the potential impacts that would occur for a higher level approach. Ecosystem impacts were evaluated under headings for terrestrial habitat, wildlife, EFH, and freshwater habitat and species for Alternative 2B in Sections 4.3.13 through 4.3.15 of the Draft SEIS and in Appendix Z 2014 Update to Appendix N – Essential Fish Habitat Assessment, 2014

Update to Appendix Q – Wildlife Technical Report, and 2014 *Update to Appendix O – Wetlands Technical Report*.

Group 65

Topic/Subtopic: Wetlands/Method of Analysis

Group Comment Text:

The impact site assessment in the Draft SEIS is inadequate for wetlands resources. The Draft SEIS assigned replacement values to different types of wetlands but did not explain how these values were calculated.

Group Comment Response:

Wetland functions and values are evaluated and detailed for each wetland in Appendix Z 2014 Update to Appendix O – Wetlands Technical Report of the Draft SEIS. Attachment 3 of Appendix Z 2014 Update to Appendix X – Draft Section 404/10 Permit Application and Draft Section 404(b)(1) Analysis in the Draft SEIS summarizes the wetland and waterbody rating system used. Although the rating system developed is applicable to all wetlands across all alternatives, Attachment 3 focuses on the ratings specific to Alternative 2B as part of the Draft 404/10 Permit Application. To rate wetlands and waterbodies for the purpose of determining appropriate compensatory mitigation ratios that comply with current regulations, a qualitative assessment was performed to classify wetlands and waterbodies into the following four categories: Category I, II, III, and IV. Category I wetlands and waterbodies are generally less common and high functioning. Category IV wetlands and waterbodies are more common with limited or degraded functions. Impacts of Alternative 2B would be limited to Category II and III wetland and waterbodies.

Group 69

Topic/Subtopic: Wetlands/Compensatory Measures

Group Comment Text:

A) The mitigation for effects to wetlands described in the Draft SEIS for Alternative 2B is inadequate and does not accurately portray the potential costs of compensatory mitigation. A detailed mitigation plan should be included that describes both the Yankee Cove project as well as the additional mitigation proposed. A clear description of the debit/credit ratio and costs should be provided.

B) Wildlife underpasses should not be considered wetland mitigation.

Group Comment Response:

A) With identification of Alternative 1 – No Action as the preferred alternative for the Final SEIS, DOT&PF notified USACE that it was withdrawing its Section 404/10 Permit Application for the JAI Project. Mitigation costs for all reasonable alternatives were provided in the Appendix Z 2014 Update to Appendix D – Technical Alignment Report. Had the ROD selected an alternative requiring a USACE 404/10 permit, calculations of credits from potential permittee-responsible mitigation projects, as well as the amount of credits to be purchased from an In-Lieu Fee provider would have been detailed in the Compensatory Mitigation Plan approved by the USACE during the Section 404/10 permitting process for a build alternative.

B) Section 5 of Appendix Z 2014 Update to Appendix O – Wetlands Technical Report of the Draft SEIS stated that the underpasses are out-of-kind mitigation to offset losses to a portion of the terrestrial wildlife habitat impacted by Alternative 2B. The remaining palustrine and estuarine wetlands (0.2 acre) would be mitigated through In-Lieu Fee compensation based on market value of mitigation costs.

Group 64

Topic/Subtopic: Wetlands/Operation/Maintenance Impacts

Group Comment Text:

- A) Alternative 2B would compromise wetland values for groundwater recharge, wildlife habitat, and nutrient transport. Fill in wetlands would reduce these functions to zero.
- B) Alternative 2B violates EO 11990 because other practicable alternatives with less impacts to wetlands are available.

Group Comment Response:

- A) Wetland impacts that overlap with other natural resource impacts were noted in the Draft SEIS and references to those respective reports or chapters/sections in the Draft SEIS are provided below. Impacts to the broader ecosystem were evaluated based on the components that make up the ecosystem itself. This provided a more detailed assessment of the potential impacts that would occur for a higher level approach. Ecosystem impacts were evaluated under headings for terrestrial habitat, wildlife, EFH, and freshwater habitat and species for Alternative 2B in Sections 4.3.13 through 4.3.15 of the Draft SEIS and in Appendix Z 2014 Update to Appendix N – Essential Fish Habitat Assessment, 2014 Update to Appendix Q – Wildlife Technical Report, and 2014 Update to Appendix O – Wetlands Technical Report. In addition, Section 4.3.12 of the Draft SEIS described impacts to groundwater from Alternative 2B and noted that "effects would be minimized through the use of porous fill material and cross-drainage structures" to minimize effects to shallow groundwater. This section also states the importance of wetlands to wildlife habitat, particularly the Berners Bay wetlands. As stated in the section, wildlife habitat functions would be reduced due to loss of habitat, but an abundance of similar habitat is adjacent to the alignment. Nutrient transport could be disrupted from construction of the alignment through wetlands but as stated in the section, large areas of similar habitat in the surrounding areas, and adequate ditching and drainage structures, would moderate loss of these functions. Impacts from fill in wetlands would reduce, but not eliminate, functions. Unavoidable impacts to wetlands and reductions of wetland functions are proposed to be offset through mitigation.
- B) The Draft SEIS included an evaluation in accordance with EO 11990 that identified Alternative 2B as the only practicable alternative that comprehensively best meets the purpose and need for the project. The FHWA and DOT&PF have identified Alternative 1 No Action as the preferred alternative for the Final SEIS. It would not result in impacts to wetlands and is consistent with EO 11990.

Topic/Subtopic: Wetlands/Section 404 Consultation

Group Comment Text:

The information provided in the Draft SEIS and the draft application for a Clean Water Act § 404 permit fails to satisfy the agencies' NEPA obligations and improperly restricts the analysis of the least environmentally damaging practicable alternative. The Clean Water Act Section 404(b)(1) analysis is based on unreliable traffic calculations and the assessment of practicability of alternatives varies by alternative. Alternative 2B is not the least environmentally damaging practicable alternative; it is the most environmentally damaging practicable alternative.

Group Comment Response:

FHWA has met its requirements under NEPA by evaluating a range of alternatives in accordance with CEQ guidance (40 CFR 1500) and FHWA regulations (23 CFR 771.130).

An evaluation of practicability of the alternatives is required pursuant to USACE guidelines at 40 CFR 230.10(a). A practicable alternative "is available and capable of being done after taking into consideration cost, existing technology, and logistics..." For the JAI Project Draft Section 404(b)(1) Analysis Update presented in Attachment 4 of the 2014 Update to Appendix X – Draft Section 404/10 Permit Application and Draft Section 404(b)(1) Analysis, provided in Appendix Z of the Draft SEIS, the criteria used to evaluate practicability include project purpose, capital and operating costs, travel time, daily traffic, travel demand accommodated, wetland impacts, and EFH impacts. The USACE performs their own analysis and makes the final determination regarding the least environmentally damaging practicable alternative.

7.28 Wildlife

Group 74

Topic/Subtopic: Wildlife/Existing Conditions

Group Comment Text:

- A) The description of Slate Cove in Section 3.3.2.1 of the Draft SEIS should be revised to describe its importance as habitat for marine mammals, fish spawning, birds, etc.
- B) The SEIS should recognize the importance of Berners Bay spring herring and eulachon runs to bald eagles, surf scoters, and Thayer's gulls because it is a significant proportion of the region or, in the case of Thayer's gulls, a significant portion of the world population of a given species at a crucial point in its lifecycle.
- C) Short eared owls are particularly dependent on Alaska coastal wetlands and natural grasslands.
- D) The rocky shores along Lynn Canal could be suitable nesting, foraging, or migration habitat for Black Oystercatchers.

Group Comment Response:

- A) The description of Slate Cove in Section 3.3.2.1 of the Draft SEIS is a summary of the results of the intertidal and subtidal surveys described in Section 4.1.1.2 of the 2004 Appendix N, *Essential Fish Habitat*. While it may be used by marine mammals, fish, and birds, the surveys did not indicate it should have status as important habitat.
- B) Section 3.3.2 and 3.3.4 of the Draft SEIS recognized the importance of Berners Bay for herring and eulachon and the species that depend on them. These sections did not describe every species that uses Berners Bay, rather they focused on USFS management indicator species, species of concern, and sensitive species, as well as State species of special concern and other species identified by resource agencies in Scoping (see Draft SEIS Section 3.3.5.1). To avoid overwhelming the public and decision makers with an assessment of impacts on hundreds of species, much of which would be repetitive or based on very little data, a subset of species was selected for analysis. This subset represents the overall species that occur in Lynn Canal, although Thayer's gull and surf scoters are not specifically referenced. The ultimate list of species used in the analysis was approved through consultation with the wildlife resource agencies.
- C) As described in Section 3.2 of the 2004 Appendix Q, *Wildlife Technical Report*, some species are more likely to be affected by the project alternatives than others. To avoid overwhelming the public and decision makers with an assessment of impacts on hundreds of species, much of which would be repetitive or based on very little data, a subset of species was selected for analysis. This subset represents the overall species that occur in Lynn Canal, including short eared owls. The list of species used in the analysis was approved through consultation with the wildlife resource agencies.
- D) Section 3.3.1.1 of the Appendix Z 2014 Update to Appendix Q Wildlife Technical Report discussed black oystercatchers. Although surveys were not conducted, reliable sources were used to determine population numbers in Lynn Canal.

Group 87

Topic/Subtopic: Wildlife/General

Group Comment Text:

The SEIS and *Wildlife Technical Report* should be updated/revised with edits from ADF&G (see comment letter from ADF&G 11/25/2014). Please note that edits addressed under this comment group may pertain to wildlife issues addressed under other comment groups.

Group Comment Response:

FHWA and DOT&PF have updated the Final SEIS and associated appendices to respond to ADF&G comments. See also FHWA's response letter to ADF&G, which is provided in this Final SEIS (Attachment B of this appendix), for specific responses to each of the editorial comments made by ADF&G.

Topic/Subtopic: Wildlife/Method of Analysis

Group Comment Text:

A) How were the high-use wildlife corridors mapped?

- B) Were the mapping studies reviewed by the scientific community?
- C) A survey for amphibian ponds should be completed for the SEIS to allow for comparison between alternatives.
- D) What sampling was done for benthic invertebrates, which are important food for shorebirds, waterfowl, fish and mammals?
- E) Were seasonal observations made for feeding shorebirds and waterfowl?

Group Comment Response:

- A) The high-use wildlife corridors along Alternative 2B are based on data gathered by ADF&G as part of the wildlife monitoring studies funded by DOT&PF pursuant to FHWA's 2006 ROD. These studies were intended to facilitate ADF&G game management after project construction. The wildlife studies collected baseline population and range information to formulate the high-use wildlife corridors identified in Section 3.3.5 of the Draft SEIS.
- B) The studies conducted by ADF&G to determine high-use wildlife corridors were published in a series of white papers described in Section 3.3 of the Appendix Z 2014 Update to Appendix Q Wildlife Technical Report in the Draft SEIS. The scientific community has an opportunity to review the SEIS and supporting documents as part of the NEPA review process.
- C) A specific survey for amphibian ponds potentially affected by each alignment was not conducted for the Draft and Final SEIS. Rather, DOT&PF and FHWA assumed that the open water and emergent wetlands identified in the wildlife habitat studies were sufficiently representative of potential amphibian habitat to determine and compare potential impacts of the project alternatives. The alignment of Alternative 2B was shifted to avoid open water and emergent wetlands. As stated in Section 4.3.15.5 of the Draft and Final SEIS, if Alternative 2B had been selected, a pre-construction survey would have been conducted to confirm the highway would not impact amphibian ponds.
- D) As described in the 2004 Appendix N, *Essential Fish Habitat Assessment*, DOT&PF surveyed intertidal and subtidal areas on the east and west sides of Lynn Canal for benthic communities and wildlife supported by benthic invertebrates.
- E) Shorebird and waterfowl surveys were not conducted specific to the project. Habitat usage by shorebirds and waterfowl was assessed for each alternative based on literature review from published sources. A description of each bird species assessed is included in Section 3.3.2 of the 2004 Appendix Q, *Wildlife Technical Report*, and Section 3.3.1 of the 2014 Update to Appendix Q Wildlife Technical Report.

Topic/Subtopic: Wildlife/Mitigation

Group Comment Text:

Construction of a highway alternative would increase hunting, angling, and wildlife harassment from human access and disturbance:

- A) Increased use of these resources, and the resultant management needs, was not adequately considered in the Draft SEIS:
- 1) Deferring to ADF&G and Fish and Game Boards to mitigate adverse effects on wildlife populations through measures such as seasons and bag limits is not adequate because these entities are politically influenced and cannot increase wildlife populations or make up for habitat loss or degradation.
- 2) Board of Game manages species over an entire Game Management Unit (GMU), and population numbers for the GMU might not reflect local population impacts.
- 3) The SEIS should analyze the costs to ADF&G to manage hunting and fishing or to employ additional staff as a result of improved access.
- B) How will the mitigation plans adequately balance wildlife protection with the advantages given to hunters, tourism, and others?

Group Comment Response:

- A 1) As discussed in Section 3.1.6 of the Draft SEIS, harvests in Alaska are dually managed by the State and federal governments, and both have their own legislation and enforceable regulations. As discussed in Section 4.1.4.2 of Appendix DD, *Land Use Technical Report*, increased access from the project could result in ADF&G considering management actions to ensure sustainable harvests of some species (e.g., moose). Possible management actions could include shortening of seasons, reduction in bag limits, the use of drawing permits, and more active monitoring and enforcement duties by State and federal agencies. It is unknown at this time if and exactly what these actions could entail. FHWA and DOT&PF do not assume ADF&G would be responsible for mitigating the direct impacts of the project on wildlife habitat.
- 2) Section 3.2.6.2 of Appendix DD, *Land Use Technical Report*, noted that the project area is in GMU 111 and 115. GMUs are designed to improve wildlife management and simplify hunting and trapping regulations. Each GMU is defined based on the land use and ownership, habitat, and human density and is managed for the overall health of the species within the GMU, including accounting for localized impacts.
- 3) ADF&G confirmed in January 2016 that no additional staff is anticipated to manage additional harvests that may occur as a result of Alternative 2B. Section 4.3.15 of the Final SEIS has been updated to reflect this input from ADF&G.

B) As stated in Sections 4.3.1.3, 4.4.1.3, 4.6.1.3, 4.3.15.3, 4.4.15.3, and 4.6.15.3 of the Draft SEIS for Alternative 2B, hunting and fishing pressure has increased along every highway in Alaska that has opened a formerly remote area. Increases in recreational hunting and recreational and personal use fishing would be expected along Alternative 2B. As in other readily accessible regions of the State, ADF&G would monitor the resources along Lynn Canal and make recommendations to the Board of Fish and Game to adjust fish and game regulations, as necessary, to protect those resources from over utilization, including limits on season duration, take limits, lottery drawings, etc. Therefore, it is expected that this increased pressure would not result in undesirable population-level effects to wildlife.

In addition, Section 5.9 and 5.12 of the Draft SEIS provided mitigation measures to balance the potential impacts to wildlife from the project, including hunters and tourism. These measures included:

- (1) Wildlife crossing signage in areas of high brown bear, moose, and mountain goat use as determined by the ADF&G would be incorporated into the road design.
- (2) In areas of high moose use as identified by the ADF&G, roadside seeding would use only non-palatable species to discourage browsing near the roadways.
- (3) Specific to Alternative 2B, no pullouts or parking areas would be constructed in the area between the Lace and Antler Rivers to minimize habitat degradation and wildlife disturbance from pedestrians as well as to provide for public safety. Vegetative openings adjacent to the highway corridor on the Berners Valley floor would be blocked with large boulders to discourage uncontrolled access by off-road vehicles, in order to minimize wildlife disturbance.
- (4) No parking places would be provided in areas that may provide pedestrian access to the Gran Point and Met Point haulouts.
- (5) No boat launches or structures that enhance boat access points (other than the new ferry terminal north of the Katzehin River and terminal improvements at Skagway) would be constructed by DOT&PF.

Group 128

Topic/Subtopic: Wildlife/Mitigation

Group Comment Text:

- A) The Draft SEIS did not provide adequate wildlife corridors and underpasses for brown bears in Berners Bay and at the Katzehin River.
- B) In wintertime, goats come close to the shore to feed. Are there provisions for goats? What is being done to facilitate goat passage?
- C) The SEIS should describe mountain goat hazing during avalanche maintenance and whether information would be available in real-time.
- D) What provisions have been made to protect wolverines?

Group Comment Response:

- A) For Alternative 2B, the number and general location of underpasses for brown bears has been coordinated extensively with ADF&G. FHWA and DOT&PF believe the proposed mitigation is adequate to address impacts. In Berners Bay, the Antler and Lace River bridges would be extended 50 feet at each end to facilitate wildlife passage. There would be two wildlife underpasses located between the two rivers. There are also four anadromous streams in Berners Bay that would have bridges with extended span lengths allowing for wildlife passage. The Katzehin River bridge would be extended 100 feet north, and an underpass would be placed between the river and the ferry terminal.
- B) Along Lynn Canal between Berners Bay and Katzehin River, there would be 21 bridges that would facilitate wildlife movement. Wildlife crossing signs would be placed as recommended by ADF&G, and the project would incorporate sight lines in the final design to enable drivers to better see mountain goats in close proximity of the road.
- C) DOT&PF has decided not to attempt to haze goats in advance of helicopter bombing. This is the prudent approach given safety considerations of personnel considering that the effectiveness of hazing has not proven effective. Note that goats are not a protected species.
- D) Section 4.3.15.3 of the Draft SEIS stated that impacts to wolverines from habitat loss, vehicular collisions, and avalanches would be minimal. As such, no mitigation measures specific to wolverines are proposed.

Group 130

Topic/Subtopic: Wildlife/Mitigation

Group Comment Text:

- A) Who reviews the effectiveness of the barge access area restoration effort after construction?
- B) Does the scientific community (e.g., university, management agencies, hunting groups, fishermen) accept the effort in Compensatory Mitigation as adequate to maintain wildlife numbers?

Group Comment Response:

- A) Section 5.5 of the Draft and Final SEIS address mitigation at intertidal and subtidal areas for all build alternatives. As stated in that section, temporary beach access points would be restored after project completion to conditions similar to those that existed previously. The process of restoration would be a requirement written into the DOT&PF construction contract and would be the responsibility of the contractor. DOT&PF would oversee the contractor's work in general, including the mitigation work, to ensure it was satisfactorily completed.
- B) Chapter 5 of the Draft SEIS described the proposed mitigation to offset potential impacts from the build alternatives. Regulatory agencies, as well as academia and the general public, provided comments on the proposed mitigation as part of the NEPA

process. In addition, the USACE Clean Water Act Section 404 permit process included a Public Notice period to solicit comments on the project and potential mitigation. These public comment periods allowed the scientific community to comment on the project mitigation. Whether there is overall acceptance from the scientific community, however, is unknown and outside of the NEPA and USACE approval processes. Comments and information received during these processes are incorporated into the Final SEIS. With identification of Alternative 1 – No Action as the preferred alternative for the Final SEIS, the USACE approval process has been discontinued.

Group 684

Topic/Subtopic: Wildlife/Mitigation

Group Comment Text:

What provisions have been made to protect orcas?

Group Comment Response:

As stated in Sections 5.9 and 5.12 of the Draft SEIS, mitigation measures to protect marine mammals, including orcas, have been included for construction and operation of the project. Although numerous measures are proposed, mitigation measures applicable to orcas in Lynn Canal include:

- (1) Pile driving at ferry terminals and multi-span bridge construction sites would be done with vibratory hammers to the extent practicable to minimize impacts to marine mammals;
- (2) During all piling installations, a trained observer would monitor for the presence of marine mammals and pile driving would be halted if a marine mammal comes within 660 feet of the activity; and
- (3) To further protect marine mammals from human disturbance, no boat launches or structures that enhance boat access points (other than the new ferry terminal north of the Katzehin River and terminal improvements at Skagway) would be constructed by DOT&PF.

Group 84

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

- A) The effects of a road alternative on wildlife species and habitat have been underestimated or not fully disclosed in the Draft SEIS.
- B) Habitat fragmentation and human disturbance will have long-term negative effects on fish and wildlife in the corridor.
- C) The Draft SEIS did not address the effects of habitat fragmentation on prey accessibility for wolves
- D) The Draft SEIS ignored that building a road increases both legal and illegal hunting and trapping pressures on wolves.

- E) The Draft SEIS was contradictory by stating that Alternative 2B would be a barrier to wildlife movement while stating that moose would not be affected by construction of the highway.
- F) The analysis of impacts to wolverines should consider ADF&G studies that characterize their home ranges and vulnerability to trapping.
- G) The Draft SEIS did not utilize the brown bear study information to site the highway through Berners Bay. The highway proposed for Alternative 2B would increase hunting and mortality of brown bears from human access and disruptions during the breeding season.
- H) Alternative 2B would provide human access and increase legal and illegal hunting of wolverines.
- I) The Draft SEIS did not evaluate effects to wolverines from avalanche maintenance activities.
- J) Alternative 2B would increase traffic collisions for moose and mountain goats. How many animals are estimated to be killed or injured by vehicles on the highway alternatives?
- K) DOT&PF stated that the funds provided for the ADF&G study were to allow ADF&G to better manage the wolverine population if Alternative 2B was built. However, there are no additional funds to allow for additional study to evaluate the population as a road is built. Thus, the burden to manage the increased wolverine harvest is on ADF&G with no additional funds.
- L) The description and evaluation of effects to mountain goats in the Draft SEIS did not account for/was lacking:
- (1) How blasting for avalanche mitigation can be compatible with mountain goat populations in the area.
- (2) Where mountain goats winter use areas intersect Alternative 2B and how that overlap would affect mountain goats. The SEIS should be updated to reflect that studies show 25.3 kilometers of the highway would intersect moderate to high use mountain goat wintering areas. How will construction and operation of a highway alignment in their winter range disturb mountain goats?
- (3) The three genetically distinct populations of mountain goats in Lynn Canal and impacts to these populations.
- (4) The mountain goats place in the ecosystem as prey for bears and wolves or scavanged species for wolverine.
- (5) Hazing and its impacts on goats.

- M) The Draft SEIS claimed that the road alternatives (2B, 3, 4B, and 4D) would have a minor effect on wildlife because they would result in less than 1 percent loss of the available habitat in the project study area, oversimplifying the issue. It also contradicted a later claim that "Alternative 2B would create a potential barrier between upland habitats and important marine fringe along the east side of Lynn Canal that would fragment the habitat of animals that tend to avoid roads."
- N) The Draft SEIS did not account for the genetic differences in brown bear populations in Berners Bay.
- O) The Draft SEIS did not consider all of the locations of high brown bear use that would intersect the new highway in Alternative 2B.
- P) The Draft SEIS did not explain if the road would result in an increase in Defense of Life and Property kills.
- Q) Mitigation should be put into monetary terms and factored into the costs of Alternative 2B.
- R) The Draft SEIS lacks an assessment of cumulative impacts to bear, mountain goats, wolverine, and wolf.

Group Comment Response:

- A) DOT&PF and FHWA have fully disclosed the effects of the road alternatives on wildlife species and habitat. Impacts to wildlife species from a road alternative are addressed in Sections 4.3.13, 4.4.13, 4.6.13, and 4.8.12 of the Draft SEIS. Additional information has been added to the Final SEIS, based on the comments in this comment group, as described below.
- B) DOT&PF and FHWA recognize that road alternatives will fragment habitat and have disclosed those effects. Chapter 4 of the Draft SEIS describes the effects of each alternative on wildlife and fish from habitat fragmentation and human disturbance. Wildlife undercrossings and bridge extensions are proposed to help mitigate for these effects to wildlife. Bridges are included over all anadromous streams to avoid impacts to fish habitat.
- C) Section 4.3.15 of the Final SEIS includes a discussion on the prey accessibility impacts for wolves from habitat fragmentation from Alternative 2B.
- D) Information regarding hunting and trapping pressures on wolves that would have resulted from Alternative 2B is incorporated in Section 4.3.15 of the Final SEIS.
- E) The Draft SEIS is not contradictory in the assessment of barriers between habitat and impacts to moose. The road alternatives would fragment habitat but would not create an uncrossable barrier that prevents wildlife movement and thereby results in the loss of all fragmented habitat. Section 4.8.12.3 of the Draft SEIS included analysis of construction impacts to moose from the alternatives, including Alternative 2B. As stated in Section 4.3.15 of the Draft SEIS, undercrossings to minimize potential effects of fragmentation from the road are incorporated in the design of Alternative 2B. Section 4.8.10 describes

potential impacts during construction to moose from noise, human disturbance, and vehicular collisions. Moose are known to adapt to human disturbances and construction noise, reducing the likelihood that moose would be adversely displaced or disturbed by construction noise and human presence during construction. Construction vehicles operate at relatively slow speeds, and generate loud noise, which greatly reduces the likelihood of collisions with moose because moose would move away from the vehicles and noise.

- F) Trapping pressures resulting from Alternative 2B on wolverines are incorporated in Section 4.3.15 of the Final SEIS.
- G) Section 4.3.13 of the Draft SEIS referenced Figure 3-21, which illustrated these potential high use areas as they relate to project alternatives based on information from the studies. Alternative 2B was modified in several locations to avoid sensitive resources. Between the Lace and Antler Rivers, the alignment was determined by resource agencies input and wetland permitting requirements to avoid wetlands. Wildlife undercrossings are incorporated into the design as discussed in Section 4.3.13 of the Draft SEIS.

As described in Section 4.3.1.3 of the Draft SEIS, hunting and fishing pressure has increased along every highway in Alaska that has opened formerly remote areas. Increases in hunting and fishing would occur along the project alignment. As in other readily accessible regions of the State, ADF&G would monitor the resources along Lynn Canal and adjust fish and game regulations, as necessary, to protect these resources from over utilization. ADF&G would consider management actions to ensure sustainable harvests including more active monitoring and enforcement duties by State and federal agencies. Furthermore, the effects of increased hunting and trapping pressure could be controlled by ADF&G and the Board of Game through season duration, take limits, lottery drawings, etc. Therefore, it is expected that this increased pressure would not result in undesirable population-level effects. Description of hunting and trapping pressures relative to brown bear are incorporated in Section 4.3.15 of the Final SEIS.

H) Per the comment, Section 4.3.15 of the Final SEIS includes the pertinent information from the 2004, 2005, and 2014 wildlife technical reports and incorporates recent information on the effects of increased hunting and trapping pressures on wolverines as well as wolverine habitat use and loss as a result of Alternative 2B. As described in Section 4.3.1.3 of the Draft SEIS, hunting and fishing pressure has increased along every highway in Alaska that has opened formerly remote areas. Increases in hunting and fishing would occur along the alignment. As in other readily accessible regions of the State, ADF&G would monitor the resources along Lynn Canal and adjust fish and game regulations, as necessary, to protect these resources from over utilization. ADF&G would consider management actions to ensure sustainable harvests including more active monitoring and enforcement duties by State and federal agencies. Furthermore, the effects of increased hunting and trapping pressure could be controlled by ADF&G and the Board of Game through season duration, take limits, lottery drawings, etc. Description of hunting and trapping pressures relative to wolverines are incorporated in Section 4.3.15 of the Final SEIS.

- I) Section 4.3.4.5 of the 2014 Update to Appendix Q Wildlife Technical Report addresses the potential impacts to wolverines as result of avalanche maintenance activities. Avalanche control could result in mortality to wolverines because avalanche chutes are preferred habitat for foraging; however, the probability of mortality related to avalanche control for Alternative 2B is likely low due to low wolverine densities in the area. The information has been incorporated into Section 4.3.15.3 of the Final SEIS.
- J) Section 4.3.15.3 of the Draft SEIS includes a description of the impacts of vehicular collisions on moose and mountain goat. Due to poor visibility in winter, the proposed highway could create the potential for vehicle collisions. Wildlife crossing signage in areas of high brown bear, moose, and mountain goat use as identified by ADF&G would be incorporated into the road design. Quantitative estimates of collisions were not completed, but given the population levels and anticipated traffic volumes mortality from vehicular collisions is not expected to have population level effects.
- K) The studies conducted by ADF&G were funded by DOT&PF as mitigation to determine population densities to aid ADF&G in harvest analysis. ADF&G confirmed in January 2016 that no additional staff would have been anticipated to manage additional harvests that may occur as a result of Alternative 2B. The Final SEIS updates Section 4.3.15 to address the ADF&G management of several wildlife species due to a new road.
- L) Mountain goat habitat loss, impacts from avalanche control, and prey species effects were addressed in Section 4.3.4.4 of Appendix Z 2014 Update to Appendix Q Wildlife Technical Report, provided in the Draft SEIS.
- (1) Section 4.3.15 of the Final SEIS is updated to reflect that avalanche control activities will likely occur during the spring and could result in mortality to mountain goats because avalanche chutes are in steep habitat preferred by goats, and are occasionally used for forage. The noise from avalanche detonation would be noticeable to mountain goats. Although mountain goats may react to sounds from avalanche detonation, they return to their previous behavior within an hour or so after isolated disturbances. The noise created by the resulting avalanche would be no different than that from naturally occurring avalanches.
- (2) The Draft SEIS considered all identified locations of high mountain goat use that would intersect the Alternative 2B alignment. Section 4.3.13 of the Draft SEIS referenced Figure 3-21, which illustrated potential high use areas as they relate to project alternatives based on information from the studies. Section 4.13.3 of the Draft SEIS identified that the Alternative 2B alignment would intersect winter habitat for mountain goats. As requested by ADF&G, wildlife crossing signage in areas of high mountain goat use as identified by ADF&G would be incorporated into the road design.
- (3) FHWA recognizes that genetically distinct populations of mountain goats are found along the alignment of Alternative 2B. However, the overall impacts to the population in Lynn Canal were evaluated in Section 4.3.13 of the Draft SEIS because mountain goat populations are managed by the ADF&G at the game unit level for populations in Lynn Canal, not at the genetic level.

- (4) The analysis and ecological importance of mountain goats in the project area was discussed in Section 4.3.15 of the Draft SEIS and in Appendix Z 2014 Update to Appendix $Q-Wildlife\ Technical\ Report$. Per the comment, details on mountain goats as a prey species has been added to Section 4.3.15 of the Final SEIS.
- (5) Section 5.9 of the Final SEIS has been updated to reflect that no hazing of mountain goats would occur prior to avalanche control activities.
- M) The Draft SEIS is not contradictory in the assessment of habitat loss and barriers between habitat. The road alternatives would fragment habitat but not create an uncrossable barrier that prevents wildlife movement, resulting in the loss of all fragmented habitat. To offset potential impacts from the Alternative 2B road on wildlife as described in Section 4.3.13 of the Draft SEIS, several wildlife undercrossings and extended bridges are proposed along the road alignment. The loss of 1 percent of the available habitat is described in the context of overall habitat. Species specific impacts from habitat loss are reported in detail in Section 4.3.15 of the Draft SEIS and in Appendix Z 2014 Update to Appendix Q Wildlife Technical Report.
- N) The Draft SEIS did not account for genetic populations. FHWA recognizes that genetically distinct populations of brown bear are found along the alignment of Alternative 2B. However, the overall impacts to the population in Lynn Canal were evaluated for effects in Section 4.3.13 of the Draft SEIS, as bear populations are managed by the ADF&G at the game unit level for populations in Lynn Canal, not at the genetic level.
- O) The Draft SEIS did consider all identified locations of high brown bear use that would intersect the Alternative 2B alignment. Section 4.3.13 of the Draft SEIS referenced Figure 3-21, which illustrated potential high use areas as they relate to project alternatives based on information from the studies. Mitigation is proposed to address these effects. Several wildlife undercrossings were incorporated into the design as discussed in Section 4.3.13 of the Draft SEIS. Section 5.9 of the Draft SEIS included design measures for road crossings and signage to minimize potential impacts to wildlife with Alternative 2B.

For Alternative 2B, the number and general locations of undercrossings, alignments, and bridge extensions as detailed in the Draft SEIS has been coordinated with resource agencies, including ADF&G. FHWA and DOT&PF believe the proposed mitigation is adequate to address impacts.

- P) Sections 4.3.15.3, 4.4.15.3, and 4.6.15.3 of the Final SEIS are updated to include an assessment of Defense of Life and Property incidents that may occur as a result of the road alternatives.
- Q) Section 5.12.5 of the Draft SEIS included costs anticipated for the mitigation relative to Alternative 2B.
- R) Cumulative impacts to terrestrial species were addressed in Section 4.9.2.12 of the Draft SEIS. Additional details have been included in the Final SEIS.

Group 89

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

- A) The Draft SEIS underestimates the effects of Alternative 2B on fish and wildlife species using shoreline areas (particularly in Berners Bay) and salmon streams.
- B) The Draft SEIS ignored that blasting the road and subsequent landslides will dump large quantities of rubble/debris/sediment into ocean basin habitat.

Group Comment Response:

- A) Sections 4.3.13 and 4.3.15 of the Draft SEIS appropriately describe and estimate the potential effects of Alternative 2B on fish and wildlife species from roadway development and placement of fill in the subtidal and intertidal areas. Effects from placement of fill and dredging, loss of habitat, increased sedimentation and nutrient loading, spills, and increased hunting/fishing pressures are assessed for shoreline areas as well as anadromous streams. The analyses presented in these sections account for the construction and long-term use of the roadway and recognizes that these will result in negative effects to wildlife and fish species.
- B) Sections 4.8.11, 4.8.12, and 5.9 of the Final SEIS have been updated to explain that the contractor would implement measures to reduce the potential for rubble/debris/sediment from blasting and other construction activities entering subtidal or intertidal areas during construction.

Group 111

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

The Draft SEIS did not state how the alternatives would comply with the Migratory Bird Treaty Act.

Group Comment Response:

As required by the Migratory Bird Treaty Act, Section 5.8 of Final SEIS has been augmented to clarify that no clearing of vegetation would occur during the USFWS approved nesting window without a pre-nesting survey. Pre-nesting surveys would be conducted immediately prior to clearing activities by a qualified biologist.

Group 121

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

- A) The SEIS should evaluate the effects to migrating waterfowl from loss of habitat, human access to shoreline areas, and vehicle bird strikes with Alternative 2B.
- B) The Draft SEIS included unsubstantiated claims and faulty logic regarding impacts to birds, including:

- (1) Heron use in urban and rural areas is the same, and habituation would occur for all individuals with construction of a road;
- (2) Alternative habitat will be available for species displaced by human activity; and
- (3) Low population levels may be an indication of a longer-term population trend or territorial characteristics, or may indicate that low density is normal.

Group Comment Response:

- A) Section 4.3.15 of the Final SEIS has been updated to include more detail on the effects of Alternative 2B on migrating waterfowl, including impacts from more people accessing the Katzehin River delta and Berners Bay shoreline and the effects of wetland habitat loss. The effects of vehicle traffic and vehicle bird strikes on waterfowl are also described in Section 4.3.15 of the Final SEIS
- B) Additional analysis of potential impacts of highway alternatives on birds has been provided in Sections 4.3.15, 4.4.15, and 4.6.15 of the Final SEIS. The analysis includes further assessment of changes in bird activity with changes in human activity, impacts from loss of habitat, and population trends.

Group 124

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

The Draft SEIS did not provide scientific evidence to support the assertion that harbor seals would not be affected by vehicle traffic on the Alternative 2B road because it is at least 100 yards from the shoreline, or that seals may habituate to traffic at the Katzehin River bridge or choose to use areas further downstream.

Group Comment Response:

The information in Section 4.3.15.1 of the Draft SEIS concerning impacts to harbor seals from Alternative 2B is derived from Appendix Q, *Wildlife Technical Report*, which was appended to the 2004 Draft SEIS. The scientific evidence in Appendix Q supporting the analysis of impacts to harbor seals is in Section 4.3.15.1 of the Final SEIS.

Group 676

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

Group Comment Text:

It is not clear from the Draft SEIS if FHWA conducted an analysis to determine the environmentally preferred alternative that included a review of road construction impacts to marine mammals. Impacts to marine mammals are expected to be less with the alternatives that rely exclusively on ferry transportation than those that include road construction and associated activities in and around haulouts and Berners Bay.

Group Comment Response:

Draft EIS for agency/public review does not typically identify the environmentally preferred alternative. Per 40 CFR 1505.2(b) and FHWA Technical Advisory 6640.8A Section VIII (ROD), the ROD will include the environmentally preferred alternative. The JAI Project ROD identifies Alternative 4C as the environmentally preferred alternative due, in part, to it having a lower potential for impacts to marine mammals (see Section III.G of the ROD). The Final SEIS identifies Alternative 1 – No Action as the preferred alternative (see Section 2.5 of the Final SEIS).

Group 683

Topic/Subtopic: Wildlife/Operation/Mitigation Impacts

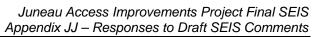
Group Comment Text:

The data collected and analyzed in wildlife studies since 2006 is important to inform decision makers of the effects of Alternative 2B, but the studies should be expanded to cover habitat affected by Alternative 3 to allow a reasoned comparison among all alternatives. The Draft SEIS lacked Information on whether the west side population is as vulnerable as the east side population of mountain goats, moose, or any other wildlife. Without similar data for moose on the west side of Lynn Canal, it is difficult to assess the effects of Alternative 3 relative to the level of detail available for Alternative 2B. Additionally, information pertaining to wolverines is insufficient on both sides of the Lynn Canal.

Group Comment Response:

The ADF&G studies in the East Lynn Canal project area were not conducted to provide information to support an evaluation of potential effects of Alternative 2B in the SEIS. Rather, they were conducted as mitigation required in the FHWA 2006 ROD for the JAI Project to assist ADF&G manage those populations. Extrapolation of regional data to areas in proximity and with similar topography and habitat types is appropriate for an alternatives analysis under NEPA and is commensurate with other NEPA evaluations.

Additionally, Section 4.4 of Appendix Z 2014 Update to Appendix Q – Wildlife Technical Report, in the Draft SEIS, uses several broad conclusions from the ADF&G studies to develop a reasonable analysis of potential effects from the construction, operation, and maintenance of Alternative 3 on the west side of Lynn Canal. To not apply these conclusions in the JAI Project NEPA evaluation would limit a reasonable analysis of these effects due to the lack of region-specific information.

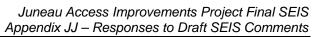




Attachment A

Correspondence from and Reponses to Cooperating Agencies since the Draft SEIS

- Environmental Protection Agency (EPA)
 - EPA to Federal Highway Administration (FHWA) Comments on 2014 Draft SEIS (November 25, 2014)
 - FHWA to EPA Transmittal of 2017 Preliminary Final SEIS for Cooperating Agency Review and Response to 2014 Draft SEIS Agency Comments (August 31, 2017)
 - o EPA to FHWA Comments on 2017 Preliminary Final SEIS (September 15, 2017)
- U.S. Army Corps of Engineers (USACE)
 - o USACE to FHWA Comments on 2014 Draft SEIS (November 25, 2014)
 - o FHWA to USACE Notification of Withdrawal of the Section 404/10 Permit Application for the JAI Project (December 20, 2016)
 - FHWA to USACE Transmittal of 2017 Preliminary Final SEIS for Cooperating Agency Review and Response to 2014 Draft SEIS Agency Comments (August 31, 2017)
- U.S. Coast Guard (USCG)
 - o FHWA to USCG Transmittal of 2017 Preliminary Final SEIS for Cooperating Agency Review (August 31, 2017)
- U.S. Forest Service (USFS)
 - o USFS to FHWA Comments on 2014 Draft SEIS (November 25, 2014)
 - FHWA to USFS Transmittal of 2017 Preliminary Final SEIS for Cooperating Agency Review and Response to 2014 Draft SEIS Agency Comments (August 31, 2017)







UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

OFFICE OF ECOSYSTEMS, TRIBAL AND PUBLIC AFFAIRS

November 25, 2014

Tim A. Haugh, Environmental Program Manager US DOT Federal Highway Administration Alaska Division P.O. Box 21648
Juneau, Alaska 99802-1648

RE: EPA comments on the Juneau Access Draft Supplemental Environmental Impact Statement

(SEIS), EPA Project #92-091-FHW.

Dear Mr. Haugh:

We have reviewed the above-referenced EIS (CEQ No. 20140281) proposed for the Lynn Canal corridor in southeast Alaska. Our review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, as well as a NEPA cooperating agency. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures, we evaluate the document's adequacy in meeting NEPA requirements.

The draft SEIS proposes a no action alternative and seven action alternatives that include various proposals to provide improved surface transportation to and from Juneau, Alaska within the Lynn Canal corridor. This SEIS specifically updates the previous Final SEIS issued in 2006 in response to a 2009 District Court decision finding that the Final SEIS did not appropriately include evaluation of an alternative utilizing existing Alaska Marine Highway System (AMHS) assets. This supplement also provides additional and updated information pertaining to resources, alternatives and relevant analyses.

We recognize and appreciate that the Draft SEIS includes several components that we requested based on our review of the PDSEIS, namely, an Executive Summary, the inclusion of a functional assessment and proposed compensatory mitigation for affected wetlands (Appendix Z-2013 Update to Appendix O-Wetlands Technical Report). We also commend FHWA for clearly highlighting updated or changed information in the document.

We do, however, continue to object to the preferred alternative, Alternative 2B-East Lynn Canal, based on the same reasons we identified in our previous comments on past EISs. Alternative 2B would have the most environmental impacts, including significant adverse effects on special aquatic sites (e.g., wetlands and mud flats); essential fish habitat; critical habitat for endangered species (i.e., Steller sea lion); wildlife (e.g., bald eagle, brown bear, marten, mountain goat); and special areas (e.g., inventoried roadless areas, ANILCA Section 508 Berners Bay LUD II Management Area; and old growth forest reserves). We have specifically stated that we believe Alternatives 1, 3, 4A, 4B, 4C and 4D are environmentally preferable to Alternative 2B. We also assert this to be the case with the new alternative, Alternative 1B-Enhanced Service with Existing AMHS Assets.

In light of the 404(b)(1) Guidelines, only the least environmentally damaging practicable alternative (LEDPA) may be authorized for a Section 404 permit. We believe Alternatives 1, 1B, 3, 4A, 4B, 4C and 4D are all less environmentally damaging than Alternative 2B, and one or more of these alternatives to the proposed action may be practicable, and therefore, the LEDPA. However, the EIS states that these alternatives are not practicable due to the lower travel capacity compared to an unconstrained traffic forecast model. We believe that practicability should be reconsidered since unconstrained traffic is not currently possible (due to ferry segments in all alternatives) and options 1B, 3, 4A, 4B, 4C and 4D do substantially increase capacity between Juneau, Haines, and Skagway. Instead of measuring each alternative against a theoretical, unattainable standard (i.e., unconstrained demand), we recommend using the no action alternative as the baseline or benchmark, and then comparing each action alternative to the no action alternative.

The EPA has previously identified Berners Bay watershed as an ecologically important area due to the abundance and diversity of fish and wildlife which inhabit this area. We commend FHWA and ADOT&PF for incorporating a variety of mitigation measures into your preferred alternative to reduce impacts on aquatic resources in the Berners Bay area. However, we request the same level of effort to mitigate the adverse effects of Alternatives 3, 4B and 4D on Berners Bay. Therefore, we recommend that the Final SEIS consider the following mitigation measures (or an appropriate combination thereof) for Alternatives 3, 4B and 4D:

- 1) move the Sawmill Cove ferry terminal to a suitable site outside of Berners Bay (e.g., Tee Harbor, Amalga Harbor, Pearl Harbor, Yankee Cove, Sunshine Cove, Bridget Cove);
- 2) if that is not practicable, move the Sawmill Cove ferry terminal to Cascade Point and remove the road segment from Cascade Point to Sawmill Cove (see pages 10 and 24 of the "Draft Design Concept Report for the Day Boat ACF" and page 6 of the "Day Boat ACF Design Study Report);
- 3) move the Berners Bay ferry operations to the Auke Bay ferry terminal during the eulachon and herring spawning period, which is approximately two weeks in late April and early May (note that Alternatives 4B and 4D already meet this goal);
- 4) impose an AMHS ferry speed limit within Berners Bay during the eulachon and herring spawning period to reduce the risk of collision with humpback whales;
- 5) establish an AMHS ferry lane within Berners Bay that is at least one nautical mile from Point Bridget and Point Saint Mary to minimize adverse effects on herring spawning habitat, Steller sea lions and Point Bridget State Park; and
- 6) designate a trained marine mammal observer on board each Berners Bay ferry during the eulachon and herring spawning period.

We request that FHWA, as the lead agency, arrange an interagency meeting with the cooperating agencies and other agency experts from NMFS, FWS and ADFG to discuss these mitigation measures prior to the Final SEIS and Record of Decision.

We have also previously stated that if these alternatives 1, 3, 4A 4B, 4C and 4D (and now 1B) are not practicable, we recommend changes to Alternative 2B, namely the relocation of the ferry terminal to the south side of the Katzehin River delta, thus eliminating the bridge crossing and road segment north of the Katzehin River. If this is not practicable, then we recommend avoiding the proposed discharge of 64,480 cubic yards of fill material into 3.15 acres on the south shore of the Katzehin River. This area appears to include mud flats that are functionally similar to the Berners Bay mud flats and the McClellan Flats (between the Chilkat River and Chilkat Inlet). Mud flats are special aquatic sites under the 404(b)(1) Guidelines (see 40 CFR 230.42), and as such, they are subject to the presumptive restrictions on discharge set forth at 40 CFR 230.10(a)(3).

We have assigned a rating of "EO" (Environmental Objections) to the Draft SEIS because: 1) there may be a practicable alternative to the proposed action which would have less adverse impact on the aquatic ecosystem [see 40 CFR 230.10(a)]; 2) the preferred alternative may result in the likelihood of the destruction or adverse modification of critical habitat under the ESA [see 40 CFR 230.10(b)]; 3) the preferred alternative may cause or contribute to significant degradation of the waters of the United States [see 40 CFR 230.10(c)]; and 4) appropriate and practicable steps may be taken which will minimize the potential adverse impacts on the aquatic ecosystem [see 40 CFR 230.10(d)]. We have changed the numeric rating from previous draft documents to a "1" (Adequate Information) due to the additional information presented in the current SEIS. A description of our rating system is enclosed.

Please contact Jennifer Curtis of my staff in Anchorage at (907) 271-6324 or <u>curtis.jennifer@epa.gov</u> with any questions you have regarding our comments.

Sincerely,

R. David Allnutt, Director

Office of Ecosystems, Tribal and Public Affairs

Enclosure:

1. U.S. EPA Rating System

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public

comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.



Alaska Division

August 31, 2017

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131) / 71100

R. David Allnut
Director, Office of Environmental Review and Assessment
U.S. Environmental Protection Agency, Region 10
1200 Sixth Ave, Suite 900
Seattle, WA 98101-3140

Dear Mr. Allnut:

Thank you for your letter, dated November 25, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project, Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the continued participation of the U.S. Environmental Protection Agency (EPA) in the JAI Project as a cooperating agency.

I am writing to you for two primary reasons. First, I have reviewed your letter in detail and have provided responses and/or revised the SEIS in response to your comments, as incorporated into the Preliminary Final SEIS. For ease of reference, the attached comment-response letter contains responses that have been imbedded in a reprint of your original comment letter. Secondly, as a Cooperating Agency, I am providing you the JAI Project Preliminary Final SEIS for your review and comment. Due to its preliminary nature, this document is provided for Cooperating Agency review only. It is not a public document, and its information should not be shared with other agencies or individuals. FHWA and DOT&PF will consider your agency's comments, as well as comments by the other Cooperating Agencies, in preparation of the JAI Project Final SEIS for public release (as noted previously and consistent with 23 U.S.C. 193(n)(2), FHWA intends to issue a combined Final SEIS and Record of Decision). Please let me know if you would like additional copies of the document. I ask that you provide any further written comments within 30 days of receipt of this correspondence.

Briefly, FHWA has identified the "No Build Alternative" as the Preferred Alternative in the JAI Preliminary Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. See Section 2.4 of the Preliminary Final SEIS for discussion.

Please do not hesitate to contact me at (907) 586-7430 or Gary Hogins (907) 465-8143, DOT&PF Project Manager, if you have any questions or concerns.

Sincerely,

Tim A. Haugh

(in Age

Environmental Program Manager

Enclosures:

Response to U.S. EPA Comments on the JAI Project Draft SEIS (November 25, 2014) JAI Project Preliminary Final SEIS – one hardcopy / one CD-ROM

Electronic cc:

Jennifer Curtis, EPA, NEPA Reviewer Gary Hogins, DOT&PF, Project Manager



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140 OFFICE OF ECOSYSTEMS, TRIBAL AND PUBLIC AFFAIRS

November 25, 2014

Tim A. Haugh, Environmental Program Manager US DOT Federal Highway Administration Alaska Division P.O. Box 21648 Juneau, Alaska 99802-1648

RE: EPA comments on the Juneau Access Draft Supplemental Environmental Impact Statement (SEIS), EPA Project #92-091-FHW.

Dear Mr. Haugh:

- We have reviewed the above-referenced EIS (CEQ No. 20140281) proposed for the Lynn Canal
- 2 corridor in southeast Alaska. Our review was conducted in accordance with our responsibilities
- 3 under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, as
- 4 well as a NEPA cooperating agency. Section 309, independent of NEPA, specifically directs
- 5 EPA to review and comment in writing on the environmental impacts associated with all major
- 6 federal actions. Under our policies and procedures, we evaluate the document's adequacy in
- 7 meeting NEPA requirements.
- 8 The draft SEIS proposes a no action alternative and seven action alternatives that include various
- 9 proposals to provide improved surface transportation to and from Juneau, Alaska within the
- 10 Lynn Canal corridor. This SEIS specifically updates the previous Final SEIS issued in 2006 in
- response to a 2009 District Court decision finding that the Final SEIS did not appropriately
- include evaluation of an alternative utilizing existing Alaska Marine Highway System (AMHS)
- assets. This supplement also provides additional and updated information pertaining to resources,
- 14 alternatives and relevant analyses.
- We recognize and appreciate that the Draft SEIS includes several components that we requested
- based on our review of the PDSEIS, namely, an Executive Summary, the inclusion of a
- 17 functional assessment and proposed compensatory mitigation for affected wetlands (Appendix Z-
- 18 2013 Update to Appendix 0- Wetlands Technical Report). We also commend FHWA for clearly
- 19 highlighting updated or changed information in the document.
- 20 RESPONSE: Your previous comments were helpful in providing a more thorough document.
- Thank you for your continued participation as a cooperating agency.
- We do, however, continue to object to the preferred alternative, Alternative 2B-East Lynn Canal,
- based on the same reasons we identified in our previous comments on past EISs. Alternative 2B

- 24 would have the most environmental impacts, including significant adverse effects on special
- 25 aquatic sites (e.g., wetlands and mud flats); essential fish habitat; critical habitat for endangered
- species (i.e., Steller sea lion); wildlife (e.g., bald eagle, brown bear, marten, mountain goat); and
- 27 special areas (e.g., inventoried roadless areas, ANILCA Section 508 Berners Bay LUD II
- Management Area; and old growth forest reserves). We have specifically stated that we believe
- Alternatives 1, 3, 4A, 4B, 4C and 4D are environmentally preferable to Alternative 2B. We also
- assert this to be the case with the new alternative, Alternative 1B-Enhanced Service with
- 31 Existing AMHS Assets.
- 32 RESPONSE: Governor Walker announced on December 15, 2017, that the "No Build
- Alternative" is the State's Preferred Alternative due to Alaska's current fiscal challenges. FHWA
- agreed that this was a prudent course of action. The primary reason for the decision was the
- plight of Alaska's economy and its effect on the State government's overall budgetary health.
- This fiscal environment, in turn, has affected DOT&PF's budget and their ability to advance a
- transportation solution at this time. Controversy regarding the project was also a contributing
- factor. Much of the controversy surrounding this project, which has persisted for many years, is
- related to the potential impacts to the natural and social environment associated with alternatives
- with substantial road components. Some of the controversy has been related to the basic modal
- 41 choice reflected in the build alternatives (i.e., ferries versus roads). The level of controversy is
- further reflected in the intense interest from the public as expressed in the comments generated
- for and against the various alternatives through past scoping processes, public hearings,
- 44 submitted on draft versions of the EIS, and reflected in surveys. It should be noted that there
- have been no environmental impacts identified at this time that would preclude selection of a
- build alternative.
- 47 However, DOT&PF and FHWA have identified the No Action Alternative as the Preferred
- 48 Alternative. See Section 2.4 of the Preliminary Final SEIS for discussion.

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- In light of the 404 (b)(1) Guidelines, only the least environmentally damaging practicable
- alternative (LEDPA) may be authorized for a Section 404 permit. We believe Alternatives 1, 1B,
- 52 3, 4A, 4B, 4C and 4D are all less environmentally damaging than Alternative 2B, and one or
- more of these alternatives to the proposed action may be practicable, and therefore, the LEDPA.
- However, the EIS states that these alternatives are not practicable due to the lower travel capacity
- compared to an unconstrained traffic forecast model. We believe that practicability should be
- reconsidered since unconstrained traffic is not currently possible (due to ferry segments in all
- alternatives) and options 1B, 3, 4A, 4B, 4C and 4D do substantially increase capacity between
- Juneau, Haines, and Skagway. Instead of measuring each alternative against a theoretical,
- 59 unattainable standard (i.e., unconstrained demand), we recommend using the no action
- alternative as the baseline or benchmark, and then comparing each action alternative to the no
- 61 action alternative.
 - **RESPONSE:**

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- 64 Comparing alternatives to the No Action Alternative provides limited information (as any
- increase in travel would qualify as an increase in capacity). Under that logic, providing even one
- additional trip in Lynn Canal would render an alternative practicable. Doing better than the no

- action is not the overall purpose of the project. The overall purpose is about meeting the demand
- for travel. In the 2008, the USACE defined an overall project purpose that aligned with the
- 69 FHWA purpose for the project and was focused on meeting the demand for travel.
- The unconstrained traffic model is the measure of demand in the corridor. It represents the
- 71 number of trips desired to be made by the traveling public in other words it is the demand.
- Only by evaluating alternatives against this measure, can FHWA determine if they are providing
- capacity to meet demand. Comparing alternatives to the unconstrained travel demand not only
- identifies how well the alternatives meet demand, but it also identifies the number of trips not
- occurring due to operational or logistical constraints. This is important for DOT&PF and FHWA
- in their goal of "providing fast, safe, efficient, and convenient transportation at the lowest cost
- 77 (49 USC §101)".

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- 78 The EPA has previously identified Berners Bay watershed as an ecologically important area due
- 79 to the abundance and diversity of fish and wildlife which inhabit this area. We commend FHW A
- and ADOT&PF for incorporating a variety of mitigation measures into your preferred alternative
- 81 to reduce impacts on aquatic resources in the Berners Bay area. However, we request the same
- level of effort to mitigate the adverse effects of Alternatives 3, 4B and 4D on Berners Bay.
- 83 Therefore, we recommend that the Final SEIS consider the following mitigation measures (or an
- appropriate combination thereof) for Alternatives 3, 4B and 4D:
 - 1) move the Sawmill Cove ferry terminal to a suitable site outside of Berners Bay (e.g., Tee Harbor, Amalga Harbor, Pearl Harbor, Yankee Cove, Sunshine Cove, Bridget Cove);
 - 2) if that is not practicable, move the Sawmill Cove ferry terminal to Cascade Point and remove the road segment from Cascade Point to Sawmill Cove (see pages 10 and 24 of the "Draft Design Concept Report for the Day Boat ACF" and page 6 of the "Day Boat ACF Design Study Report);
 - 3) move the Berners Bay ferry operations to the Auke Bay ferry terminal during the eulachon and herring spawning period, which is approximately two weeks in late April and early May (note that Alternatives 4B and 4D already meet this goal);
 - 4) impose an AMHS ferry speed limit within Berners Bay during the eulachon and herring spawning period to reduce the risk of collision with humpback whales;
 - 5) establish an AMHS ferry lane within Berners Bay that is at least one nautical mile from Point Bridget and Point Saint Mary to minimize adverse effects on herring spawning habitat, Steller sea lions and Point Bridget State Park; and
 - 6) designate a trained marine mammal observer on board each Berners Bay ferry during the eulachon and herring spawning period.
- RESPONSE: It is unnecessary to apply the same level of minimization to all the alternatives,
- especially considering that Alternative 2B advanced through the USACE Clean Water Section
- 404 and Rivers and Harbors Act Section 10 permitting process and has had a USACE permit
- issued previously. The same level of minimization is not necessary for all of the alternatives and
- therefore further evaluations are unwarranted. The following provide specific responses to parts
- 106 1 through 6 of the EPA's comment above.
- 1) Sites along the road system south of Berners Bay were considered and dismissed during
- alternative screening due to basin characteristics and exposure to weather that would make those
- potential sites less suitable for a ferry terminal.

- 2) If the Final SEIS had identified an alternative requiring a terminal in Berners Bay
- (Alternatives 3, 4B and 4D) as the Preferred Alternative, the Final SEIS would have evaluated
- 112 Cascade Point as an alternative ferry terminal site to Sawmill Cove.
- 3) Alternatives 4B and 4D would accommodate the recommendation for the eulachon and
- herring spawning timeframe. Relocating ferry service from Berners Bay to Auke Bay during the
- eulachon and herring spawning period for Alternative 3 was evaluated in the USACE 2008
- Record of Decision and Permit Evaluation. The alternative was labeled 3M and was determined
- to be not practicable for logistical considerations.
- 4) Travel in Berners Bay would not exceed the service speed of the specific ferry vessel for each
- alternative, which ranges from 15 to 30 knots. As described in the Final SEIS, Chapter 4.4.17,
- and 2004 Appendix O Wildlife Technical Report, whale collisions with ferries are rare, and whale
- densities are low along the ferry routes; therefore, the increased risk of associated collisions
- would not adversely affect whales in Lynn Canal.
- 5) AMHS has not established actual ferry lanes for any alternative outside of their current
- operations. Currently, Alternative 1 No Action has been identified as the Preferred Alternative.
- Should another alternative which potentially effects these locations be selected, AMHS will take
- this into consideration when developing the route. There are approximately 4 miles between
- Point Saint Mary and Point Bridget. It should be noted that adverse impacts to herring spawning
- at Point Saint Mary are unlikely, since spawning has not been observed there since 1981. As
- stated in the 2014 *Update to Appendix S Steller Sea Lions*, Steller sea lions are very agile and
- successfully avoid encounters in the water. Because the ferry traffic associated with Alternative 3
- would be relatively slow and consistent in both direction and speed, it is expected that sea lions
- at Point Saint Mary would be unaffected by these vessels because they have habituated to other
- large commercial vessels in Lynn Canal. The potential for sea lion and ferry contact is
- considered minimal.
- 6) FHWA has made a determination that ferry operations are not likely to adversely affect Steller
- sea lions. As a result of consultation, the NMFS has concurred with this determination; the
- measure of placing observers on ferry boats has been considered and they are not proposed
- aboard ferries under any alternative.
- We request that FHWA, as the lead agency, arrange an interagency meeting with the cooperating
- agencies and other agency experts from NMFS, FWS and ADFG to discuss these mitigation
- measures prior to the Final SEIS and Record of Decision.
- RESPONSE: Technical input from the various agencies is important in mitigating environmental
- impacts from the alternatives. If the Final SEIS had selected a build alternative as the Preferred
- Alternative, FHWA would have conducted additional meetings with federal and state agencies
- during the Final SEIS and permitting processes.
- We have also previously stated that if these alternatives 1, 3, 4A 4B, 4C and 4D (and now 1B)
- are not practicable, we recommend changes to Alternative 2B, namely the relocation of the ferry
- terminal to the south side of the Katzehin River delta, thus eliminating the bridge crossing and
- road segment north of the Katzehin River. If this is not practicable, then we recommend avoiding

¹ Juneau Group of the Sierra Club. 2007. Petition to List the Lynn Canal Distinct Population Segment of the Pacific Herring (*Culpea pallasi*) Under the Endangered Species Act. Juneau, Alaska. April 2007.

- the proposed discharge of 64,480 cubic yards of fill material into 3.15 acres on the south shore of
- the Katzehin River. This area appears to include mud flats that are functionally similar to the
- Berners Bay mud flats and the McClellan Flats (between the Chilkat River and Chilkat Inlet).
- Mud flats are special aquatic sites under the 404(b)(l) Guidelines (see 40 CFR 230.42), and as
- such, they are subject to the presumptive restrictions on discharge set forth at 40 CFR 230.1
- 155 O(a)(3).
- RESPONSE: DOT&PF considered placement of the Alternative 2B ferry terminal south of the
- 157 Katzehin River. This modification is not practicable largely due to the constant deposition of
- glacial silt from the Katzehin River on the delta. The 5-fathom contour extends more than a mile
- offshore on the south side of the river. To construct a terminal there, extensive dredging would
- be required initially, and maintenance dredging would be required periodically. The Katzehin
- 161 Ferry Terminal location was also chosen for its proximity to Haines and Skagway. Siting a
- terminal south of the Katzehin River would add at least 4 miles of travel distance to both
- 163 communities. Based on increased ferry route lengths, all round trips would be at least 24 minutes
- longer and annual operating costs would be approximately \$1.8 million higher (2006 dollars).
- Larger boats or longer operating hours would be needed to achieve the necessary capacity to
- meet Alternative 2B projected traffic volume. Either change would involve higher operating
- costs, which would mean higher user costs and greater state funding. Longer loading times (for
- larger boats) and travel times as well as higher user costs would tend to decrease the very
- demand we are trying to accommodate.
- 170 The 2014 Wetlands Report and Draft SEIS Appendix Z 2014 Update to Appendix O Wetlands
- 171 Technical Report do not identify the Katzehin Ferry Terminal or the Katzehin River delta as a
- mudflat. The field data and wetland mapping used are based on 2006 efforts as part of the 2006
- Final EIS and 2008 USACE Section 404/10 Permit Authorization. DOT&PF studied the
- Katzehin area for the presence of mudflats using 2014 high-resolution digital orthomosaic
- photography, photographs and video clips from Alaska ShoreZone, and Alaska ShoreZone
- 176 Coastal Mapping. A memorandum describing the 2015 mudflats reevaluation is attached.
- According to the analysis, both sites (Katzehin Ferry Terminal and Katzehin River delta) have
- 178 rock and gravel visible on the 2014 aerials and are not classified as mudflats by ShoreZone;
- therefore, these areas would not be characterized as a special aquatic site according to Section
- 404(b)(1) Guidelines (40 CFR Part 230).
- Alternative 2B was modified as part of the 2006 Final SEIS to avoid fill of estuarine wetlands
- north of the Katzehin River. The alignment has been moved uphill and the slopes steepened to
- avoid all but one area (0.2 acre) of estuarine wetlands where a steep cliff and an eagle nest tree
- prevent moving out of the intertidal area. Some placement of fill in the Katzehin River is not
- avoidable as the cost of a bridge structure at this location is 15 times the cost of the proposed
- 186 embankment fill.
- We have assigned a rating of "EO" (Environmental Objections) to the Draft SEIS because: 1)
- there may be a practicable alternative to the proposed action which would have less adverse
- impact on the aquatic ecosystem [see 40 CFR 230.lO(a)]; 2) the preferred alternative may result
- in the likelihood of the destruction or adverse modification of critical habitat under the ESA [see
- 40 CFR 230. IO(b)]; 3) the preferred alternative may cause or contribute to significant
- degradation of the waters of the United States [see 40 CFR 230.1 O(c)]; and 4) appropriate and
- practicable steps may be taken which will minimize the potential adverse impacts on the aquatic
- ecosystem [see 40 CFR 230.1 O(d)]. We have changed the numeric rating from previous draft

documents to a "I" (Adequate Information) due to the additional information presented in the 195 current SEIS. A description of our rating system is enclosed. 196 RESPONSE: Thank you for your continued participation as a cooperating agency. 197 Please contact Jennifer Curtis of my staff in Anchorage at (907) 271-6324 or 198 curtis.jennifer@epa.gov with any questions you have regarding our comments. 199 200 Sincerely, 201 R. David Allnut 202 Office of Ecosystems, Tribal and Public Affairs 203 204 Enclosure: 205

1. U.S. EPA Rating System

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts, EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

^{*}From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.

Attachment JAI Project 2015 Mudflats Analysis

Memo

Date:	Thursday, January 29, 2015
Project:	Juneau Access Improvements Project
To:	Gary Hogins, DOT&PF
From:	Mac Salway, HDR
Subject:	Reevaulation of mudflats at the Katzehin Ferry Terminal site and Katzehin River bridge crossing

Introduction

In the U.S. Army Corps of Engineers' (USACE) comment letter dated November 25, 2014 on the Draft Supplemental Environmental Impact Statement (DSEIS) for the Juneau Access Improvements (JAI) Project, the USACE requested more information on the potential presence of mudflats in and adjacent to the proposed Katzehin River bridge and the Katzehin Ferry Terminal location (USACE 2014). The U.S. Environmental Protection Agency (USEPA) similarly noted the potential for mudflats along the south shore of the Katzehin River in their comment letter, also dated November 25, 2014 (USEPA 2014). The purpose of this memorandum is to examine the potential for mudflats or other special aquatic sites within these two areas using newly available information.

Existing Information

Mudflats are classified as special aquatic sites under the Section 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material (Guidelines; 40 CFR Part 230, U.S. Federal Register 2010). The Guidelines define them as follows:

Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

The Katzehin Ferry Terminal location and the southern Katzehin River bridge embankment were originally mapped in the 1994 *Wetlands Technical Report*, and mapping was subsequently updated in 2004, 2006, and 2014 (DOT&PF 1994, 2004, 2006, 2014a). Mapping was completed using National Wetland Inventory (NWI) codes according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). Field work was completed in 2003 and 2006. The 2006 field

effort resulted in a refined boundary for the estuarine emergent wetland located at the Katzehin Ferry Terminal site. Neither the Katzehin Ferry Terminal location nor the Katzehin River delta was mapped for the JAI Project with an NWI code that would indicate the presence of mudflats. Typical NWI codes characterizing mudflats begin with E2US3 (estuarine, intertidal, unconsolidated shore composed of mud). No mudflats were mapped in these two areas during the original effort or any of the subsequent updates. Wetland mapping performed in 2004 and subsequent years occurred on a digital orthomosaic aerial image taken in 2003 with a pixel resolution of 1.5 feet. The 2003 aerial



Exhibit 1. Photograph taken July 27, 2003 of the Katzehin Ferry Terminal site.

photography appears to be collected during high tide. Exhibit 1 shows a photograph of the Katzehin ferry terminal site taken during the 2003 field work (DOT&PF 2004).

2015 Reevaluation of Mudflats

The potential for mudflats at the Katzehin Ferry Terminal location and Katzehin River delta were reevaluated in 2015. New information used for this reevaluation includes:

- Alaska ShoreZone Coastal Mapping (National Oceanic and Atmospheric Administration [NOAA]
 2014)
- Photographs and video clips from Alaska ShoreZone (NOAA 2014)
- High-resolution digital orthomosaic photography flown in summer 2014 with 3-inch pixel resolution

The Alaska ShoreZone Coastal Mapping project (ShoreZone website) is sponsored by NOAA Fisheries and includes a standardized system for cataloguing high-resolution geomorphic and biological resources. The ShoreZone website includes low-tide oblique aerial images and access to the biophysical data. The area around the Katzehin River was flown for the ShoreZone website on June 4, 2004; however, these data were not evaluated for previous JAI wetland mapping efforts. The ShoreZone mapping resources, along with the new high-resolution 2014 aerial imagery, allow for detailed analysis of the intertidal areas sufficient to determine the current presence of mudflats. Each area, the Katzehin Ferry Terminal location and the southern embankment of the Katzehin River bridge, is examined separately below.

Katzehin Ferry Terminal Location

The wetland and waterbody mapping was updated in 2014 for the entire study area for the DSEIS (DOT&PF 2014a) and was used to calculate impacts for the project's USACE Section 404 permit

application (DOT&PF 2014b) currently under review. Mapping for Katzehin Ferry Terminal location included the following two NWI codes:

- E2US1N/E2RS2N Estuarine, Intertidal, Unconsolidated Shore with Cobble-Gravel, Regularly Flooded/Estuarine, Intertidal, Rocky Shore, Rubble, Regularly Flooded
- E2EM1N Estuarine, Intertidal, Emergent Vegetation, Regularly Flooded

Exhibit 2 shows the Katzehin Ferry Terminal site along with the 2014 aerial imagery, the 2014 JAI wetland mapping, and the 2004 ShoreZone classification (NOAA 2014). The relevant ShoreZone mapping codes are described in Table 1.

Table 1. ShoreZone mapping at the proposed Katzehin Ferry Terminal site

ID	Habitat Class	Shore Type	Environmental Sensitivity Index
1	Semi-Protected/ Immobile/Rock	Cliff with gravel beach	Sheltered rocky rubble shores
2	Semi-Protected/ Partially Mobile/ Sediment or Rock Sediment	Gravel beach - narrow	Gravel beaches (cobbles and boulders)
3	Semi-Protected/ Mobile/Sediment	Organics/fines	Sheltered tidal flats
4	Semi-Protected/ Mobile/Sediment	Sand and gravel flat fan	Sheltered tidal flats

^{*}Environmental Sensitivity Index is a shore type classification that provides a concise summary of coastal resources that are at risk if an oil spill occurs nearby (NOAA 2014).

Rocks and gravels are visible in the 2014 aerial photography and in the ShoreZone photograph (Exhibit 3) throughout the area where the proposed ferry terminal would be sited. The shore types mapped by ShoreZone generally describe rocky/gravel beaches. No part of the Katzehin Ferry Terminal area is mapped as mudflat by ShoreZone (NOAA 2014). One section of ShoreZone mapping (ID# 3) identifies organics and fines in its mapping. This code represents vegetation and fines that can be located either in the intertidal or supratidal region. Additional information from the ShoreZone website was collected for the across-shore components of this area (Table 2; NOAA 2014). This mapping zone (ShoreZone ID# 3) covers an area mapped as E2EM1N in the DSEIS and USACE permit application.

Table 2. Additional information on across-shore components of ShoreZone ID# 3 (from land waterward)

Beach, storm ridge-Anthropogenic, logs (cut trees)/Clastic, pebbles $(0.5\mathrm{to}\mathrm{6cm})$, sand (very fine $0.5\mathrm{to}\mathrm{2mm})$	e to very coarse,
Beach, berm-Clastic, pebbles (0.5 to 6cm), sand (very fine to very coarse, 0.5 to 2mm)	
Marsh, mid to low (discontinuous)-Biogenic, grass on dunes/Clastic, sand (very fine to very coapebbles (0.5 to 6cm)	rse, 0.5 to 2mm),
Tidal Flat. flats-Clastic, sand (very fine to very coarse. 0.5 to 2mm), pebbles (0.5 to 6cm)	

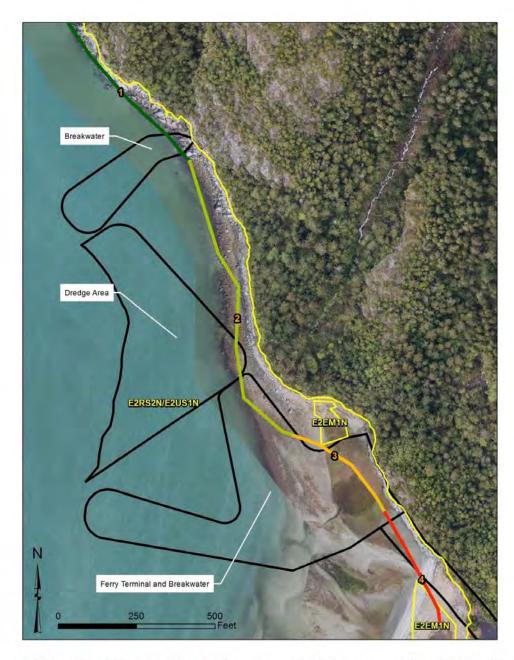


Exhibit 2. 2014 aerial imagery, JAI wetland mapping, and 2004 ShoreZone mapping of the Katzehin Ferry Terminal site.



Exhibit 3. Photograph of the Katzehin Ferry Terminal site from the ShoreZone website (NOAA 2014).

Photo taken June 4, 2004 looking southeast.

The discontinuous marsh documented in the third across-shore component of ShoreZone ID# 3 accounts for the emergent estuarine wetland currently mapped. Rocks and gravel are present in all across-shore components in all areas where the proposed ferry terminal would be located. The smallest particle size mapped by ShoreZone in the area is sand.

Rocks and gravel are visible throughout the area on the 2014 aerial photography. The ShoreZone mapping does not identify mudflats and classifies the area as being dominated by pebbles and sand. Consequently, this area would not meet the definition of mudflats and therefore would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

Katzehin River South Shore Embankment

The southern embankment of the Katzehin River bridge was mapped for the DSEIS and Section 404 permit application with the following two NWI codes:

- E1UBL Estuarine, Subtidal, Unconsolidated Bottom
- E2EM1N Estuarine, Intertidal, Emergent Vegetation, Regularly Flooded

Exhibit 4 shows the southern embankment for the Katzehin River bridge with the 2014 aerial photography and the 2004 ShoreZone mapping. No part of the Katzehin River south shore embankment is mapped as mudflat by ShoreZone (NOAA 2014). The ShoreZone mapping near the proposed embankment is described in Table 3. Two ShoreZone types are mapped in the area, both describing the area as sand flats.

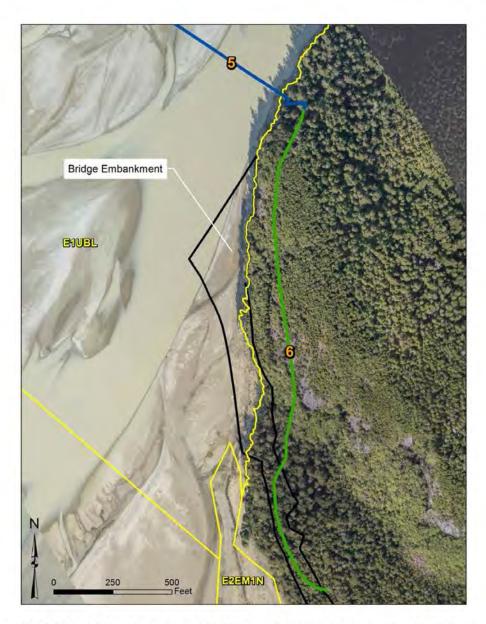


Exhibit 4. 2014 aerial imagery, JAI wetland mapping, and 2004 ShoreZone mapping of the Katzehin River bridge southern embankment.

Table 3. ShoreZone mapping at proposed southern Katzehin River bridge embankment

ID	Habitat Class	Shore Type	Environmental Sensitivity Index
5	Very Protected/Estuary	Sand flat	Sheltered tidal flat
6	Very Protected/Partially Mobile/Sediment or Rock and Sediment	Sand flat	Sheltered tidal flat

^{*}Environmental Sensitivity Index is a shore type classification that provides a concise summary of coastal resources that are at risk if an oil spill occurs nearby (NOAA 2014).

Additional information from the ShoreZone website was collected for the across-shore components of the two ShoreZone types (Table 4; NOAA 2014). These components are described in Table 4. Aside from the cliff component on ShoreZone ID# 6, all other components list sand before mud or fines, meaning that sand is present in greater abundance than mud or fines. Rocks and gravel are visible on the 2014 aerial imagery directly adjacent to the river channel and sporadically throughout the entire area that would be impacted.

Table 4. Additional information on across-shore components of ShoreZone ID#s 5 and 6 (from land waterward)

ShoreZone ID# 5	ShoreZone ID# 6
Delta, fan, bars, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	Cliff, eroding, inclined (20 to 35deg), low (<5m)- Bedrock
Tidal Flat, flats, bar, ridge, multiple tidal channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	River Channel, single channel-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)
(mix of silt or clay, < 0.5mm) River Channel, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	Tidal Flat, flats, bar, ridge, multiple tidal channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)??
	Delta, fan, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)
	River Channel, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)

Due to the presence of rocks and gravel visible on the 2014 aerials and the classification of the area as sand flats by ShoreZone, this area would not meet the definition of mudflats and therefore would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

Summary

The 2014 wetland mapping used in the 2014 DSEIS and USACE permit application was reevaluated using new information to determine the presence of mudflats in two locations: the Katzehin Ferry Terminal location and the south shore embankment of the Katzehin Ferry Terminal. The information evaluated included site photographs, video, and coastal mapping from a 2004 low-altitude flyover from the ShoreZone website and high-resolution aerial photography taken during summer 2014.

The ShoreZone coastal mapping does not identify mudflats in either area in any across-shore component. The coastal mapping identifies the Katzehin Ferry Terminal site to be dominated by pebbles and sand and the bridge embankment site to be dominated by sand. Rocks and gravel are also visible in both locations in the 2014 aerial photography.

Upon reevaluation, it appears that the areas were correctly identified as waters of the U.S. and not mudflats. These areas would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue Seattle, WA 98101-3140

OFFICE OF ENVIRONMENTAL REVIEW AND ASSESSMENT

September 15, 2017

Tim Haugh, FHWA Environmental Program Manager Federal Highway Administration, Alaska Division P.O. Box 21648 Juneau, Alaska 99802-1648

Gary Hogins, Project Manager Alaska Department of Transportation and Public Facilities Design and Engineering Services PO Box 112500 Juneau, AK 99811-2500 Federal Highway Administration

SFP 1 8 2017

Juneau, Alaska

Dear Mr. Haugh and Mr. Hogins:

Thank you for the opportunity to review the Preliminary Final Supplemental Environmental Impact Statement for the Juneau Access Improvement Project in southeast Alaska (EPA Region 10 Project No. 92-091-FHW).

We understand the PFSEIS identifies the No Build Alternative as the Preferred Alternative, consistent with Governor Walker's announcement of the No Build Alternative as the State of Alaska's preferred alternative in December 2016. We appreciate the additional discussion regarding this decision in Section 2.4 of the PFSEIS. This discussion notes the current fiscal challenges within the state, as well as current controversy regarding the best path forward, as the primary reasons for the selection of the No Build Alternative at this time.

We also appreciate the responses to our November 25, 2014, comment letter on the Supplemental Draft EIS. Due to the continuing concerns related to the previously preferred alternative (Alternative 2B), we support the decision to select the No Build Alternative at this time. Should the project be proposed again in the future, we look forward to engaging with the appropriate parties on this project under our applicable authorities.

Again, we appreciate the opportunity to review the PFSEIS. Please contact Jennifer Curtis of my staff in Anchorage at (907) 271-6324 or curtis.jennifer@epa.gov, or you may contact me at (206) 553-1841 or nogi.jill@epa.gov, for any further discussion regarding this project.

Sincerely,

Jill A. Nogi

Environmental Review and Sediments Management Unit



DEPARTMENT OF THE ARMY

ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS REGULATORY DIVISION
P.O. BOX 6898
JBER, ALASKA 99506-0898
NOV 2 5 2014

Regulatory Division POA-2006-597

Mr. Tim A. Haugh U.S. Department of Transportation Federal Highway Administration Post Office Box 21648 Juneau, Alaska 99802-1648

Dear Mr. Haugh:

This letter provides the U.S. Army Corps of Engineers (Corps) comments on the Draft Supplemental Environmental Impact Statement (DSEIS) dated September 2014, for the proposed Juneau Access Improvements Project (JAI), in Juneau, Alaska. At this time, the Corps is participating as a cooperating agency in development of the DSEIS, as well as beginning an evaluation of a Department of the Army (DA) permit application for this project. Although these processes may run concurrently, there are some distinct differences between information required under the National Environmental Policy Act (NEPA) and information/evaluation required under the DA permit evaluation process. The following comments address the NEPA elements for continued SEIS development.

<u>Special Aquatic Sites:</u> Characterization of the wetland special aquatic sites that occur within the proposed project area is well described in the DSEIS. Available ShoreZone¹ photography for the Katzehin River delta, as well as survey information referenced in the DSEIS, indicates that there may be areas of mudflats in and adjacent to the proposed Katzehin River bridge approach and ferry terminal locations.

The Corps requests clarity on the presence or absence of mudflats at this location, and that further measures be explored to reduce impacts to the aquatic ecosystem at this location. If mudflats are found to occur within the project area, a description and delineation of these special aquatic sites should be included in the Final SEIS. This information would also be needed for the DA permit evaluation.

Like wetlands, mudflats are considered special aquatic sites in the Environmental Protection Agency's (EPA) 404(b)(1) Guidelines (Guidelines)². The Guidelines are an integral part of the Corps' permit evaluation compliance requirements. The Guidelines describe special aquatic sites as "possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values". The Corps wants to ensure all special aquatic sites are adequately reflected in the FSEIS and DA permit evaluation.

Alternatives: With the exception of the no action alternative, all of the alternatives carried forward for analysis in the DSEIS meet the project purpose and need to varying degrees, as summarized in the JAI DSEIS, Appendices Volume 6, Appendix Z, Table 1. Tables like this are very effective at identifying the degree to which the various alternatives meet the project purpose and need and the associated environmental footprints. This table includes environmental impacts in the form of the number of river/stream crossings, acres and types of waters of the U.S. (WOUS) filled, and acres of WOUS

² 40 CFR 230.

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¹ NOAA Fisheries, Alaska ShoreZone Coastal Mapping and Imagery website.

impacted. Although summaries such as this are useful for quantifying WOUS size and type, they fall short of capturing the quality of those WOUS and the associated impacts, such as essential fish habitat and use by threatened/endangered species. We appreciate that Appendix Z further discusses these considerations.

In making a future determination of the least environmentally damaging practicable alternative for the JAI project, the Corps will use: applicable information from our previous record of decision in light of the changes reflected in the SEIS; information provided in the EIS and SEIS; an independent Guidelines review and compliance determination; and an evaluation of the public interest review factors and comments received during the DA permit evaluation process.

Based on the information provided in the DSEIS and available to us, an alternative ferry terminal site could be located on the eastside of Lynn Canal within the vicinity at Cascade Point. The Guidelines establish that to be available, alternative sites need not be under the ownership of the permit applicant. The sites must merely be reasonably available for purchase, use or management. The Corps has issued a DA permit, POA-1997-245-M5, Berners Bay, to Goldbelt Incorporated on November 29, 2012, to construct a marine dock and breakwater. The use of the site would provide an opportunity to co-locate with an already permitted project. We note that the Federal Highway Administration has committed to investigating the use of this site.³ The Corps requests that the Final SEIS evaluate an alternative within the vicinity of Cascade Point to minimize impacts to aquatic resources as required by the Guidelines. Additionally, this would have the benefit of reducing the ferry travel distance and roundtrip time.

Additionally, the Corps requests that the Federal Highway Adminstration include information in the Final SEIS that evaluates the potential for a suitable alternative ferry terminal site on the west side of Lynn Canal that may exist south of William Henry Bay but north of Saint James Bay.

<u>Mitigation Sequence:</u> Under the Corps' substantive evaluation criteria for all Section 404 Clean Water Act (CWA) permits, the Guidelines, mitigation is a sequential process of avoidance, minimization, and compensation. Compensatory mitigation is not considered until after all appropriate and practicable steps have been taken to first avoid and then minimize adverse impacts to the aquatic ecosystem.

The mitigation regulations at 33 CFR Part 332 establish standards and criteria for the use of appropriate and practicable compensatory mitigation for unavoidable functional losses of aquatic resources authorized by Corps permits.

Avoidance measures are the planning strategies that entirely eliminate the discharge of fill material into the aquatic ecosystem to achieve the project purpose. A key requirement of compliance with the avoidance sequence of the Guidelines is to show whether or not an aquatic resource can be completely avoided. Minimization entails measures to reduce or diminish the impacts to aquatic resources. The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA permits.

Although the burden of proof for satisfying these steps rests with the permit applicant, the Corps must rely upon its own analysis in making a finding of compliance or non-compliance with the Guidelines. The applicant must provide information that is sufficient to determine compliance, so the Corps can make a timely permit decision. The information provided in the mitigation section of the DSEIS is not specific to the proposed work for the Corps' Guidelines analysis, and we understand this more specific information is forthcoming.

The DSEIS states that the Alaska Department of Transportation and Public Facilities intends to coordinate with the Corps to develop a compensatory mitigation plan to offset impacts to waters of the

³ The Draft Design Concept Report for the Day Boat ACF dated February 25, 2013, states that ADOT&PF has committed to the consideration of Cascade Point as a terminal for north Lynn Canal ferry service.

United States, and that proposed compensatory mitigation for unavoidable impacts to waters of the United States would consist of: 1) A previously constructed artificial reef project located in Juneau at Yankee Cove; 2) The proposed riprap breakwater for the Katzehin Ferry Terminal; and 3) An in-lieu-fee payment.

The proposed ferry terminal fill would be an impact resulting in a loss of aquatic function and thus would not qualify for compensatory mitigation credit. However, it may be possible that as a by-product, the proposed breakwater may provide some benefit to the aquatic environment, and may affect the permit applicant's overall compensatory mitigation obligation. A mitigation plan would be required that addresses the objectives, baseline information, performance standards, etc.

In developing the proposed compensatory mitigation plan, the guidelines and requirements outlined in the regulations at 33 CFR 332 should be followed. It should include sufficient information about how the proposed compensatory mitigation relates to the individual and cumulative impacts to aquatic resources within the proposed project area, including an assessment to quantify debits and credits for aquatic resource impacts and compensation.

We appreciate the opportunity to comment and look forward to working with you further. In the spirit of cooperation, as the SEIS process comes to a close, the Corps requests a meeting with FHWA, ADOT&PF, and the commenting resource agencies. The purpose of the meeting would be to enhance interagency coordination and ensure that issues of concern are clearly identified for consideration in the FSEIS.

Thank you for the opportunity to comment. Please contact Randy Vigil via email at Randal.P.Vigil@usace.army.mil; or by phone at (907) 790-4490, Linda Speerstra at linda.speerstra@usace.army.mil; (907) 747-0658, or myself at Shannon.R.Morgan@usace.army.mil; (907) 753-5552 if you have questions.

Sincerely,

Shannon Morgan Chief, South Branch

Shannon Morgan



Department of Transportation and Public Facilities

Design & Engineering Services Statewide Environmental Office

> 3132 Channel Drive Juneau, Alaska 99811-2500 Main: 907-465-2960 Toll free: 800-467-6955

> > Fax: 907-465-3124

December 20, 2016

Mr. Randy Vigil U.S. Army Corps of Engineers **Regulatory Division** CEPOA-RD, Juneau Field Office P.O. Box 22270 Juneau, AK 99802-9998

RE: Request to withdraw Department of the Army Individual Section 404/10 Permit Application for the Juneau Access Improvements Project, POA-2006-597-2

Dear Mr. Vigil,

The Alaska Department of Transportation and Public Facilities (DOT&PF) is requesting to withdraw the Department of the Army Individual Section 404/10 Permit Application for the Juneau Access Improvements Project, POA-2006-597-2 submitted September 17, 2014. This is due to Governor Walker's recent change of preferred alternative, selecting Alternative 1, No-Action as the new State of Alaska's preferred alternative.

If you have any questions or require additional information, please contact Gary Hogins, Project Manager at (907) 465-8143 or at gary.hogins@alaska.gov.

Sincerely,

Taylor C. Horne

Statewide Environmental Program Manager

cc: Tim Haugh, Environmental Program Manager, FHWA Gary Hogins, JAI Project Manager, DOT&PF

John Barnett, Regional Environmental Manager, DOT&PF



Alaska Division

August 31, 2017

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S (131) / 71100

Ms. Shannon Morgan Chief, South Branch, Alaska District U.S. Army Corps of Engineers P.O. Box 6898 JBER, Alaska 99509

Dear Ms. Morgan:

Thank you for your letter, dated November 25, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project, Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the continued participation of the U.S. Army Corps of Engineers (USACE) in the JAI Project as a cooperating agency.

I am writing to you for two primary reasons. First, I have reviewed your letter in detail and have provided responses and/or revised the SEIS in response to your comments, as incorporated into the Preliminary Final SEIS. For ease of reference, the attached comment-response letter contains responses that have been imbedded in a reprint of your original comment letter. Secondly, as a Cooperating Agency, I am providing you the JAI Project Preliminary Final SEIS for your review and comment. Due to its preliminary nature, this document is provided for Cooperating Agency review only. It is not a public document, and its information should not be shared with other agencies or individuals. FHWA and DOT&PF will consider your agency's comments, as well as comments by the other Cooperating Agencies, in preparation of the JAI Project Final SEIS for public release (as noted previously and consistent with 23 U.S.C. 193(n)(2), FHWA intends to issue a combined Final SEIS and Record of Decision). Please let me know if you would like additional copies of the document. I ask that you provide any further written comments within 30 days of receipt of this correspondence.

Briefly, FHWA has identified the "No Build Alternative" as the Preferred Alternative in the JAI Preliminary Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. See Section 2.4 of the Preliminary Final SEIS for discussion.

Please do not hesitate to contact me at (907) 586-7430 or Gary Hogins (907) 465-8143, DOT&PF Project Manager, if you have any questions or concerns.

Sincerely,

Tim A. Haugh

Environmental Program Manager

Enclosures:

Responses to USACE Comments on the JAI Project Draft SEIS (November 25, 2014) JAI Project Preliminary Final SEIS - one hardcopy / three CD-ROMs

Electronic cc:

Randy Vigil, U.S. Army Corps of Engineers, Alaska District, Project Manager Linda Speerstra, U.S Army Corps of Engineers, Chief South Branch, Alaska District Gary Hogins, DOT&PF, Project Manager



DEPARTMENT OF THE ARMY

ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS REGULATORY DIVISION
P.O. BOX 6898
JBER, ALASKA 99506-0898
NOV 25 2014

Regulatory Division POA-2006-597

Mr. Tim Haugh U.S. Department of Transportation Federal Highway Administration Post Office Box 21648 Juneau, Alaska 99802-1648

Dear Mr. Haugh:

- 1 This letter provides the U.S. Army Corps of Engineers (Corps) comments on the Draft
- 2 Supplemental Environmental Impact Statement (DSEIS) dated September 2014, for the proposed
- 3 Juneau Access Improvements Project (JAI), in Juneau, Alaska. At this time, the Corps is
- 4 participating as a cooperating agency in development of the DSEIS, as well as beginning an
- 5 evaluation of a Department of the Army (DA) permit application for this project. Although these
- 6 processes may run concurrently, there are some distinct differences between information
- 7 required under the National Environmental Policy Act (NEPA) and information/evaluation
- 8 required under the DA permit evaluation process. The following comments address the NEPA
- 9 elements for continued SEIS development.

<u>Special Aquatic Sites</u>: Characterization of the wetland special aquatic sites that occur within the proposed project area is well described in the DSEIS. Available ShoreZone¹ photography for the Katzehin River delta, as well as survey information referenced in the DSEIS, indicates that there may be areas of mudflats in and adjacent to the proposed Katzehin River bridge approach and ferry terminal locations.

The Corps requests clarity on the presence or absence of mudflats at this location, and that further measures be explored to reduce impacts to the aquatic ecosystem at this location. If mudflats are found to occur within the project area, a description and delineation of these special aquatic sites should be included in the Final SEIS. This information would also be needed for the DA permit evaluation.

Like wetlands, mudflats are considered special aquatic sites in the Environmental Protection Agency's (EPA) 404(b)(1) Guidelines (Guidelines)². The Guidelines are an integral part of the Corps' permit evaluation compliance requirements. The Guidelines describe special aquatic sites

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¹ NOAA Fisheries, Alaska ShoreZone Coastal Mapping and Imagery website.

² 40 CFR 230.

- as "possessing special ecological characteristics of productivity, habitat, wildlife protection, or
- other important and easily disrupted ecological values". The Corps wants to ensure all special
- 25 aquatic sites are adequately reflected in the FSEIS and DA permit evaluation.
- 26 RESPONSE: The 2014 Wetlands Report and Draft SEIS Appendix Z 2014 Update to Appendix
- 27 *O Wetlands Technical Report* do not identify the Katzehin Ferry Terminal or the Katzehin
- 28 River delta as a mudflat. The field data and wetland mapping used are based on 2006 efforts as
- part of the 2006 Final EIS and 2008 USACE Section 404/10 Permit Authorization. FHWA
- reevaluated the Katzehin area for the presence of mudflats using 2014 high-resolution digital
- orthomosaic photography, photographs and video clips from Alaska ShoreZone, and Alaska
- 32 ShoreZone Coastal Mapping. A memorandum describing the 2015 mudflat reevaluation is
- attached. According to the analysis, both sites (Katzehin Ferry Terminal and Katzehin River
- delta) have rock and gravel visible on the 2014 aerials and are not classified as mudflats by
- 35 ShoreZone; therefore, these areas would not be characterized as a special aquatic site according
- to Section 404(b)(1) Guidelines (40 CFR Part 230).

37 **Alternatives:** With the exception of the no action alternative, all of the alternatives carried forward for analysis in the DSEIS meet the project purpose and need to varying degrees, as 38 summarized in the JAI DSEIS, Appendices Volume 6, Appendix Z, Table 1. Tables like this are 39 40 very effective at identifying the degree to which the various alternatives meet the project purpose and need and the associated environmental footprints. This table includes environmental impacts 41 42 in the form of the number of river/stream crossings, acres and types of waters of the U.S. (WOUS) filled, and acres of WOUS impacted. Although summaries such as this are useful for 43 quantifying WOUS size and type, they fall short of capturing the quality of those WOUS and the 44 associated impacts, such as essential fish habitat and use by threatened/endangered species. We 45 appreciate that Appendix Z further discusses these considerations. 46

- 47 RESPONSE: The tables provided in the Draft SEIS Appendix Z 2014 Update to Appendix X
- 48 Draft Section 404/10 Permit Application Draft Section 404(b)(1) Analysis are intended to
- summarize the environmental impacts to WOUS consistent with a USACE permit application.
- Detailed information regarding the quantity of the impacts to essential fish habitat and
- threatened/endangered species of each project alternative is provided in Draft SEIS Appendix Z
- 52 2014 Update to N– Essential Fish Habitat Assessment, 2014 Update to S Steller Sea Lion
- 53 *Technical Report*, and 2014 *Update to Q Wildlife Technical Report*.

In making a future determination of the least environmentally damaging practicable alternative for the JAI project, the Corps will use: applicable information from our previous record of decision in light of the changes reflected in the SEIS; information provided in the EIS and SEIS; an independent Guidelines review and compliance determination; and an evaluation of the public interest review factors and comments received during the DA permit evaluation process.

RESPONSE: Thank you for your comment.

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Based on the information provided in the DSEIS and available to us, an alternative ferry terminal site could be located on the eastside of Lynn Canal within the vicinity at Cascade Point. The Guidelines establish that to be available, alternative sites need not be under the ownership of the permit applicant. The sites must merely be reasonably available for purchase, use or management.

The Corps has issued a DA permit, POA-1997-245-MS, Berners Bay, to Goldbelt Incorporated on November 29, 2012, to construct a marine dock and breakwater. The use of the site would provide an opportunity to co-locate with an already permitted project. We note that the Federal Highway Administration has committed to investigating the use of this site.³ The Corps requests that the Final SEIS evaluate an alternative within the vicinity of Cascade Point to minimize impacts to aquatic resources as required by the Guidelines. Additionally, this would have the benefit of reducing the ferry travel distance and roundtrip time.

RESPONSE: If the Final SEIS had identified an alternative requiring a terminal in Berners Bay (Alternatives 3, 4B and 4D) as the Preferred Alternative, the Final SEIS would have evaluated Cascade Point as an alternative site to Sawmill Cove.

Additionally, the Corps requests that the Federal Highway Administration include information in the Final SEIS that evaluates the potential for a suitable alternative ferry terminal site on the west side of Lynn Canal that may exist south of William Henry Bay but north of Saint James Bay.

RESPONSE: If the Final SEIS had identified Alternative 3 as the Preferred Alternative, the Final SEIS would have evaluated the potential for a suitable alternative ferry terminal site between Saint James Bay and William Henry Bay on the West side of Lynn Canal.

Mitigation Sequence: Under the Corps' substantive evaluation criteria for all Section 404 Clean Water Act (CWA) permits, the Guidelines, mitigation is a sequential process of avoidance, minimization, and compensation. Compensatory mitigation is not considered until after all appropriate and practicable steps have been taken to first avoid and then minimize adverse impacts to the aquatic ecosystem.

The mitigation regulations at 33 CFR Part 332 establish standards and criteria for the use of appropriate and practicable compensatory mitigation for unavoidable functional losses of aquatic resources authorized by Corps permits.

Avoidance measures are the planning strategies that entirely eliminate the discharge of fill material into the aquatic ecosystem to achieve the project purpose. A key requirement of compliance with the avoidance sequence of the Guidelines is to show whether or not an aquatic resource can be completely avoided. Minimization entails measures to reduce or diminish the impacts to aquatic resources. The fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States authorized by DA permits.

Although the burden of proof for satisfying these steps rests with the permit applicant, the Corps must rely upon its own analysis in making a finding of compliance or non-compliance with the Guidelines. The applicant must provide information that is sufficient to determine compliance, so the Corps can make a timely permit decision. The information provided in the mitigation section of the DSEIS is not specific to the proposed work for the Corps' Guidelines analysis, and we understand this more specific information is forthcoming.

RESPONSE: If the Final SEIS had identified a build alternative as the Preferred Alternative, FHWA and DOT&PF would have coordinated with the USACE to develop a Compensatory

³ The Draft Design Concept Report for the Day Boat ACF dated February 25, 2013, states that ADOT&PF has committed to the consideration of Cascade Point as a terminal for north Lynn Canal ferry service.

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106 Mitigation Plan that would outline the 12 elements required by the Federal Rule on

107 Compensatory Mitigation: Compensatory Mitigation for Losses of Aquatic Resources; Final

- 108 Rule (33 CFR Parts 325 and 332 and 40 CFR Part 230, Subpart J), dated April 10, 2008 for any
- permittee-responsible mitigation projects. The mitigation section (Chapter 5) of the Final SEIS
- includes a brief discussion of the avoidance, minimization, and mitigation measures for the JAI
- project build alternatives. A more detailed discussion is included in Draft SEIS Appendix Z 2014
- 112 Update to Appendix X Draft Section 404/10 Permit Application Draft Section 404(b)(1) Analysis.
- Attachment 3 of that document includes an evaluation of the project design for Alternative 2B
- that avoids and minimizes impacts to aquatic resources wherever practicable, as directed in the
- Final Rule.

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- The DSEIS states that the Alaska Department of Transportation and Public Facilities intends
- to coordinate with the Corps to develop a compensatory mitigation plan to offset impacts to
- waters of the United States, and that proposed compensatory mitigation for unavoidable impacts
- to waters of the United States would consist of: 1) A previously constructed artificial reef project
- located in Juneau at Yankee Cove; 2) The proposed riprap breakwater for the Katzehin Ferry
- 122 Terminal; and 3) An in-lieu-fee payment.
- 123 RESPONSE: As part of the 2008 USACE permit (POA-2006-597-2), DOT&PF committed to
- paying \$780,000 as an ILF to offset the loss of 32.1 acres of estuarine and marine shores.
- Through 2014, DOT&PF has paid \$324,000 (2006 dollars) as mitigation for anticipated estuarine
- and marine shore impacts. This money was used to construct two artificial reefs at Yankee Cove
- in cooperation with the National Marine Fisheries Service. In a letter to FHWA from the USACE
- on February 21, 2014, the USACE requested proposed mitigation in accordance with the 2008
- Final Rule on Compensatory Mitigation.
- 130 If the Final SEIS had identified a build alternative as the Preferred Alternative, the FHWA and
- DOT&PF would have coordinated with the USACE to develop a Compensatory Mitigation Plan
- that would outline the 12 elements required by the Final Rule for permittee-responsible
- mitigation projects.
- The proposed ferry terminal fill would be an impact resulting in a loss of aquatic function
- and thus would not qualify for compensatory mitigation credit. However, it may be possible that
- as a by-product, the proposed breakwater may provide some benefit to the aquatic environment,
- and may affect the permit applicant's overall compensatory mitigation obligation. A mitigation
- plan would be required that addresses the objectives, baseline information, performance
- standards, etc.
- 140 RESPONSE: The DOT&PF believes the area created from the riprap breakwater for the
- Katzehin Ferry Terminal provides an opportunity for permittee-responsible aquatic resource
- enhancement that may be included in the Compensatory Mitigation Plan. If the Final SEIS had
- identified Alternative 2B as the Preferred Alternative, the FHWA and DOT&PF would have
- 144 coordinated with the USACE to develop a Compensatory Mitigation Plan that would outline the
- 145 12 elements required by the Final Rule for permittee-responsible mitigation projects.

In developing the proposed compensatory mitigation plan, the guidelines and requirements

- outlined in the regulations at 33 CFR 332 should be followed. It should include sufficient
- information about how the proposed compensatory mitigation relates to the individual and

- cumulative impacts to aquatic resources within the proposed project area, including an
- assessment to quantify debits and credits for aquatic resource impacts and compensation.
- RESPONSE: If the Final SEIS had identified a build alternative as the Preferred Alternative, the
- 152 Compensatory Mitigation Plan would have included the 12 elements required by the Final Rule
- for permittee-responsible mitigation projects. This would include information on individual and
- cumulative impacts to aquatic resources, as well as an assessment to quantify debits and credits
- for aquatic resource impacts and compensation.
- We appreciate the opportunity to comment and look forward to working with you further. In
- the spirit of cooperation, as the SEIS process comes to a close, the Corps requests a meeting with
- 158 FHWA, ADOT&PF, and the commenting resource agencies. The purpose of the meeting would
- be to enhance interagency coordination and ensure that issues of concern are clearly identified
- 160 for consideration in the FSEIS.
- RESPONSE: Technical input from the various agencies is important in minimizing and
- mitigating environmental impacts from the alternatives. If the Final SEIS had identified a build
- alternative as the Preferred Alternative, FHWA would have continued to conduct meetings with
- federal and state agencies during the Final SEIS and permitting processes.
- Thank you for the opportunity to comment. Please contact Randy Vigil via email at
- Randal.P.Vigil@usace.army.mil; or by phone at (907) 790-4490, Linda Speerstra at
- linda.speerstra@usace.army.mil; (907) 747-0658, or myself at Shannon.R.Morgan@usace.army.mil;
- 168 (907) 753-5552 if you have questions.
- 169 Sincerely,
- 170 Shannon Morgan
- 171 Chief, South Branch

Attachment JAI Project 2015 Mudflats Analysis

Memo

Date:	Thursday, January 29, 2015
Project:	Juneau Access Improvements Project
To:	Gary Hogins, DOT&PF
From:	Mac Salway, HDR
Subject:	Reevaulation of mudflats at the Katzehin Ferry Terminal site and Katzehin River bridge crossing

Introduction

In the U.S. Army Corps of Engineers' (USACE) comment letter dated November 25, 2014 on the Draft Supplemental Environmental Impact Statement (DSEIS) for the Juneau Access Improvements (JAI) Project, the USACE requested more information on the potential presence of mudflats in and adjacent to the proposed Katzehin River bridge and the Katzehin Ferry Terminal location (USACE 2014). The U.S. Environmental Protection Agency (USEPA) similarly noted the potential for mudflats along the south shore of the Katzehin River in their comment letter, also dated November 25, 2014 (USEPA 2014). The purpose of this memorandum is to examine the potential for mudflats or other special aquatic sites within these two areas using newly available information.

Existing Information

Mudflats are classified as special aquatic sites under the Section 404(b)(1) Guidelines for the Specification of Disposal Sites for Dredged or Fill Material (Guidelines; 40 CFR Part 230, U.S. Federal Register 2010). The Guidelines define them as follows:

Mud flats are broad flat areas along the sea coast and in coastal rivers to the head of tidal influence and in inland lakes, ponds, and riverine systems. When mud flats are inundated, wind and wave action may resuspend bottom sediments. Coastal mud flats are exposed at extremely low tides and inundated at high tides with the water table at or near the surface of the substrate. The substrate of mud flats contains organic material and particles smaller in size than sand. They are either unvegetated or vegetated only by algal mats.

The Katzehin Ferry Terminal location and the southern Katzehin River bridge embankment were originally mapped in the 1994 Wetlands Technical Report, and mapping was subsequently updated in 2004, 2006, and 2014 (DOT&PF 1994, 2004, 2006, 2014a). Mapping was completed using National Wetland Inventory (NWI) codes according to the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Field work was completed in 2003 and 2006. The 2006 field

effort resulted in a refined boundary for the estuarine emergent wetland located at the Katzehin Ferry Terminal site. Neither the Katzehin Ferry Terminal location nor the Katzehin River delta was mapped for the JAI Project with an NWI code that would indicate the presence of mudflats. Typical NWI codes characterizing mudflats begin with E2US3 (estuarine, intertidal, unconsolidated shore composed of mud). No mudflats were mapped in these two areas during the original effort or any of the subsequent updates. Wetland mapping performed in 2004 and subsequent years occurred on a digital orthomosaic aerial image taken in 2003 with a pixel resolution of 1.5 feet. The 2003 aerial



Exhibit 1. Photograph taken July 27, 2003 of the Katzehin Ferry Terminal site.

photography appears to be collected during high tide. Exhibit 1 shows a photograph of the Katzehin ferry terminal site taken during the 2003 field work (DOT&PF 2004).

2015 Reevaluation of Mudflats

The potential for mudflats at the Katzehin Ferry Terminal location and Katzehin River delta were reevaluated in 2015. New information used for this reevaluation includes:

- Alaska ShoreZone Coastal Mapping (National Oceanic and Atmospheric Administration [NOAA] 2014)
- · Photographs and video clips from Alaska ShoreZone (NOAA 2014)
- High-resolution digital orthomosaic photography flown in summer 2014 with 3-inch pixel resolution

The Alaska ShoreZone Coastal Mapping project (ShoreZone website) is sponsored by NOAA Fisheries and includes a standardized system for cataloguing high-resolution geomorphic and biological resources. The ShoreZone website includes low-tide oblique aerial images and access to the biophysical data. The area around the Katzehin River was flown for the ShoreZone website on June 4, 2004; however, these data were not evaluated for previous JAI wetland mapping efforts. The ShoreZone mapping resources, along with the new high-resolution 2014 aerial imagery, allow for detailed analysis of the intertidal areas sufficient to determine the current presence of mudflats. Each area, the Katzehin Ferry Terminal location and the southern embankment of the Katzehin River bridge, is examined separately below.

Katzehin Ferry Terminal Location

The wetland and waterbody mapping was updated in 2014 for the entire study area for the DSEIS (DOT&PF 2014a) and was used to calculate impacts for the project's USACE Section 404 permit

application (DOT&PF 2014b) currently under review. Mapping for Katzehin Ferry Terminal location included the following two NWI codes:

- E2US1N/E2RS2N Estuarine, Intertidal, Unconsolidated Shore with Cobble-Gravel, Regularly Flooded/Estuarine, Intertidal, Rocky Shore, Rubble, Regularly Flooded
- · E2EM1N Estuarine, Intertidal, Emergent Vegetation, Regularly Flooded

Exhibit 2 shows the Katzehin Ferry Terminal site along with the 2014 aerial imagery, the 2014 JAI wetland mapping, and the 2004 ShoreZone classification (NOAA 2014). The relevant ShoreZone mapping codes are described in Table 1.

Table 1. ShoreZone mapping at the proposed Katzehin Ferry Terminal site

ID	Habitat Class	Shore Type	Environmental Sensitivity Index
1	Semi-Protected/Immobile/Rock	Cliff with gravel beach	Sheltered rocky rubble shores
2	Semi-Protected/ Partially Mobile/ Sediment or Rock Sediment	Gravel beach - narrow	Gravel beaches (cobbles and boulders)
3	Semi-Protected/ Mobile/Sediment	Organics/fines	Sheltered tidal flats
4	Semi-Protected/ Mobile/Sediment	Sand and gravel flat fan	Sheltered tidal flats

^{*}Environmental Sensitivity Index is a shore type classification that provides a concise summary of coastal resources that are at risk if an oil spill occurs nearby (NOAA 2014).

Rocks and gravels are visible in the 2014 aerial photography and in the ShoreZone photograph (Exhibit 3) throughout the area where the proposed ferry terminal would be sited. The shore types mapped by ShoreZone generally describe rocky/gravel beaches. No part of the Katzehin Ferry Terminal area is mapped as mudflat by ShoreZone (NOAA 2014). One section of ShoreZone mapping (ID# 3) identifies organics and fines in its mapping. This code represents vegetation and fines that can be located either in the intertidal or supratidal region. Additional information from the ShoreZone website was collected for the across-shore components of this area (Table 2; NOAA 2014). This mapping zone (ShoreZone ID# 3) covers an area mapped as E2EM1N in the DSEIS and USACE permit application.

Table 2. Additional information on across-shore components of ShoreZone ID# 3 (from land waterward)

Beach, storm ridge-Anthropogenic, logs (cut trees)/Clastic, pebbles (0.5 to 6cm), sand (very fine to very coarse, 0.5 to 2mm)

Beach, berm-Clastic, pebbles (0.5 to 6cm), sand (very fine to very coarse, 0.5 to 2mm)

Marsh, mid to low (discontinuous)-Biogenic, grass on dunes/Clastic, sand (very fine to very coarse, 0.5 to 2mm), pebbles (0.5 to 6cm)

Tidal Flat, flats-Clastic, sand (very fine to very coarse, 0.5 to 2mm), pebbles (0.5 to 6cm)

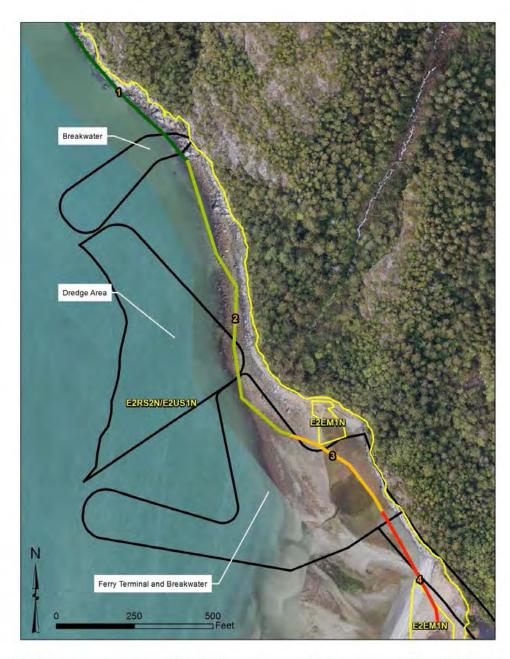


Exhibit 2. 2014 aerial imagery, JAI wetland mapping, and 2004 ShoreZone mapping of the Katzehin Ferry Terminal site.



Exhibit 3. Photograph of the Katzehin Ferry Terminal site from the ShoreZone website (NOAA 2014).

Photo taken June 4, 2004 looking southeast.

The discontinuous marsh documented in the third across-shore component of ShoreZone ID# 3 accounts for the emergent estuarine wetland currently mapped. Rocks and gravel are present in all across-shore components in all areas where the proposed ferry terminal would be located. The smallest particle size mapped by ShoreZone in the area is sand.

Rocks and gravel are visible throughout the area on the 2014 aerial photography. The ShoreZone mapping does not identify mudflats and classifies the area as being dominated by pebbles and sand. Consequently, this area would not meet the definition of mudflats and therefore would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

Katzehin River South Shore Embankment

The southern embankment of the Katzehin River bridge was mapped for the DSEIS and Section 404 permit application with the following two NWI codes:

- E1UBL Estuarine, Subtidal, Unconsolidated Bottom
- E2EM1N Estuarine, Intertidal, Emergent Vegetation, Regularly Flooded

Exhibit 4 shows the southern embankment for the Katzehin River bridge with the 2014 aerial photography and the 2004 ShoreZone mapping. No part of the Katzehin River south shore embankment is mapped as mudflat by ShoreZone (NOAA 2014). The ShoreZone mapping near the proposed embankment is described in Table 3. Two ShoreZone types are mapped in the area, both describing the area as sand flats.

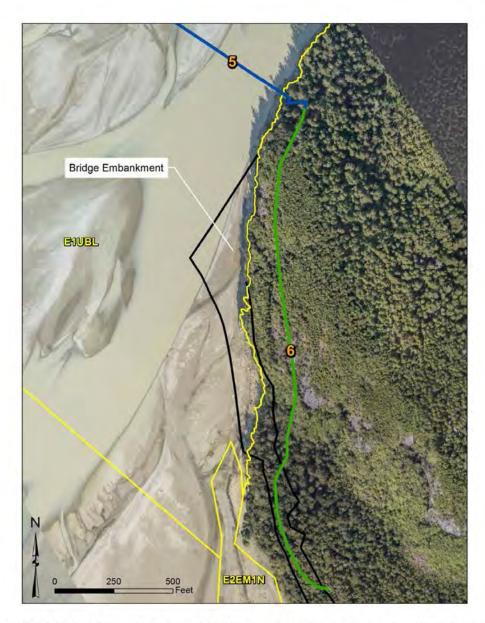


Exhibit 4. 2014 aerial imagery, JAI wetland mapping, and 2004 ShoreZone mapping of the Katzehin River bridge southern embankment.

Table 3. ShoreZone mapping at proposed southern Katzehin River bridge embankment

ID	Habitat Class	Shore Type	Environmental Sensitivity Index*
5	Very Protected/Estuary	Sand flat	Sheltered tidal flat
6	Very Protected/Partially Mobile/Sediment or Rock and Sediment	Sand flat	Sheltered tidal flat

^{*}Environmental Sensitivity Index is a shore type classification that provides a concise summary of coastal resources that are at risk if an oil spill occurs nearby (NOAA 2014).

Additional information from the ShoreZone website was collected for the across-shore components of the two ShoreZone types (Table 4; NOAA 2014). These components are described in Table 4. Aside from the cliff component on ShoreZone ID# 6, all other components list sand before mud or fines, meaning that sand is present in greater abundance than mud or fines. Rocks and gravel are visible on the 2014 aerial imagery directly adjacent to the river channel and sporadically throughout the entire area that would be impacted.

Table 4. Additional information on across-shore components of ShoreZone ID#s 5 and 6 (from land waterward)

ShoreZone ID# 5	ShoreZone ID# 6	
Delta, fan, bars, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	Cliff, eroding, inclined (20 to 35deg), low (<5m)- Bedrock	
Tidal Flat, flats, bar, ridge, multiple tidal channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	River Channel, single channel-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	
River Channel, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	Tidal Flat, flats, bar, ridge, multiple tidal channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)??	
	Delta, fan, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	
	River Channel, multiple channels-Clastic, sand (very fine to very coarse, 0.5 to 2mm), fines or mud (mix of silt or clay, < 0.5mm)	

Due to the presence of rocks and gravel visible on the 2014 aerials and the classification of the area as sand flats by ShoreZone, this area would not meet the definition of mudflats and therefore would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

Summary

The 2014 wetland mapping used in the 2014 DSEIS and USACE permit application was reevaluated using new information to determine the presence of mudflats in two locations: the Katzehin Ferry Terminal location and the south shore embankment of the Katzehin Ferry Terminal. The information evaluated included site photographs, video, and coastal mapping from a 2004 low-altitude flyover from the ShoreZone website and high-resolution aerial photography taken during summer 2014.

The ShoreZone coastal mapping does not identify mudflats in either area in any across-shore component. The coastal mapping identifies the Katzehin Ferry Terminal site to be dominated by pebbles and sand and the bridge embankment site to be dominated by sand. Rocks and gravel are also visible in both locations in the 2014 aerial photography.

Upon reevaluation, it appears that the areas were correctly identified as waters of the U.S. and not mudflats. These areas would not be characterized as a special aquatic site according to Section 404(b)(1) Guidelines (40 CFR Part 230).

References

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- DOT&PF (Alaska Department of Transportation and Public Facilities). 1994. Wetlands Technical Report.

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- DOT&PF. 2004. Appendix O Wetlands Technical Report for the Juneau Access Improvements

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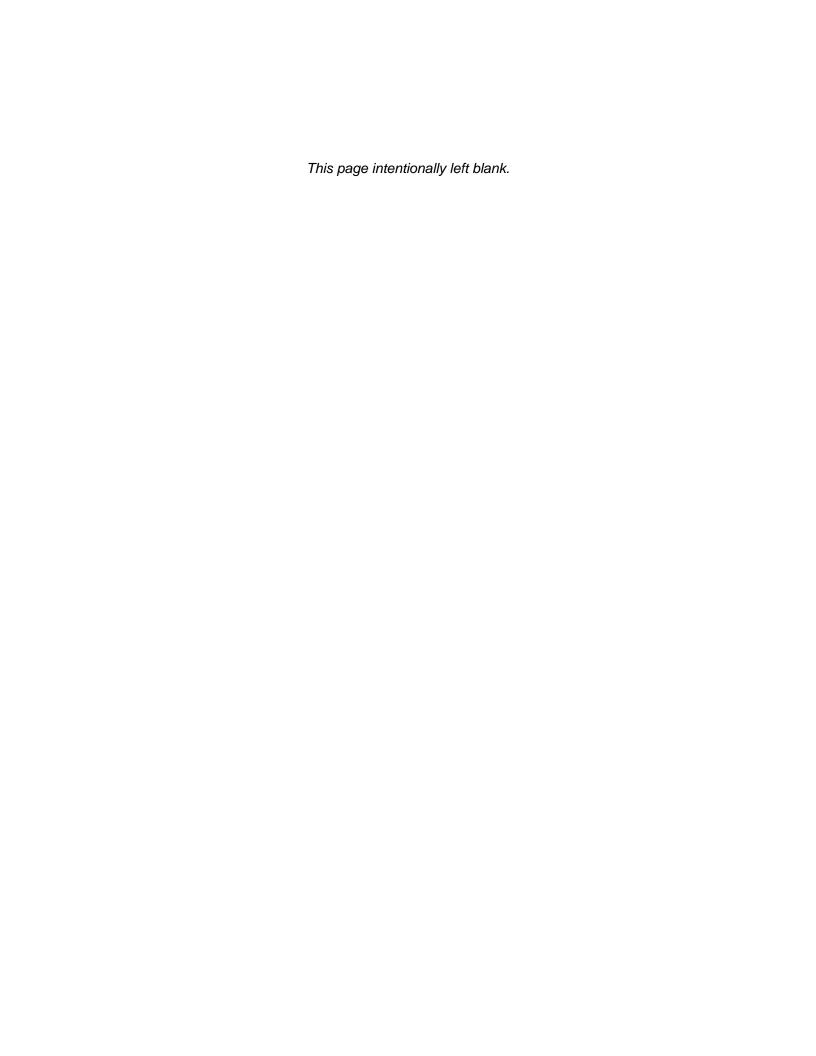
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 http://dot.alaska.gov/sereg/projects/juneau/access/assets/2014_DSEIS_appendices/AppendixZ_Update_X_Section404.pdf
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- USACE (U.S. Army Corps of Engineers). 2014. Letter from Shannon Morgan (Chief, South Branch, U.S. Army Corps of Engineers) to Tim Haugh (Federal Highway Administration), November 25, 2014.

- USEPA (U.S. Environmental Protection Agency). 2014. Letter from R. David Allnutt (Director, Office of Ecosystems, U.S. Environmental Protection Agency) to Tim Haugh (Federal Highway Administration), November 25, 2014.
- U.S. Federal Register. 2010. Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material. U.S. Department of Defense. Corps of Engineers, Department of the Army. 40 CFR Part 230 Subparts A through J. Source: 45 FR 85344, December 24, 1980.





Alaska Division

August 31, 2017

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131) / 71100

Mr. Jim Helfinstine District Bridge Program Administrator Commander 17th Coast Guard District P.O. Box 25517 Juneau, AK 99802-5517

Dear Mr. Helfinstine:

I am writing to you for two primary reasons. First, thank you for the continued participation of the U.S. Coast Guard (USCG) in the Juneau Access Improvement (JAI) Project as a cooperating agency. Secondly, as a Cooperating Agency, I am providing you the JAI Project Preliminary Final SEIS for your review and comment. Due to its preliminary nature, this document is provided for Cooperating Agency review only. It is not a public document, and its information should not be shared with other agencies or individuals. FHWA and DOT&PF will consider your agency's comments, as well as comments by the other Cooperating Agencies, in preparation of the JAI Project Final SEIS for public release (as noted previously and consistent with 23 U.S.C. 193(n)(2), FHWA intends to issue a combined Final SEIS and Record of Decision). Please let me know if you would like additional copies of the document. I ask that you provide any further written comments within 30 days of receipt of this correspondence.

Briefly, FHWA has identified the "No Build Alternative" as the Preferred Alternative in the JAI Preliminary Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. See Section 2.4 of the Preliminary Final SEIS for discussion.

Please do not hesitate to contact me at (907) 586-7430 or Gary Hogins (907) 465-8143, DOT&PF Project Manager, if you have any questions or concerns.

Sincerely,

Tim A. Haugh

(in Age

Environmental Program Manager

Enclosures:

JAI Project Preliminary Final SEIS – one hardcopy / one CD-ROM

Electronic cc:

Gary Hogins, DOT&PF, Project Manager

File Code: 1950 Date:

NOV 2 5 2014

Tim Haugh Environmental Program Manager Federal Highway Administration P.O. Box 21648 Juneau, AK 99802-1648

Dear Mr. Haugh:

Thank you for the opportunity to review the Juneau Access Supplemental Draft Environmental Impact Statement (SDEIS). Attached please find our comments. If you have any further questions or wish to discuss this further, please feel free to contact Mr. Ken Post at (907) 586-8796.

Sincerely,

BETH G. PENDLETON Regional Forester

Beta G. Persleton

Enclosure

cc: Forrest Cole, Brad Orr, Susan Jennings

Federal Highway Administration

NOV 26 2014

Juneau, Alaska





General Comments

Old Growth Reserves

The Old Growth Reserve (OGR) modification review is underway. Although we don't have specific OGR information to offer at this time, it is possible that OGR modifications will be needed and that will require a forest plan amendment and a separate Forest Service decision. If that is the case, the Forest Service will adopt the FHWA FEIS, and that means that the adopted FEIS will have to be consistent with Forest Service policy, handbook guidance, and regulations for items such as the biological evaluation (BE), subsistence, and roadless areas. A separate Forest Service decision will also be subject to the 36 CFR Part 218 Objection regulations and its resultant timeframes. When the OGR review is complete, we will work with you to discuss how to incorporate this information into the FHWA FEIS, and how the Forest Service timeline fits within the larger Juneau Access decision timeline.

In addition, there appears to be a misinterpretation of the 50 percent POG application that will need to be corrected. The VCU bullets in Section 4.3.14 need to be clear whether old-growth forest or productive old-growth forest is being discussed. Productive old-growth forest has a distinct meaning with respect to Tongass NF management and Old-growth LUD standards (TLRMP, pages 7-28: Old-growth forest capable of producing at least 20 cubic feet of wood fiber per acre per year, or having greater than 8,000 board feet per acre).

Subsistence

As noted during the Agency review of the preliminary Draft SEIS, the subsistence analysis (ANICLA 810) for this project does not conform to Forest Service standards presented in Forest Service Handbook (FSH) 2090.23. Portions of the required analysis are in the Draft SEIS and technical reports, but these are incomplete. For example, the 2006 FEIS and other documents in the record discuss access and competition (FEIS, pages 4-37 and 4-85), areas of subsistence use (Appendix DD), and notes there were public comments (Appendix Y, pages 40, 105, 108 and 127). Other subsistence documents are cited as well, such as the 1988 USFS subsistence study and a 1994 ADF&G analysis. There does not appear to be a clear rationale for how all this information ties together in the effects section and how that supports a determination of "would not significantly restrict subsistence uses."

In addition, the analysis for each alternative needs to address each evaluation criteria (access, abundance, and competition) and to present a finding (FSH 2090.23.11). Depending on the finding, notices, hearings, and determinations may be necessary. The appropriate finding language is given in FSH 2090.23.12. As stated at FSH 2090.23.22.1: "The evaluation and findings shall be made and clearly identified for the proposed action and for each alternative."

Biological Assessment

No revised Biological Assessment was provided for review since the Forest Service review of the preliminary Draft SEIS. For the FEIS, the status of some candidate species has changed this year, and the

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document needs to be consistent with those changes (Kittlitz's murrelet, yellow-billed loon, and Pacific herring). See http://www.fws.gov/alaska/fisheries/endangered/species.htm

Biological Evaluation

No Biological Evaluation (BE) for this project, that meets the standards detailed in the Forest Service Manual 2670 and R-10 supplement number R-10 2600-2005-1, was submitted for review. While this Draft SEIS updated the Forest Service review of the preliminary Draft SEIS to include current Forest Service R10 sensitive species in the analysis, much of the required analysis is in the Draft SEIS and/or technical reports. Most noticeably, the analyses lack determinations for all sensitive species (see FSM 2672.42 for BE standards, and R10 supplement FSM 2672.42.5 for determination language).

Historic, Traditional and Cultural Sites

The Forest Service received a copy of a letter from the Douglas Indian Association dated 11/25/14 to ADOT with what appears to be new information about historic, traditional, and cultural sites in the project area. This information should be evaluated and included in the FEIS.

Specific Comments

Page 3-5, fourth paragraph: The document states that the Roadless Rule "...applies generally to the National Forest System..." and that "...it is the USFS's position that the Roadless Rule remains in effect on the Tongass National Forest because the U.S. Court of Appeals for the Ninth Circuit's order...." In reality, the Roadless Rule is a regulation that applies to the National Forest System and to the Tongass National Forest. The Forest Service is not "generally selecting to implement," but is implementing the Roadless Rule because it is regulation. The word "generally" should be deleted. Until the courts have made a final decision, the Roadless Rule is in effect on the Tongass. After the words "At the present time", delete the words "it is the Forest Service's position" and continue with the rest of the sentence.

Page 3-5, fifth full paragraph: delete "typically." The same paragraph states that "IRAs on federal lands are a resource potentially available for future designation as wilderness under the Wilderness Act of 1964." While this is true, it's not the sole reason for roadless area designation. The *Federal Register* notice for the 2001 Roadless Rule identifies other roadless area values and characteristics (page 3245). This same comment applies to other locations in the SDEIS.

Page 3-6, second full paragraph in middle of page: The sentence starting with "Because" should be changed to read: "It is the State of Alaska's position that the JAI Project easement is provided by statute and an analysis of other reasonable and prudent alternatives need not be conducted prior to the USFS issuance of the 4407 easement."

Page 3-63, first paragraph below bullets: "Where the Non-Development LUDs do not fulfill size, spacing, and composition criteria of Old-Growth Habitat reserves, it would be necessary to add or modify old-growth reserves to meet the criteria." This paragraph should also include a statement that a Forest Plan amendment would be required to add or modify old-growth reserves.

Page 4-3, first paragraph: The sentence starting with "If" should be changed to read: "If it becomes necessary...the Federal Highway Administration (FHWA) could seek to secure a transportation easement...." This same comment applies to other locations in the SDEIS.

Page 4-3, Roadless Areas as a Resource: see comment for page 3-5. The Tongass is not exempt from the Roadless Rule; the agency is currently in litigation, but at the present time the Roadless Rule remains in effect on the Tongass.

Page 4-3, Roadless Areas as a Resource: the SDEIS notes the nine roadless area characteristics and states that <u>most</u> of the characteristics are addressed elsewhere in the SDEIS. The cross-references mentioned should be identified here so the reader can easily find them elsewhere in the document. In addition, the SDEIS needs to include a discussion of those resources not addressed in other resource effects sections.

Page 4-3, Roadless Areas as a Resource: Delete "The State of Alaska believes an analysis under the Roadless Rule (of whether other reasonable and prudent alternatives exist that do not use Inventoried Roadless Areas) is not required for this project because Congress authorized the granting of the SAFETEA-LU 4407 transportation easements mentioned in the "note" above to the State of Alaska." In our previous comments dated 8/1/14, the Forest Service specifically requested that the analysis should not go into detail regarding the type of easement to be granted and only focus on the environmental effects. Regardless of the type of easement, the Chief of the Forest Service would still need to make a determination that the easement can be granted to authorize the ROW within a roadless area.

Page 4-34, Land Use: change "the" to "a" directly in front of the wording about the 4407 easement.

Page 4-35, Consistency with Land Use and Management Plans: Change the wording to "If Alternative 2b were the selected alternative, the Forest Service would apply the TUS prescription upon initiation of construction and during system operation (TLRMP, page 3-128)."

Page 4-35, Section 4.3.1.2: "The USFS, in consultation with ADF&G and USFWS, would adjust the boundaries of the affected Old-Growth Habitat LUDs in accordance with old-growth reserve (OGR) standards in the TLRMP (see OGR discussion in Section 4.3.14)." This would require a Forest Plan amendment and a separate NEPA document signed by the Forest Supervisor. This requirement should be added to the document.

Page 4-202, Section 4.8, lines 3-5: The text mentions temporary facilities "such as borrow sources...." In actuality, the conversion of forest land to a borrow source is a permanent action. The following sentence goes on to say that the "specific location and sizes of these temporary facilities would be determined by the construction contractors." It should be recognized that the Tongass Forest Plan requires an interdisciplinary team process for the planning of quarry and borrow sites (page 4-84).

Page 4-121, Section 4.4.9.3: "Alternative 3 would have summer ADT volumes of approximately 1,060 in 2020 and 1,055 in 2050. During winter, ADT would be less than 500 vehicles per day." These numbers do not match those on page 4-123.

Page 4-223, second full paragraph: we did not understand this paragraph, and the forest plan reference on page D-17 is to a section on lakes and ponds.

Page 5-2, Section 5.5, Intertidal and Subtidal Areas section: This section should include the mitigation change for herring spawning dates discussed on page 4-177.

Page 5-3, Section 5.6: There should be a timing window identified for putting culverts in anadromous fish streams, and note that a Title 16 Permit from ADF&G is required.



Alaska Division

August 31, 2017

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In Reply Refer To: STP-000S(131) / 71100

Ms. Beth Pendleton Regional Forester, United States Department of Agriculture U.S. Forest Service, Alaska Region P.O. Box 21628 Juneau, Alaska 99802

Dear Ms. Pendleton:

Thank you for your letter, dated November 25, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project, Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the continued participation of the U.S. Forest Service (USFS) in the JAI Project as a cooperating agency.

I am writing to you for two primary reasons. First, I have reviewed your letter in detail and have provided responses and/or revised the SEIS in response to your comments, as incorporated into the Preliminary Final SEIS. For ease of reference, the attached comment-response letter contains responses that have been imbedded in a reprint of your original comment letter. Secondly, as a Cooperating Agency, I am providing you the JAI Project Preliminary Final SEIS for your review and comment. Due to its preliminary nature, this document is provided for Cooperating Agency review only. It is not a public document, and its information should not be shared with other agencies or individuals. FHWA and DOT&PF will consider your agency's comments, as well as comments by the other Cooperating Agencies, in preparation of the JAI Project Final SEIS for public release (as noted previously and consistent with 23 U.S.C. 193(n)(2), FHWA intends to issue a combined Final SEIS and Record of Decision). Please let me know if you would like additional copies of the document. I ask that you provide any further written comments within 30 days of receipt of this correspondence.

Briefly, FHWA has identified the "No Build Alternative" as the Preferred Alternative in the JAI Preliminary Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. See Section 2.4 of the Preliminary Final SEIS for discussion.

Please do not hesitate to contact me at (907) 586-7430 or Gary Hogins at (907) 465-8143, DOT&PF Project Manager, if you have any questions or concerns.

Sincerely,

Tim A. Haugh

(in Age

Environmental Program Manager

Enclosures:

Responses to USFS Comments on the JAI Project Draft SEIS (November 25, 2014)

JAI Project Preliminary Final SEIS - two hardcopies / seven CD-ROMs

Electronic cc:

Earl Stewart, USFS, Tongass Forest Supervisor Brad Orr, USFS, District Ranger Susan Jennings, USFS, Forest Planner Gary Hogins, DOT&PF, Project Manager Forest Service Alaska Region

P.O. Box 21628 Juneau, AK 99802-1628

File Code: 1950

Date:

Tim Haugh Environmental Program Manager Federal Highway Administration P.O. Box 21648 Juneau, AK 99802-1648

Dear Mr. Haugh:

Thank you for the opportunity to review the Juneau Access Supplemental Draft Environmental Impact Statement (SDEIS). Attached please find our comments. If you have any further questions or wish to discuss this further, please feel free to contact Mr. Ken Post at (907) 586-8796.

Sincerely,

BETH G. PENDLETON Regional Forester

Enclosure

cc: Forrest Cole, Brad Orr, Susan Jennings

Federal Highway Administration

NOV 2 6 2014

Juneau. Alaska

General Comments

Old Growth Reserves

The Old Growth Reserve (OGR) modification review is underway. Although we don't have specific OGR information to offer at this time, it is possible that OGR modifications will be needed and that will require a forest plan amendment and a separate Forest Service decision. If that is the case, the Forest Service will adopt the FHWA FEIS, and that means that the adopted FEIS will have to be consistent with Forest Service policy, handbook guidance, and regulations for items such as the biological evaluation (BE), subsistence, and roadless areas. A separate Forest Service decision will also be subject to the 36 CFR Part 218 Objection regulations and its resultant timeframes. When the OGR review is complete, we will work with you to discuss how to incorporate this information into the FHWA FEIS, and how the Forest Service timeline fits within the larger Juneau Access decision timeline.

RESPONSE: Regarding the OGR review provided by USFS since submitting this comment, modifications to small OGR boundaries have been recommended by the interagency team; therefore, for Alternative 2B based on this comment, a Forest Plan amendment and associated USFS NEPA decision will be needed. The Final EIS acknowledges this with updated information on OGRs; see especially Sections 4.3.14 and 4.4.14 (also related wildlife sections of chapter 4).

Regarding the SEIS's consistency with USFS policy, in the event the project Record of Decision selects an alternative requiring an USFS NEPA action, FHWA will consult with USFS regarding content and format necessary to meet agency guidelines for subsistence and Biological Evaluation. DOT&PF has provided all subsistence information the Forest Service has requested. The Final EIS contains all the information necessary for the FHWA determination. These topics are addressed in more detail below under specific comments.

In addition, there appears to be a misinterpretation of the 50 percent POG application that will need to be corrected. The VCU bullets in Section 4.3.14 need to be clear whether old-growth forest or productive old-growth forest is being discussed. Productive old-growth forest has a distinct meaning with respect to Tongass NF management and Old-growth LUD standards (TLRMP, pages 7-28:Old-growth forest capable of producing at least 20 cubic feet of wood fiber per acre per year, or having greater than 8,000 board feet per acre).

RESPONSE: The information in Terrestrial Habitat sections of the SEIS (Sections 3.3.3, 4.3.14, and 4.4.14) was originally based entirely on USFS geospatial data and, specifically, on 2013 Size Density data. All old-growth forest indicated as low-volume, medium-volume, and high-volume is Productive Old Growth forest habitat. The Final SEIS incorporates the results of the interagency review of small OGRs. Per your comment, and based on the interagency team's report, the text of Sections 4.3.14 and 4.4.14 of the Final SEIS has been revised, and the updates reflect the impacts identified in that report. FHWA assumes the OGR review provided by the interagency team of USFS, USFWS, and ADF&G is the most up-to-date analysis and that it correctly identifies what is and is not "productive old growth." FHWA appreciates the input of the old-growth habitat and terrestrial wildlife experts from the interagency team.

Subsistence

As noted during the Agency review of the preliminary Draft SEIS, the subsistence analysis (ANICLA 810) for this project does not conform to Forest Service standards presented in Forest Service Handbook (FSH) 2090.23. Portions of the required analysis are in the Draft SEIS and technical reports, but these are incomplete. For example, the 2006 FEIS and other documents in the record discuss access and competition (FEIS, pages 4-37 and 4-85), areas of subsistence use (Appendix DD), and notes there were public comments (Appendix Y, pages 40,105, 108 and 127). Other

subsistence documents are cited as well, such as the 1988 USFS subsistence study and a 1994 ADF&G analysis. There does not appear to be a clear rationale for how all this information ties together in the effects section and how that supports a determination of "would not significantly restrict subsistence uses."

In addition, the analysis for each alternative needs to address each evaluation criteria (access, abundance, and competition) and to present a finding (FSH 2090.23.11). Depending on the finding, notices, hearings, and determinations may be necessary. The appropriate finding language is given in FSH 2090.23.12. As stated at FSH 2090.23.22.1: "The evaluation and findings shall be made and clearly identified for the proposed action and for each alternative."

RESPONSE: The SEIS and its appendices, especially Appendix DD, the *Land Use Technical Report* and its sections on subsistence, taken together with the 2006 Final EIS contain all the required information about subsistence. The FSEIS document is sufficient for FHWA's needs under Section 810 of ANILCA. The document includes findings that no alternative would "significantly restrict subsistence uses." For the Final SEIS, see Sections_4.3.6. and 4.4.6 to cross reference to Appendix DD, which in turn cross references to FHWA's findings in the 2006 FEIS.

At the request of the Forest Service, DOT&PF previously provided all cited and requested material on this topic to Mr. Ken Post of the Forest Service Region Office in Juneau.

Biological Assessment

No revised Biological Assessment was provided for review since the Forest Service review of the preliminary Draft SEIS. For the FEIS, the status of some candidate species has changed this year, and the document needs to be consistent with those changes (Kittlitz's murrelet, yellow-billed loon, and Pacific herring). See http://www.fws.gov/alaska/fisheries/endangered/species.htm

RESPONSE: The Biological Assessment (BA) was not issued with the Draft SEIS. Since publication of the Draft SEIS, FHWA has withdrawn the BA since the No Action Alternative has been identified as the Preferred Alternative.

Biological Evaluation

No Biological Evaluation (BE) for this project, that meets the standards detailed in the Forest Service Manual 2670 and R-10 supplement number R-10 2600-2005-1, was submitted for review. While this Draft SEIS updated the Forest Service review of the preliminary Draft SEIS to include current Forest Service R10 sensitive species in the analysis, much of the required analysis is in the Draft SEIS and/or technical reports. Most noticeably, the analyses lack determinations for all sensitive species (see FSM 2672.42 for BE standards, and R10 supplement FSM 2672.42.5 for determination language).

RESPONSE: In the event the project Record of Decision selects an alternative requiring an USFS NEPA action, FHWA will consult with USFS regarding the format and content of a Biological Evaluation. A BE and associated determinations are not required at this time since FHWA has identified the No Action Alternative as the Preferred Alternative.

Historic, Traditional and Cultural Sites

The Forest Service received a copy of a letter from the Douglas Indian Association dated 11/25/14 to ADOT with what appears to be new information about historic, traditional, and cultural sites in the project area. This information should be evaluated and included in the FEIS.

RESPONSE: It is understandable that a review of the Draft SEIS could lead to confusion regarding the summary of historic site information presented, and that it might appear some site locations were missing. To protect sensitive site information, the data and analyses are only summarized in the SEIS, although all of the information available was used in making determinations of eligibility and findings of effect. To protect them, the locations of sensitive archaeological and burial sites were not disclosed in the Draft SEIS and are not disclosed in the Final SEIS.

FHWA and DOT&PF, along with the State Historic Preservation Officer (SHPO), had meetings on February 25, 2016 with Sealaska Corporation, Sealaska Heritage Institute, Douglas Indian Association, and Goldbelt Corporation to address the concerns expressed in comments on the Draft SEIS. Upon conclusion of these meetings, no previously unidentified sites of cultural or historic importance were identified. FHWA's determination of no adverse effect to historic properties remains valid.

As stated in Section 4.8.3, 5.10, and 5.12.1 of the SEIS, if a previously unknown cultural resource or burial site/human remains were discovered during construction, work in the vicinity of the discovery would halt until the discovery was evaluated and appropriate consultation with Tribes and other consulting parties was conducted per Section 106 of the National Historic Preservation Act. If the discovery included human remains or associated funerary objects, it would also be subject to the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), and tribal consultation would be conducted per NAGPRA.

In Sections 3.1.3 and 4.3.4, information has been added to indicate that sensitive sites are not disclosed but were taken into account, and to indicate the cultural importance of the area to Alaska Native people and organizations.

Specific Comments

Page 3-5, fourth paragraph: The document states that the Roadless Rule "...applies generally to the National Forest System..." and that "...it is the USFS's position that the Roadless Rule remains in effect on the Tongass National Forest because the U.S. Court of Appeals for the Ninth Circuit's order...." In reality, the Roadless Rule is a regulation that applies to the National Forest System and to the Tongass National Forest. The Forest Service is not "generally selecting to implement," but is implementing the Roadless Rule because it is regulation. The word "generally" should be deleted. Until the courts have made a final decision, the Roadless Rule is in effect on the Tongass. After the words "At the present time", delete the words "it is the Forest Service's position" and continue with the rest of the sentence.

RESPONSE: A 9th Circuit Court of Appeals decision in July 2015 confirmed that the Roadless Rule applies to Tongass National Forest. The Final SEIS reflects this decision, and the text in this section has been revised accordingly.

Page 3-5, fifth full paragraph: delete "typically." The same paragraph states that "IRAs on federal lands are a resource potentially available for future designation as wilderness under the Wilderness Act of 1964." While this is true, it's not the sole reason for roadless area designation. The Federal Register notice for the 2001Roadless Rule identifies other roadless area values and characteristics (page 3245). This same comment applies to other locations in the SDEIS.

RESPONSE: The text of this paragraph has been updated in the Final SEIS according to this comment to reflect Roadless Area characteristics and values, apart from potential for Wilderness designation. This information is also presented in in Appendix DD of the Draft and Final SEIS.

Page 3-6, second full paragraph in middle of page: The sentence starting with "Because" should be changed to read: "It is the State of Alaska's position that the JAI Project easement is provided by statute and an analysis of other reasonable and prudent alternatives need not be conducted prior to the USFS issuance of the 4407 easement."

RESPONSE: Per your comment, the sentence has been modified to reflect that, because the JAI Project

easement was granted by statute, the State of Alaska believes an analysis of other 'reasonable and prudent' alternatives need not be conducted prior to USFS issuance of the 4407 easement.

Page 3-63, first paragraph below bullets: "Where the Non-Development LUDs do not fulfill size, spacing, and composition criteria of Old-Growth Habitat reserves, it would be necessary to add or modify old- growth reserves to meet the criteria." This paragraph should also include a statement that a Forest Plan amendment would be required to add or modify old-growth reserves.

RESPONSE: Per your comment, text has been added to the end of the paragraph to reflect that TLRMP documents indicate an amendment to the TLRMP would be required to add or modify old-growth reserves.

Page 4-3, first paragraph: The sentence starting with "If' should be changed to read: "If it becomes necessary...the Federal Highway Administration (FHWA) could seek to secure a transportation easement...." This same comment applies to other locations in the SDEIS.

RESPONSE: Per your comment, the sentence beginning with "if" has been modified to read: "If it became necessary to construct outside the Section 4407 easement..., the Federal Highway Administration (FHWA) would seek to secure..."

Page 4-3, Roadless Areas as a Resource: see comment for page 3-5. The Tongass is not exempt from the Roadless Rule; the agency is currently in litigation, but at the present time the Roadless Rule remains in effect on the Tongass.

RESPONSE: Per your comment, the Roadless paragraph has been modified to accurately reflect the current status of the Roadless Rule and the Tongass National Forest, based on the July 2015 9th Circuit Court of Appeals decision.

Page 4-3, Roadless Areas as a Resource: the SDEIS notes the nine roadless area characteristics and states that <u>most</u> of the characteristics are addressed elsewhere in the SDEIS. The cross-references mentioned should be identified here so the reader can easily find them elsewhere in the document. In addition, the SDEIS needs to include a discussion of those resources not addressed in other resource effects sections.

RESPONSE: Section 4.4 of Appendix DD, *Land Use Technical Report*, includes tables with cross references and needed discussion of topics for which there is not analysis elsewhere in the SEIS. Cross reference to specific sections in Appendix DD have been included in the "Roadless as a Resource" subsection of 4.1.1. A sentence also has been added to clarify that, while most of the characteristics are addressed within the SEIS document itself, there is additional information in Appendix DD.

Page 4-3, Roadless Areas as a Resource: Delete "The State of Alaska believes an analysis under the Roadless Rule (of whether other reasonable and prudent alternatives exist that do not use Inventoried Roadless Areas) is not required for this project because Congress authorized the granting of the SAFETEA-LU 4407 transportation easements mentioned in the "note" above to the State of Alaska." In our previous comments dated 8/1/14, the Forest Service specifically requested that the analysis should not go into detail regarding the type of easement to be granted and only focus on the environmental effects. Regardless of the type of easement, the Chief of the Forest Service would still need to make a determination that the easement can be granted to authorize the ROW within a roadless area.

RESPONSE: Per your comment, the Final SEIS has deleted the language as requested in Section 4.1.1. Similar language is retained in the Affected Environment section on Roadless areas (Section 3.1.1.1 of the Final SEIS), because FHWA believes it is important to disclose the options for securing an easement.

Page 4-34, Land Use: change "the" to "a" directly in front of the wording about the 4407 easement.

RESPONSE: The memorandum in question, addressing easements in Section 4407 of SAFETEA-LU, applies to all 4407 easements and the easement-granting process. Per your comment, the language in the Final SEIS has been modified to read as follows: "The 300-foot ROW width on USFS lands is based upon the width specified in the Memorandum of Understanding for Section 4407 easements...." Information on 4407 easements also has been added to Section 3.1.1.3.

Page 4-35, Consistency with Land Use and Management Plans: Change the wording to "If Alternative 2b were the selected alternative, the Forest Service would apply the TUS prescription upon initiation of construction and during system operation (TLRMP, page 3-128)."

RESPONSE: Because the Forest Plan revision in December 2016 eliminated the TUS LUD, it appears this comment no longer applies. The text has been modified throughout, including at this location, to reflect the Transportation Systems Corridors (TSC) concept adopted in the 2016 revised TLRMP. In Sections 4.3.1.2 and 4.4.1.2, a reference to the TLRMP revision Final EIS has been included.

Page 4-35, Section 4.3.1.2: "The USFS, in consultation with ADF&G and USFWS, would adjust the boundaries of the affected Old-Growth Habitat LUDs in accordance with old-growth reserve (OGR) standards in the TLRMP (see OGR discussion in Section 4.3.14)." This would require a Forest Plan amendment and a separate NEPA document signed by the Forest Supervisor. This requirement should be added to the document.

RESPONSE: The cross-referenced Section 4.3.14 has been rewritten to reflect the interagency team recommendations regarding adjustment of OGR boundaries and includes discussion of the need for a USFS NEPA decision and Forest Plan amendment. Such a statement has also been added in 4.3.1.2.

Page 4-202, Section 4.8, lines 3-5: The text mentions temporary facilities "such as borrow sources...." In actuality, the conversion of forest land to a borrow source is a permanent action. The following sentence goes on to say that the "specific location and sizes of these temporary facilities would be determined by the construction contractors." It should be recognized that the Tongass Forest Plan requires an interdisciplinary team process for the planning of quarry and borrow sites (page 4-84).

RESPONSE: Per your comment, the Final SEIS at the beginning of 4.8 clarifies that certain areas, such as staging and storage areas, truly would be temporary use areas used during the construction process. Any such area needed outside the highway right-of-way on USFS land would be secured under special use permit and ultimately restored and returned to USFS management. Borrow sites would be permanent and would be located within the highway right-of-way unless there were no other reasonable alternative. In that case, a USFS Interdisciplinary Team process would be needed. Per your comment, the Final SEIS also notes that material sites and disposal sites would be identified as part of the final design process.

Page 4-121, Section 4.4.9.3: "Alternative 3 would have summer ADT volumes of approximately 1,060 in 2020 and 1,055 in 2050. During winter, ADT would be less than 500 vehicles per day." These numbers do not match those on page 4-123.

RESPONSE: The traffic numbers throughout the EIS, including both Section 4.4.9.3 and Section 4.4.10.2, have been updated and should be consistent.

Page 4-223, second full paragraph: we did not understand this paragraph, and the forest plan reference on page D-17 is to a section on lakes and ponds.

RESPONSE: The only reference in Chapter 4 to p. D-17 was on p. 4-233, not p. 4-223, and was in the first full paragraph on that page, not the second, so it is possible we have not understood the comment as intended. The reference to p. D-17 should have been to Appendix D of the January 2008 Final EIS for the 2008 Forest Plan Amendment, which is about old-growth conservation strategy. In any case, the Forest Plan was revised again in 2016, and this reference has been eliminated in the JAI Final EIS. We have reviewed this paragraph and removed a sentence that may have caused confusion and have made changes to indicate the alternative would contribute to cumulative effects.

Page 5-2, Section 5.5, Intertidal and Subtidal Areas section: This section should include the mitigation change for herring spawning dates discussed on page 4-177.

RESPONSE: Per your comment, the commitment discussed on page 4-177 of the Draft SEIS (Section 4.6.13) has been added as a separate numbered item under Section 5.5 Intertidal and Subtidal Areas in the Final EIS to indicate that the ferry would not begin summer operations in Berner's Bay until May 15 (moved from May 1 to help protect Lynn Canal herring stock).

Page 5-3, Section 5.6: There should be a timing window identified for putting culverts in anadromous fish streams, and note that a Title 16 Permit from ADF&G is required.

RESPONSE: Commitment #1 in Section 5.6 indicates that all anadromous fish streams would be bridged, so no culverts would be required on such streams. A timing window is appropriate for bridge work in anadromous fish streams, and one is provided in Commitment #3. Section 5 lists mitigation commitments; the Permits and Approvals subsections of Chapter 4 (e.g., 4.3.18) lists the Title 16 permit. Commitment #3 indicates that inwater work would be in accordance with the permit.

Attachment B

Correspondence from and Reponses to Federal and State Agencies, Local Governments, and Tribal Organizations since the Draft SEIS

Federal Agencies

- Department of the Interior
 - O Department of Interior to Department of Transportation and Public Facilities (DOT&PF) Comments on 2014 Draft SEIS (November 7, 2014)
- National Marine Fisheries Service (NMFS)
 - o NMFS to FHWA Comments on 2014 Draft SEIS (November 3, 2014)
 - o FHWA to NMFS EFH Conservation Recommendation Pursuant to Section 305(b)(4) of the MSA (January 19, 2017)
 - o FHWA to NMFS Notification of Withdraw or Biological Assessment Addendum and Request for Formal Section 7 Consultation (February 15, 2017)
 - o FHWA to NMFS Response to 2014 Draft SEIS Agency Comments (July 9, 2018)
- U.S. Fish and Wildlife Service (USFWS)
 - o USFWS to DOT&PF Comments on 2014 Draft SEIS (November 24, 2014)
 - o FHWA to USFWS Response to 2014 Draft SEIS Agency Comments (July 9, 2018)

State Agencies

- Alaska Department of Fish and Game (ADF&G)
 - o ADF&G to DOT&PF Comments on 2014 Draft SEIS (November 25, 2014)
 - o DOT&PF to ADF&G Response to 2014 Draft SEIS Comments (July 9, 2018)
- Alaska Department of Natural Resources (DNR)
 - o DNR to DOT&PF Comments on 2014 Draft SEIS (November 25, 2014)
 - o DOT&PF to DNR Response to 2014 Draft SEIS Comments (July 9, 2018)

Local Governments

- Haines Borough
 - o Haines Borough to DOT&PF Comments on 2014 Draft SEIS (October 28, 2014)
 - DOT&PF to Haines Borough Response to 2014 Draft SEIS Comments (July 9, 2018)
- Municipality of Skagway
 - Municipality of Skagway to DOT&PF Comments on 2014 Draft SEIS (November 10, 2014)
 - DOT&PF to Municipality of Skagway Response to 2014 Draft SEIS Comments (July 9, 2018)
- Skagway Port Commission
 - Skagway Port Commission to FHWA Comments on 2014 Draft SEIS (November 25, 2014)

 DOT&PF to Skagway Port Commission Response to 2014 Draft SEIS Comments (July 9, 2018)

Native Organizations

- Douglas Indian Association
 - Douglas Indian Association to DOT&PF Comments on 2014 Draft SEIS (November 25, 2014)
 - o DOT&PF to Douglas Indian Association Acknowledging 2014 Draft SEIS comments received (January 15, 2016)
 - o DOT&PF to Douglas Indian Association Response to 2014 Draft SEIS Comments (July 9, 2018)
- Sealaska
 - Sealaska Corporation to DOT&PF Comments on 2014 Draft SEIS (November 25, 2014)
 - DOT&PF to Sealaska Corporation Acknowledging 2014 Draft SEIS comments received (January 15, 2016)
 - DOT&PF to Sealaska Corporation Response to 2014 Draft SEIS Comments (July 9, 2018)



United States Department of the Interior

OFFICE OF THE SECRETARY

Office of Environmental Policy and Compliance 1689 C Street, Room 119 Anchorage, Alaska 99501-5126

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9043.1 ER14/0617 PEP/ANC

November 7, 2014

Ms. Deborah Holman DOT&PF Southeast Region P.O. Box 112506 Juneau, AK 99811-2506

Subject: Comments on the Draft Supplemental Environmental Impact Statement (DSEIS) Department of Transportation Federal Highway Administration (FHWA), Juneau Access Improvements Project, Alaska

Dear Ms. Holman:

The U.S. Department of the Interior has no comments to offer on the subject document at this time.

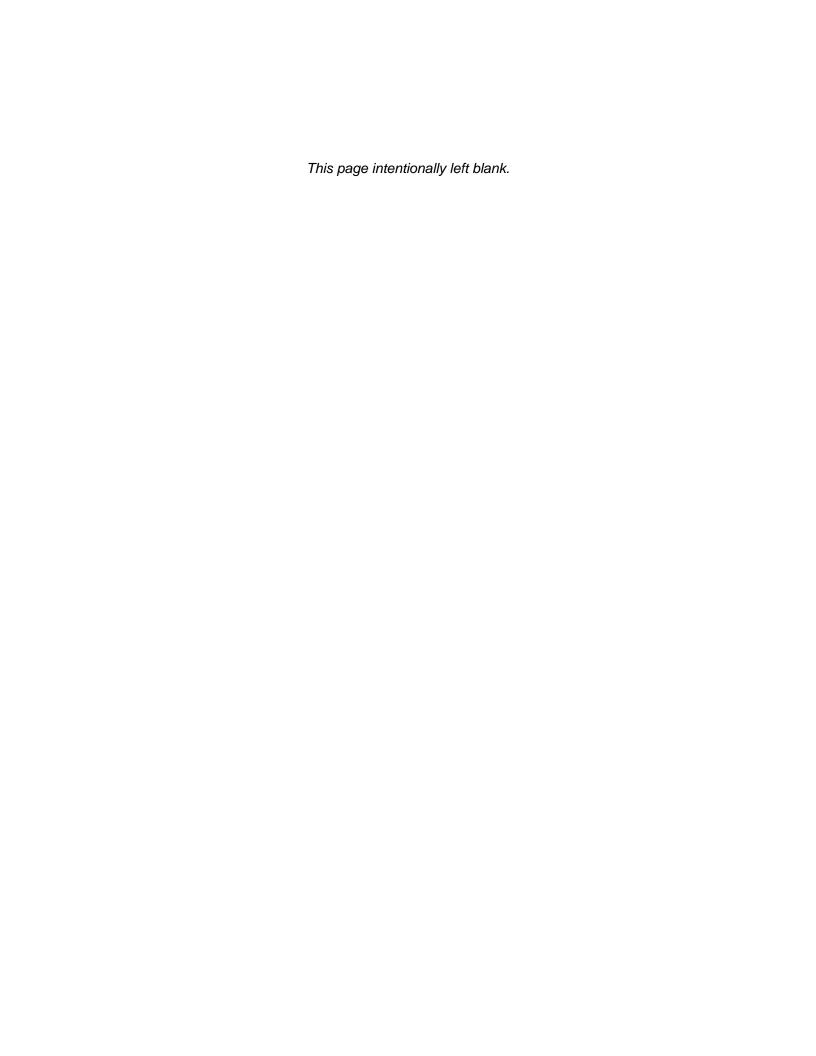
Thank you for the opportunity to review this DSEIS.

Sincerely,

Philip Johnson

Regional Environmental Officer - Alaska

cc: Tim Haugh, FHWA Environment Program Manager



November 3, 2014

Sandra Garcia-Aline, Division Administrator Federal Highway Administration P.O. Box 21648 Juneau, AK 99802-1648

Re: Juneau Access Improvements Project STP-000S(131)/71100 AKR-2014-9360

Dear Ms. Garcia-Aline,

The National Marine Fisheries Service (NMFS) has reviewed the Federal Highway Administration's (FHWA) September 2014 Draft Supplemental Environmental Impact Statement (EIS) for the Juneau Access Improvements Project (Project). Our comments and recommendations are outlined below.

Project Background

The stated purpose of the Project is to improve surface transportation to and from Juneau in the Lynn Canal corridor. The Project has been the subject of ongoing multi-agency consultation since the initial Draft EIS in 1997. Most recently, the Alaska Department of Transportation and Public Facilities (ADOT) initiated preparation of a new Draft Supplemental EIS that evaluates a new alternative, Alternative 1B, for enhanced transportation service using existing Alaska Marine Highway Service (AMHS) assets from Juneau to Haines and Skagway. The Draft Supplemental EIS also reassesses alternatives presented in the 2006 Final EIS and updates other information since the 2006 Record of Decision.

In March 2012, NMFS declined an invitation to act as a cooperating agency for preparation of the new Draft Supplemental EIS and noted the need for Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Endangered Species Act (ESA) consultations in light of required federal permits for the Project. In addition, NMFS restated our view that, relative to Alternative 2B, Alternative 3 was the environmentally preferred alternative for resources under NMFS's jurisdiction. Alternative 3 included a highway along the western shore of Lynn Canal from William Henry Bay to Haines with ferry terminals at Sawmill Cove and William Henry Bay and a bridge over the Chilkat Inlet.

Alternatives Analyses

The 2014 Draft Supplemental EIS considers alternatives and identifies consequences to living marine resources under NMFS jurisdiction. New information on aquatic invasive species is available since the 2006 Final EIS was prepared. Riparian invasive plants such as reed



canarygrass and knotweed are spreading in Southeast Alaska and may impact anadromous stream corridors with dense monoculture stands that alter sediment stability, shading, and nutrient cycling. Currently, Juneau contains major infestations of reed canarygrass and Japanese knotweed. Reed canarygrass occurs at the Kensington Mine site, near Juneau, Alaska (personal observation in July 2014, L.Shaw, Fisheries Biologist, NMFS, Alaska Region).

Although the Draft Supplemental EIS responds to a comment concerning invasive plants by describing measures to minimize their spread, the general public transportation vector is not considered. Vehicles traveling the East Lynn Canal Highway may spread these plants along the road corridor and potentially into anadromous streams and coastal areas that are currently not infested. Eradication or control of these invasive plants, once established, can be expensive and difficult. Recognizing this, the Metlakatla Indian Community has established a vehicle wash down system for all vehicles entering Annette Island from the Alaska Marine Highway System (Winter 2012).

NMFS recommends that all alternatives in the Final Supplemental EIS examine the potential for aquatic invasive species to spread as a result of project activities and identify management measures to prevent the spread of invasive species.

An EFH assessment for the proposed project was completed in 2004, with an addendum completed in 2006. The latest update to the EFH assessment was completed in May 2014. Specific to EFH, NMFS's comments evaluate only those alternatives that are new or have been modified; i.e. Alternatives 1B, 2B, and 3.

Also provided below is an assessment of potential impacts to marine mammals and their habitat from each of the eight alternatives in the 2014 Draft Supplemental EIS. Marine mammals under NMFS's authority in the Lynn Canal area include two species listed as endangered under the ESA (humpback whales and the western Distinct Population Segment of Steller sea lions), and six additional species protected by the Marine Mammal Protection Act (Dall's and harbor porpoise, harbor seals, the eastern Distinct Population Segment of Steller sea lions, killer whales, and minke whales).

Alternative 1-No Action

Alternative 1 includes a continuation of mainline ferry service in Lynn Canal and incorporates two Alaska Class Ferry (ACF) day boats already programmed for construction by the AMHS. No new roads or terminals would be built. Improvements include the two day boats (one would sail between Auke Bay and Haines, and the other would sail between Haines and Skagway), improvements to the Haines and Auke Bay Ferry Terminal staging areas, and expansion of the Haines Ferry Terminal to include a new double-end berth for the day boats.

Marine vessel collisions with marine mammals have the potential to cause injury or mortality (Laist 2001), however documented interactions between marine mammals and AMHS vessels are low in northern Lynn Canal (NMFS Alaska Region Stranding Database 2014).

Alternative 1B- Enhanced Service with Existing AMHS Assets from Juneau to Haines and Skagway

Alternative 1B would continue mainline ferry service in Lynn Canal with no new roads or ferry terminals to be built. Improvements would include two new ACF day boats, improved vehicle and passenger staging areas at the Auke Bay and Haines Ferry Terminals, and expansion of the Haines Ferry Terminal to include a new double-end berth for ACF day boats.

The latest update to the EFH assessment (May 2014) notes that an increase in the number of ferry vessels operated in Lynn Canal could generate more wave and surge effects on shorelines. This may cause an increase in shoreline erosion and turbidity, adversely affecting aquatic habitat, such as eelgrass. The document states that these impacts would be limited to existing ferry terminals in limited areas with shallow shorelines and near-shore vessel operations

Eelgrass provides EFH for the feeding and growth of juvenile salmon, rockfishes, Pacific cod, and flatfishes (Holsman et al. 2006, Laurel et al. 2007, Murphy et al. 2000, Johnson et al. 2003). A recent NMFS study by Harris, Neff, and Johnson (2012) compared the undeveloped eelgrass bed at Bridget Cove to eelgrass beds adjacent to coastal development at the Bay Creek estuary (adjacent to Statter Harbor) and Auk Nu Cove (adjacent to the Auke Bay ferry terminal and a private seafood processing facility). The study documents significant declines in percentage of eelgrass cover (shoot density and areal extent), changes in faunal assemblages, and decreases in fish catch-per-unit effort at Bay Creek and Auk Nu Cove.

Additional degradation of the eelgrass bed in Auk Nu Cove may stem from erosion and turbidity impacts. If chosen, additional ferry operations could further affect the area and impede the recovery of the adjacent eelgrass bed. The Final Supplemental EIS should consider incorporating elements into the design of the Auke Bay Ferry terminal to dissipate the additional wave energy from vessels and minimize continued degradation of the adjacent Auk Nu Cove eelgrass bed.

As noted in the 2004 Wildlife Technical Report (Appendix Q), marine vessel collisions with marine mammals can occur. To date, documented interactions are low between AMHS ferries and marine mammals in northern Lynn Canal. Alternative 1B is not expected to have any additional habitat impacts to marine mammals because no new roads or ferry terminals would be required.

Alternative 2B- East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway

Alternative 2B would construct the East Lynn Canal Highway from a new ferry terminal at Echo Cove to a new ferry terminal two miles north of the Katzehin River, with ferry service connecting to Haines and Skagway. This alternative includes 47.9 miles of new highway, multiple new bridge crossings, blasting of new tunnels, and ongoing avalanche control operations.

This latest update to the EFH assessment concludes that despite the changes proposed in Alternative 2B, the overall acreage of impacts is approximately the same. However, impacts

associated with the ferry terminal were reduced and impacts associated with the roadway were increased. These impacts include filling 32 acres and dredging 4.4 acres of intertidal and subtidal marine areas for the Katzehin ferry terminal.

Alternative 2B would build bridges across ten streams and drainages that support populations of anadromous fish. Additional fill on the south bank of the Katzehin River is to provide scour protection at the bridge abutment will impact 0.55 acres. Further, Alternative 2B would result in the loss of 61 acres of wetlands, including 53 acres of palustrine forested wetlands between Slate Creek and Sherman Point north of Berners Bay, the largest area of wetland loss.

Short-term acute impacts to marine mammals from Alternative 2B include acoustic disturbance from helicopter use, marine vessel use, blasting, and construction noise near two Steller sea lion haulouts along the East Lynn Canal coastline (Gran Point and Met Point haulouts). Video monitoring of these two sites by FHWA/ADOT shows that these haulouts are used year-round by Steller sea lions from both eastern and western Distinct Population Segments. Gran Point is designated as Critical Habitat for Steller sea lions under the ESA. Critical Habitat was designated as a buffer against disturbance, noise, harassment, and illegal shooting.

During the construction period, pile driving at the multiple bridge construction sites will exceed acoustic thresholds for harm and harassment of marine mammals. Potential long-term impacts to marine mammals from Alternative 2B include harassment by helicopters or other equipment involved in avalanche control activities and maintenance of the road. The proposed routing of the road in Alternative 2B is near the two Steller sea lion haulouts and may increase human access to those sites, resulting in chronic harassment events. NMFS anticipates there may be negative impacts to Steller sea lions in response to the increased human activity in such close proximity to these important haulouts.

As noted in the 2004 Wildlife Technical Report (Appendix Q), the impacts to marine mammals from the stressors described above are expected to be greater for Alternative 2B than for any of the ferry improvement alternatives. This is primarily due to the impacts to marine mammals and their habitat from land-based activities.

Alternative 3-West Lynn Canal Highway

Alternative 3 would construct the West Lynn Canal Highway from a new ferry terminal at William Henry Bay on the west side of Lynn Canal to Haines with a new bridge across the Chilkat River/Inlet. This alternative includes 38.9 miles of new highway and a second new ferry terminal at Sawmill Cove in Berner's Bay. Two ACF day boats would operate between the new ferry terminals in Berner's Bay and William Henry Bay, and a new conventional monohull ferry would be constructed to operate between Haines and Skagway. The Skagway Ferry Terminal would be modified to include a new end berth to accommodate the Haines-Skagway shuttle ferry.

Alternative 3 would result in the loss of 26 acres of wetlands and 12 acres of intertidal and subtidal habitat, primarily from construction of ferry terminals at Sawmill Cove and William Henry Bay. All anadromous fish streams would be crossed with bridges.

Similar to Alternative 2B, short-term acute impacts to marine mammals from Alternative 3 include acoustic disturbance from helicopter use, marine vessel use, pile driving, and construction noise near the coast or in marine waters. These acoustic stressors will likely have more of an impact during the spring months when large aggregations of humpback whales and Steller sea lions occur in Berner's Bay in association with schooling/spawning forage fish (i.e., eulachon and herring). In addition, as noted in the 2004 Wildlife Technical Report (Appendix Q), the long term operation of marine shuttles through Berner's Bay will increase disturbance to marine mammals, particularly during the spring months.

The road construction component of Alternative 3 does not pass near known consistent Steller sea lion haulouts and would not be expected to alter designated Critical Habitat for this species. The construction of the two new ferry terminals may impact habitat used by marine mammal prey or potential haulout sites for harbor seals.

Alternatives 4A through 4D-Fast Vehicle Ferry Service vs. Conventional Monohull Ferry Service from Either Auke Bay or Berner's Bay

All four of these alternatives would include continued mainline ferry service with a minimum of two mainline ferry trips per week during the summer and one per week in the winter. The Haines-Skagway service would be provided by a new conventional monohull ferry. All four of these alternatives would require construction of a new double-end berth at Auke Bay. These four alternatives would provide faster and/or more frequent ferry service in Lynn Canal with greater capacity than Alternative 1.

Alternative 4A would construct two new fast vehicle ferries to provide daily summer service between Auke Bay and Haines and between Auke Bay and Skagway. Alternative 4B would widen and extend Glacier Highway from Echo Cove to Sawmill Cove in Berner's Bay and construct a new ferry terminal with two end berths to accommodate two new fast vehicle ferries that would be constructed. The two new fast ferries would provide service between Sawmill Cove and Haines/Skagway during the summer and between Auke Bay and Haines/Skagway during the winter. The ACF day boats programmed under Alternative 1 would not be used under these two alternatives.

Alternative 4B includes additional potential impacts from the construction of a new ferry terminal in Berner's Bay, which includes effects to marine mammal prey habitat.

Alternative 4C would use the two ACF day boats to operate between Auke Bay and Haines/Skagway and Alternative 4D would use the two ACF day boats to operate between Sawmill Cove and Haines, and Sawmill Cove and Skagway. As in Alternative 4B, Alternative 4D would widen and extend Glacier Highway from Echo Cove to Sawmill Cove in Berner's Bay, and construct a new ferry terminal with a double-end berth to accommodate both day boats at once.

Alternative 4D would result in day boats operating in Berner's Bay year-round, including during the spring months when large aggregations of humpback whales and Steller sea lions are present in association with schooling/spawning forage fish. Acoustic disturbance in Berner's Bay is a concern for marine mammals, particularly during the spring months.

Alternative Analyses—Conclusion

It is not clear from the Draft Supplemental EIS or referenced documents that the FHWA conducted an analysis to determine an environmentally preferred alternative. From NMFS's perspective, the environmentally preferred alternative is Alternative 1-No Action, followed by 1B. With appropriate mitigation measures to protect eelgrass beds at Auk Nu Cove, these alternatives would have the least impact because they require no additional fill, no dredging of wetlands or marine areas, and no new construction of roads and ferry terminals.

Impacts to marine mammals are expected to be less with the alternatives that rely exclusively on ferry transportation than those that rely on road construction. Additionally, Berner's Bay is a particularly sensitive area with humpback whales, Steller sea lions, and other marine mammals present year-round and in particularly high densities during the spring months. Therefore, alternatives proposing road construction and activities in and around haulouts and Berner's Bay are of greater concern for NMFS. For these reasons, the environmentally preferred alternative regarding marine mammals and their habitat is Alternative 1-No Action, followed by 1B, 4A, or 4C. Next would be 4B and 4D.

Construction of roads along the coastline of Lynn Canal would have greater short-term and long-term impacts to marine mammals and their habitat due to permanent construction and human activity near haulouts and high use areas than the alternatives primarily relying on ferry transportation. Of the two road construction alternatives, Alternative 3 would be preferable to Alternative 2B due to the expected impacts to the two Steller sea lion haulouts under the latter alternative. As noted in the 2004 Wildlife Technical Report (Appendix Q), the impacts to marine mammals from road construction-related stressors are expected to be greater for Alternative 2B than for any of the ferry improvement alternatives.

EFH Conservation Recommendations

Section 305(b) of the MSA requires federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. Therefore, in accordance with Section 305(b)(4)(A) of the MSA, NMFS offers the following EFH Conservation Recommendation:

• The Yankee Cove artificial reef site was previously completed as mitigation for adverse impacts to living marine resources, including EFH, as a result of the proposed project. NMFS credits the Project for this work. However, NMFS recommends that the Final Supplemental EIS re-evaluate the impacts of the preferred alternative to determine if the level of mitigation already completed is commensurate with and compensates for effects the final alternative may have on living marine resources, including EFH. Additional mitigation may be needed to address final project impacts. NMFS remains willing to discuss mitigation with FWHA.

Under section 305(b)(4) of the MSA, FHWA is required to respond to NMFS's EFH recommendations in writing within 30 days. If FHWA will not make a decision within 30 days of receiving NMFS's EFH Conservation Recommendation, FHWA should provide NMFS with a letter within 30 days to that effect and indicate when a full response will be provided.

Should you have any questions regarding EFH and our recommendation please contact Linda Shaw at 907-586-7510 or linda.shaw@noaa.gov. If you have any questions regarding the marine mammal assessment provided in this letter, please contact Sadie Wright at 907-586-7630 or sadie.wright@noaa.gov.

Sincerely,

James W. Balsiger, Ph.D. Administrator, Alaska Region

cc: Deborah Holman, ADOT, Juneau Chris Meade, EPA, Juneau Randy Vigil, USACE, Juneau Steve Brockman, USFWS, Juneau Tim Haugh, FHWA, Juneau

Literature Cited:

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 - %20Economic%20impacts%20CNIPM%20Presentation%202012%20.pdf



Alaska Division

January 19, 2017

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: 000S(131)/71100

Mr. James W. Balsiger, Ph.D Administrator, Alaska Region National Marine Fisheries Service P.O. Box 21668 Juneau, AK 99802-1668

Dear Mr. Balsiger:

The Federal Highway Administration (FHWA) and Alaska Department of Transportation and Public Facilities (DOT&PF) thank you for your comments on the September 2014 Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We are in the process of reviewing and responding to your comments on the Draft SEIS. This letter has been prepared as a response to the NMFS's EFH conservation recommendation contained in the comments pursuant to Section 305(b)(4) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

In your letter, dated November 3, 2014, you present the following EFH Conservation Recommendation:

The Yankee Cove artificial reef site was previously completed as mitigation for adverse impacts to living marine resources, including EFH, as a result of the proposed project. NMFS credits the Project for this work. However, NMFS recommends that the Final Supplemental EIS re-evaluate the impacts of the preferred alternative to determine if the level of mitigation already completed is commensurate with and compensates for effects the final alternative may have on living marine resources, including EHF. Additional mitigation may be needed to address final project impacts. NMFS remains willing to discuss mitigation with FHWA.

On December 15, 2016, Governor Walker identified Alternative 1, No-Action as the State of Alaska's new preferred alternative for the JAI Project. As no improvements are proposed under this alternative, no impacts to EFH would occur and therefore no further mitigation is proposed as a part of this project.

Thank you again for your comments on the Draft SEIS and the EFH Conservation Recommendation. We assume this letter fulfills our obligation under Section 305(b)(4) of the MSA. If you have any questions, please feel free to contact me at (907) 586-7430 or at Tim.Haugh@dot.gov.

Sincerely,

Tim A. Haugh

Environmental Program Manager

cc: Gary Hogins, Project Manager, DOT&PF



Alaska Division

February 15, 2017

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131)/71100

Mr. James W. Balsiger, Ph.D Administrator, Alaska Region National Marine Fisheries Service P.O. Box 21668 Juneau, AK 99802-1668

Dear Mr. Balsiger:

The Federal Highway Administration as the lead federal agency for Section 7 consultation of the Endangered Species Act on behalf of the U.S. Army Corps of Engineers and the U.S. Forest Service, both cooperating agencies for the Juneau Access Improvement (JAI) Project Supplemental Environmental Impact Statement (SEIS), is withdrawing the Biological Assessment and request for formal consultation with the National Marine Fisheries Service submitted January 29, 2014. As a result of Governor Walker's decision to identify Alternative 1, No-Action as the new State of Alaska's preferred alternative, further Section 7 consultation is not necessary.

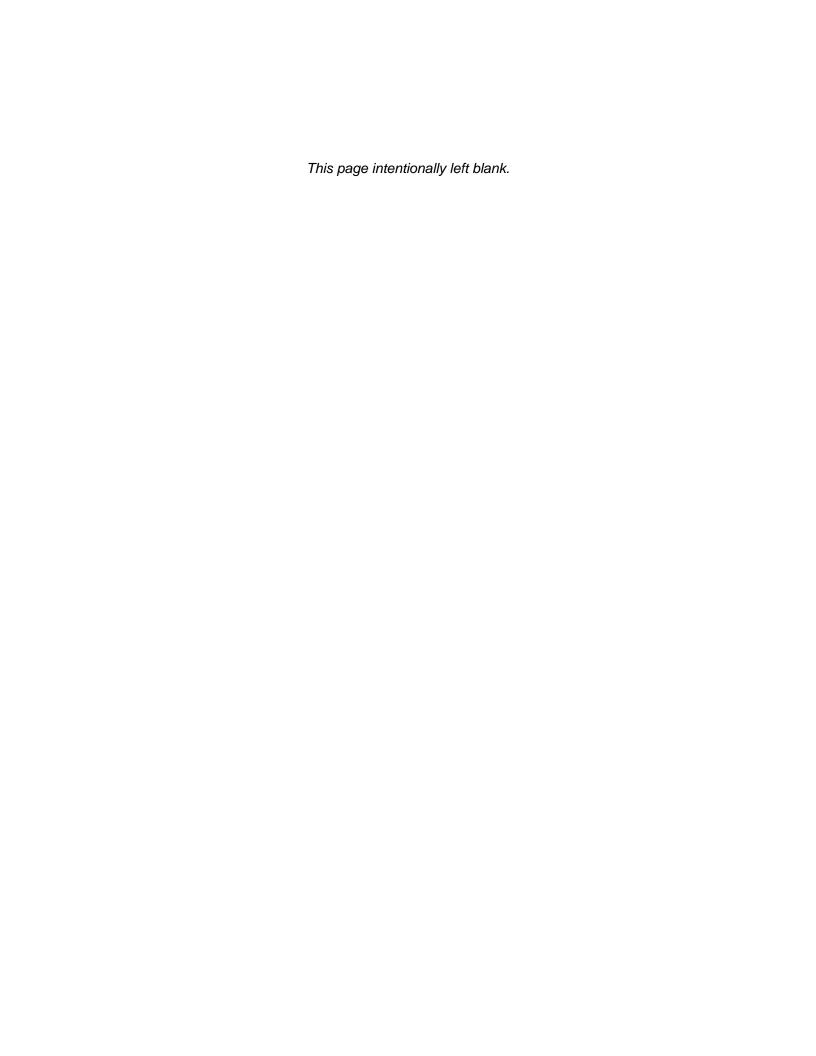
I appreciate your agency's continued involvement and assistance in preparation of the JAI Final SEIS. Please feel free to contact me at (907) 586-7430 or email at tim.haugh@dot.gov with any questions.

Sincerely

Tim A. Haugh

Environmental Program Manager

cc: Gary Hogins, DOT&PF Project Manager Randy Vigil, US Army Corps of Engineers Susan Jennings, US Forest Service





Alaska Division

July 9, 2018

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131)/71100

James W. Balsiger National Oceanic and Atmospheric Administration National Marine Fisheries Service P.O Box 21668 Juneau, Alaska 99802

Dear Balsiger:

Thank you for your letter, dated November 3, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the National Marine Fisheries Service in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 586-7430 or Greg Lockwood, the DOT&PF Project Manager, at (907) 465-1828 if you have any additional questions or concerns.

Sincerely,

Tim A. Haugh

Environmental Program Manager

Enclosures: Responses to National Marine Fisheries Service Comments on the JAI Project

Draft SEIS (November 3, 2014)

cc: Greg Lockwood, Southcoast Region Preliminary Engineering & Development

Group Chief, DOT&PF



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

November 3, 2014

Sandra Garcia-Aline, Division Administrator Federal Highway Administration P.O. Box 21648 Juneau, AK 99802-1648

Re: Juneau Access Improvements Project STP-OOOS(131)/71100 AJCR-2014-9360

Dear Ms. Garcia-Aline,

The National Marine Fisheries Service (NMFS) has reviewed the Federal Highway Administration's (FHWA) September 2014 Draft Supplemental Environmental Impact Statement (EIS) for the Juneau Access Improvements Project (Project). Our comments and recommendations are outlined below

Project Background

The stated purpose of the Project is to improve surface transportation to and from Juneau in the Lynn Canal corridor. The Project has been the subject of ongoing multi-agency consultation since the initial Draft EIS in 1997. Most recently, the Alaska Department of Transportation and Public Facilities (ADOT) initiated preparation of a new Draft Supplemental EIS that evaluates a new alternative, Alternative 1B, for enhanced transportation service using existing Alaska Marine Highway Service (AMHS) assets from Juneau to Haines and Skagway. The Draft Supplemental EIS also reassesses alternatives presented in the 2006 Final EIS and updates other information since the 2006 Record of Decision.

In March 2012, NMFS declined an invitation to act as a cooperating agency for preparation of the new Draft Supplemental EIS and noted the need for Magnuson-Stevens Fishery Conservation and Management Act (MSA) and Endangered Species Act (ESA) consultations in light of required federal permits for the Project. In addition, NMFS restated our view that, relative to Alternative 2B, Alternative 3 was the environmentally preferred alternative for resources under NMFS' sjurisdiction. Alternative 3 included a highway along the western shore of Lynn Canal from William Henry Bay to Haines with ferry terminals at Sawmill Cove and William Henry Bay and a bridge over the Chilkat Inlet.

Alternatives Analyses

The 2014 Draft Supplemental EIS considers alternatives and identifies consequences to living marine resources under NMFS jurisdiction. New information on aquatic invasive species is available since the 2006 Final EIS was prepared. Riparian invasive plants such as reed



canarygrass and knotweed are spreading in Southeast Alaska and may impact anadromous stream corridors with dense monoculture stands that alter sediment stability, shading, and nutrient cycling. Currently, Juneau contains major infestations of reed canarygrass and Japanese knotweed. Reed canarygrass occurs at the Kensington Mine site, near Juneau, Alaska (personal observation in July 2014, L. Shaw, Fisheries Biologist, NMFS, Alaska Region).

RESPONSE: The Draft Supplemental Environmental Impact Statement (SEIS) addressed invasive plant species in Section 3.3.3, and the Alaska Department of Transportation and Public Facilities' (DOT&PF's) commitment to mitigating, reducing, or eliminating vectors for invasive species to colonize areas affected by project activities is included in Section 5.4. Per your comment, the National Marine Fisheries Service's (NMFS's) personal observation of infestations of reed canarygrass and Japanese knotweed has been incorporated into Section 3.3.3 of the Final SEIS.

Although the Draft Supplemental EIS responds to a comment concerning invasive plants by describing measures to minimize their spread, the general public transportation vector is not considered. Vehicles traveling the East Lynn Canal Highway may spread these plants along the road corridor and potentially into anadromous streams and coastal areas that are currently not infested. Eradication or control of these invasive plants, once established, can be expensive and difficult. Recognizing this, the Metlakatla Indian Community has established a vehicle wash down system for all vehicles entering Annette Island from the Alaska Marine Highway System (Winter 2012).

NMFS recommends that all alternatives in the Final Supplemental EIS examine the potential for aquatic invasive species to spread as a result of project activities and identify management measures to prevent the spread of invasive species.

RESPONSE: The spread of invasive species during construction is discussed in Section 5.4 of the Draft SEIS. Once a project is completed, the road components become part of the Statewide road system. DOT&PF, in cooperation with the University of Alaska Fairbanks Cooperative Extension Service, has identified practices to prevent the spread of invasive species in *Best Management Practices – Controlling the Spread of Invasive Plants During Road Maintenance* (http://aknhp.uaa.alaska.edu/big-files/AKEPIC/Publications/2014/Graziano%20et%20al.%202014%20BMPs.pdf, UAF 2014). These best management practices would be used by DOT&PF during routine maintenance activities along the road system, concentrating on high-priority invasive plant species such as reed canarygrass and knotweed.

An EFH assessment for the proposed project was completed in 2004, with an addendum completed in 2006. The latest update to the EFH assessment was completed in May 2014. Specific to EFH, NMFS's comments evaluate only those alternatives that are new or have been modified; i.e. Alternatives 1B, 2B, and 3.

Also provided below is an assessment of potential impacts to marine mammals and their habitat from each of the eight alternatives in the 2014 Draft Supplemental EIS. Marine mammals under NMFS's authority in the Lynn Canal area include two species listed as endangered under the ESA (humpback whales and the western Distinct Population Segment of Steller sea lions), and six additional species protected by the Marine Mammal Protection Act (Dall's and harbor porpoise, harbor seals, the eastern Distinct Population Segment of Steller sea lions, killer whales,

and minke whales).

Alternative 1-No Action

Alternative 1 includes a continuation of mainline ferry service in Lynn Canal and incorporates two Alaska Class Ferry (ACF) day boats already programmed for construction by the AMHS. No new roads or terminals would be built. Improvements include the two day boats (one would sail between Auke Bay and Haines, and the other would sail between Haines and Skagway), improvements to the Haines and Auke Bay Ferry Terminal staging areas, and expansion of the Haines Ferry Terminal to include a new double-end berth for the day boats.

Marine vessel collisions with marine mammals have the potential to cause injury or mortality (Laist 2001), however documented interactions between marine mammals and AMHS vessels are low in northern Lynn Canal (NMFS Alaska Region Stranding Database 2014).

RESPONSE: Per your comment, information from the NMFS Alaska Region Stranding Database is incorporated into the Final SEIS in Section 4.2B.15.1.

Alternative 1B- Enhanced Service with Existing AMHS Assets from Juneau to Haines and Skagway

Alternative 1B would continue mainline ferry service in Lynn Canal with no new roads or ferry terminals to be built. Improvements would include two new ACF day boats, improved vehicle and passenger staging areas at the Auke Bay and Haines Ferry Terminals, and expansion of the Haines Ferry Terminal to include a new double-end berth for ACF day boats.

The latest update to the EFH assessment (May 2014) notes that an increase in the number of ferry vessels operated in Lynn Canal could generate more wave and surge effects on shorelines. This may cause an increase in shoreline erosion and turbidity, adversely affecting aquatic habitat, such as eelgrass. The document states that these impacts would be limited to existing ferry terminals in limited areas with shallow shorelines and near-shore vessel operations

Eelgrass provides EFH for the feeding and growth of juvenile salmon, rockfishes, Pacific cod, and flatfishes (Holsman et al. 2006, Laurel et al. 2007, Murphy et al. 2000, Johnson et al. 2003). A recent NMFS study by Harris, Neff, and Johnson (2012) compared the undeveloped eelgrass bed at Bridget Cove to eelgrass beds adjacent to coastal development at the Bay Creek estuary (adjacent to Statter Harbor) and Auk Nu Cove (adjacent to the Auke Bay ferry terminal and a private seafood processing facility). The study documents significant declines in percentage of eelgrass cover (shoot density and areal extent), changes in faunal assemblages, and decreases in fish catch-per-unit effort at Bay Creek and Auk Nu Cove.

RESPONSE: The improvements cited above as part of Alternative 1B (i.e., two new Day Boat Alaska Class Ferries [ACFs], improved vehicle and passenger staging areas at the Auke Bay and Haines Ferry Terminals, and expansion of the Haines Ferry Terminal to include a new double-end berth for Day Boat ACFs) are independent, separate projects that were already programmed and not part of Alternative 1B. Since Alternative 1B would not have included shoreline development at the ferry terminals, it would not have directly affected adjacent eelgrass beds. Per your comment, Section 4.2B.13 of the Final SEIS describes wakes from

ferries and potential effects to shallow nearshore areas. The studies by NMFS (Harris, Neff, and Johnson, 2012; Holsman et al., 2006; Laurel et al., 2007; Murphy et al., 2000; and Johnson et al., 2003) are incorporated into the analysis.

Additional degradation of the eelgrass bed in Auk Nu Cove may stem from erosion and turbidity impacts. If chosen, additional ferry operations could further affect the area and impede the recovery of the adjacent eelgrass bed. The Final Supplemental EIS should consider incorporating elements into the design of the Auke Bay Ferry terminal to dissipate the additional wave energy from vessels and minimize continued degradation of the adjacent Auk Nu Cove eelgrass bed.

RESPONSE: Alternative 1B would not have included modifications to the existing ferry terminal. Per your comment, Section 4.2B.13 of the Final SEIS acknowledges the increased turbidity and propeller wash effects on eelgrass. Eel grass beds in the terminal area of Auke Bay are already disturbed, and additional wave energy at the Auke Bay Ferry Terminal from ferry operations would not have been anticipated to substantially degrade the eelgrass bed adjacent to Auk Nu Cove beyond its current condition. The Federal Highway Administration (FHWA) has determined that Alternative 1B would not have a substantial adverse effect on eelgrass beds or other Essential Fish Habitat (EFH).

As noted in the 2004 Wildlife Technical Report (Appendix Q), marine vessel collisions with marine mammals can occur. To date, documented interactions are low between AMHS ferries and marine mammals in northern Lynn Canal. Alternative 1B is not expected to have any additional habitat impacts to marine mammals because no new roads or ferry terminals would be required.

Alternative 2B- East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway

Alternative 2B would construct the East Lynn Canal Highway from a new ferry terminal at Echo Cove to a new ferry terminal two miles north of the Katzehin River, with ferry service connecting to Haines and Skagway. This alternative includes 47.9 miles of new highway, multiple new bridge crossings, blasting of new tunnels, and ongoing avalanche control operations.

This latest update to the EFH assessment concludes that despite the changes proposed in Alternative 2B, the overall acreage of impacts is approximately the same. However, impacts associated with the ferry terminal were reduced and impacts associated with the roadway were increased. These impacts include filling 32 acres and dredging 4.4 acres of intertidal and subtidal marine areas for the Katzehin ferry terminal.

Alternative 2B would build bridges across ten streams and drainages that support populations of anadromous fish. Additional fill on the south bank of the Katzehin River is to provide scour protection at the bridge abutment will impact 0.55 acres. Further, Alternative 2B would result in the loss of 61 acres of wetlands, including 53 acres of palustrine forested wetlands between Slate Creek and Sherman Point north of Berners Bay, the largest area of wetland loss.

Short-term acute impacts to marine mammals from Alternative 2B include acoustic disturbance from helicopter use, marine vessel use, blasting, and construction noise near two Steller sea lion haulouts along the East Lynn Canal coastline (Gran Point and Met Point haulouts). Video

monitoring of these two sites by FHWA/ADOT shows that these haulouts are used year-round by Steller sea lions from both eastern and western Distinct Population Segments. Gran Point is designated as Critical Habitat for Steller sea lions under the ESA. Critical Habitat was designated as a buffer against disturbance, noise, harassment, and illegal shooting.

RESPONSE: Video monitoring was conducted by FHWA/DOT&PF at the Gran Point haulout only. No video monitoring occurred at Met Point as stated in the above paragraph.

During the construction period, pile driving at the multiple bridge construction sites will exceed acoustic thresholds for harm and harassment of marine mammals. Potential long-term impacts to marine mammals from Alternative 2B include harassment by helicopters or other equipment involved in avalanche control activities and maintenance of the road. The proposed routing of the road in Alternative 2B is near the two Steller sea lion haulouts and may increase human access to those sites, resulting in chronic harassment events. NMFS anticipates there may be negative impacts to Steller sea lions in response to the increased human activity in such close proximity to these important haulouts.

As noted in the 2004 Wildlife Technical Report (Appendix Q), the impacts to marine mammals from the stressors described above are expected to be greater for Alternative 2B than for any of the ferry improvement alternatives. This is primarily due to the impacts to marine mammals and their habitat from land-based activities.

RESPONSE: Per your comment, Sections 4.3.13, 4.3.15.1, and 4.3.17 of the Final SEIS describe the potential effects of Alternative 2B on EFH and marine mammals as noted.

Alternative 3-West Lynn Canal Highway

Alternative 3 would construct the West Lynn Canal Highway from a new ferry terminal at William Henry Bay on the west side of Lynn Canal to Haines with a new bridge across the Chilkat River/Inlet. This alternative includes 38.9 miles of new highway and a second new ferry terminal at Sawmill Cove in Berner's Bay. Two ACF day boats would operate between the new ferry terminals in Berner's Bay and William Henry Bay, and a new conventional monohull ferry would be constructed to operate between Haines and Skagway. The Skagway Ferry Terminal would be modified to include a new end berth to accommodate the Haines-Skagway shuttle ferry.

Alternative 3 would result in the loss of 26 acres of wetlands and 12 acres of intertidal and subtidal habitat, primarily from construction of ferry terminals at Sawmill Cove and William Henry Bay. All anadromous fish streams would be crossed with bridges. Similar to Alternative 2B, short-term acute impacts to marine mammals from Alternative 3 include acoustic disturbance from helicopter use, marine vessel use, pile driving, and construction noise near the coast or in marine waters. These acoustic stressors will likely have more of an impact during the spring months when large aggregations of humpback whales and Steller sea lions occur in Berner's Bay in association with schooling/spawning forage fish (i.e., eulachon and herring). In addition, as noted in the 2004 Wildlife Technical Report (Appendix Q), the long term operation of marine shuttles through Berner's Bay will increase disturbance to marine mammals, particularly during the spring months.

The road construction component of Alternative 3 does not pass near known consistent Steller sea lion haulouts and would not be expected to alter designated Critical Habitat for this species. The construction of the two new ferry terminals may impact habitat used by marine mammal prey or potential haulout sites for harbor seals.

RESPONSE: Impacts to humpback whales and Steller sea lions from Alternative 3, including acoustic disturbances in Berners Bay, were addressed in Sections 4.4.17 and 4.8.12 of the Draft SEIS. Acoustic disturbances from construction and vessel operation may have caused Steller sea lions and humpback whales to avoid the area near the disturbance, but avoidance would have been expected to be temporary. As stated in Sections 4.4.15.1 and 4.8.12, haulouts for marine mammals would have been unlikely to be affected by construction or operation in Berners Bay. The amount of available forage in Berners Bay and temporary avoidance would have not been expected to adversely affect marine mammals or their prey species.

Alternatives 4A through 4D-Fast Vehicle Ferry Service vs. Conventional Monohull Ferry Service from Either Auke Bay or Berner's Bay

All four of these alternatives would include continued mainline ferry service with a minimum of two mainline ferry trips per week during the summer and one per week in the winter. The Haines-Skagway service would be provided by a new conventional monohull ferry. All four of these alternatives would require construction of a new double-end berth at Auke Bay. These four alternatives would provide faster and/or more frequent ferry service in Lynn Canal with greater capacity than Alternative 1.

Alternative 4A would construct two new fast vehicle ferries to provide daily summer service between Auke Bay and Haines and between Auke Bay and Skagway. Alternative 4B would widen and extend Glacier Highway from Echo Cove to Sawmill Cove in Berner's Bay and construct a new ferry terminal with two end berths to accommodate two new fast vehicle ferries that would be constructed. The two new fast ferries would provide service between Sawmill Cove and Haines/Skagway during the summer and between Auke Bay and Haines/Skagway during the winter. The ACF day boats programmed under Alternative 1 would not be used under these two alternatives.

Alternative 4B includes additional potential impacts from the construction of a new ferry terminal in Berner's Bay, which includes effects to marine mammal prey habitat.

Alternative 4C would use the two ACF day boats to operate between Auke Bay and Haines/Skagway and Alternative 4D would use the two ACF day boats to operate between Sawmill Cove and Haines, and Sawmill Cove and Skagway. As in Alternative 4B, Alternative 4D would widen and extend Glacier Highway from Echo Cove to Sawmill Cove in Berner's Bay, and construct a new ferry terminal with a double-end berth to accommodate both day boats at once.

Alternative 4D would result in day boats operating in Berner's Bay year-round, including during the spring months when large aggregations of humpback whales and Steller sea lions are present in association with schooling/spawning forage fish. Acoustic disturbance in Berner's Bay is a concern for marine mammals, particularly during the spring months.

RESPONSE: Impacts to humpback whales and Steller sea lions from Alternative 4D, including acoustic disturbances in Berners Bay, are addressed in Section 4.6.17 of the Draft SEIS. Underwater acoustic disturbances from vessel operation may have caused Steller sea lions and humpback whales to avoid the area near the vessel, but avoidance would have been expected to be temporary. The amount of available forage and temporary avoidance would not have been expected to adversely affect Steller sea lions or humpback whales.

Note that Alternative 4D would not have included year round Day Boat ACF use in Berners Bay. The Day Boat ACFs would have operated in Berners Bay during summer months only.

Alternative Analyses—Conclusion

It is not clear from the Draft Supplemental EIS or referenced documents that the FHWA conducted an analysis to determine an environmentally preferred alternative. From NMFS's perspective, the environmentally preferred alternative is Alternative 1-No Action, followed by 1B. With appropriate mitigation measures to protect eelgrass beds at Auk Nu Cove, these alternatives would have the least impact because they require no additional fill, no dredging of wetlands or marine areas, and no new construction of roads and ferry terminals.

Impacts to marine mammals are expected to be less with the alternatives that rely exclusively on ferry transportation than those that rely on road construction. Additionally, Berner's Bay is a particularly sensitive area with humpback whales, Steller sea lions, and other marine mammals present year-round and in particularly high densities during the spring months. Therefore, alternatives proposing road construction and activities in and around haulouts and Berner's Bay are of greater concern for NMFS. For these reasons, the environmentally preferred alternative regarding marine mammals and their habitat is Alternative 1-No Action, followed by 1B, 4A, or 4C. Next would be 4B and 4D.

Construction of roads along the coastline of Lynn Canal would have greater short-term and long-term impacts to marine mammals and their habitat due to permanent construction and human activity near haulouts and high use areas than the alternatives primarily relying on ferry transportation. Of the two road construction alternatives, Alternative 3 would be preferable to Alternative 2B due to the expected impacts to the two Steller sea lion haulouts under the latter alternative. As noted in the 2004 Wildlife Technical Report (Appendix Q), the impacts to marine mammals from road construction-related stressors are expected to be greater for Alternative 2B than for any of the ferry improvement alternatives.

RESPONSE: A Draft EIS for agency/public review does not typically identify the environmentally preferred alternative. Per 40 Code of Federal Regulations (CFR) 1505.2(b) and FHWA Technical Advisory 6640.8A Section VIII (Record of Decision [ROD]), the ROD includes the environmentally preferred alternative. The JAI Project ROD identifies Alternative 4C as the environmentally preferred alternative due, in part, to it having a lower potential for impacts to marine mammals (see Section III.G of the ROD). Alternative 1 – No Action is the selected alternative (see Section I of the ROD and Section 2.5 of the Final SEIS).

EFH Conservation Recommendations

Section 305(b) of the MSA requires federal agencies to consult with NMFS on all actions that

may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. Therefore, in accordance with Section 305(b)(4)(A) of the MSA, NMFS offers the following EFH Conservation Recommendation:

• The Yankee Cove artificial reef site was previously completed as mitigation for adverse impacts to living marine resources, including EFH, as a result of the proposed project. NMFS credits the Project for this work. However, NMFS recommends that the Final Supplemental EIS re-evaluate the impacts of the preferred alternative to determine if the level of mitigation already completed is commensurate with and compensates for effects the final alternative may have on living marine resources, including EFH. Additional mitigation may be needed to address final project impacts. NMFS remains willing to discuss mitigation with FWHA.

RESPONSE: In the 2006 Final Environmental Impact Statement (FEIS), DOT&PF committed to \$780,000 in-lieu fee compensation to offset unavoidable adverse impacts to intertidal and subtidal marine waters (EFH). In 2008, DOT&PF provided \$324,000 to construct the Yankee Cove project, which established two artificial reefs to enhance habitat important to spawning and rearing fish, including Pacific herring and marine invertebrates. FHWA determined the balance remaining (\$456,000), in addition to the in-water work timing window to avoid sensitive life stages of fish (March 15 through June 15) and other measures described in Chapter 5 of the Draft SEIS, would provide adequate mitigation for Alternative 2B impacts to marine resources. Alternative 1 – No Action (preferred alternative) would not result in impacts above the existing condition; therefore, no mitigation is required or proposed under the Alternative 1 – No Action.

Under section 305(b)(4) of the MSA, FHWA is required to respond to NMFS's EFH recommendations in writing within 30 days. IfFHWA will not make a decision within 30 days of receiving NMFS's EFH Conservation Recommendation, FHWA should provide NMFS with a letter within 30 days to that effect and indicate when a full response will be provided.

Should you have any questions regarding EFH and our recommendation please contact Linda Shaw at 907-586-7510 or linda.shaw@noaa.gov. If you have any questions regarding the marine mammal assessment provided in this letter, please contact Sadie Wright at 907-586-7630 or sadie.wright @noaa.gov.

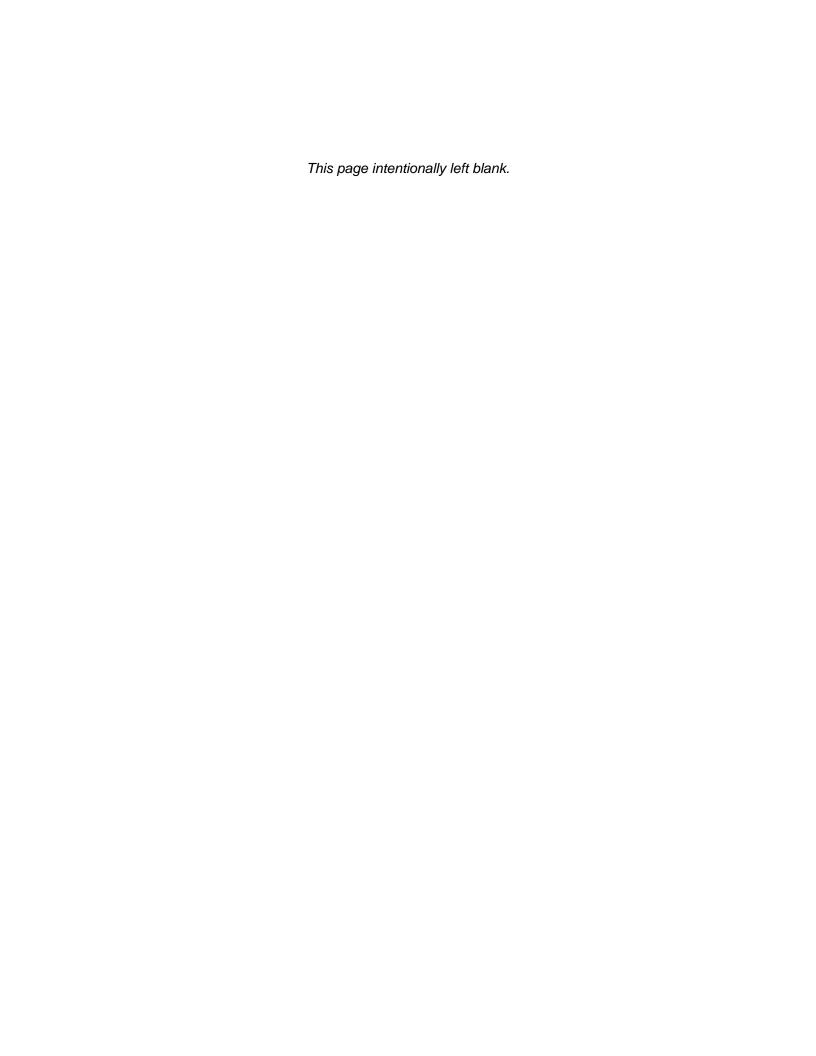
Sincerely,

James W. Balsiger, Ph.D. Administrator, Alaska Region

cc: Deborah Holman, ADOT, Juneau Chris Meade, EPA, Juneau Randy Vigil, USACE, Juneau Steve Brockman, USFWS, Juneau Tim Haugh, FHWA, Juneau

Literature Cited:

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 - %20Economic%20impacts%20CNIPM%20Presentation%202012%20.pdf





United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE Juneau Suboffice, Anchorage Field Office 3000 Vintage Blvd, Suite 201 Juneau, AK 99801



In Reply Refer To: FWS/AFES/AFWFO

11/24/2014

Deborah Holman Alaska Department of Transportation and Public Facilities 6860 Glacier Highway Juneau, AK 99802-1648

Dear Ms. Holman:

Staff of the U.S. Fish and Wildlife Service has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Juneau Access Improvements Project. The SEIS evaluates seven action alternatives to improve surface transportation between Juneau and the head of Lynn Canal, plus a no action alternative. Action alternatives include new highways along either the east or west side of Lynn Canal, or enhanced ferry service using new or existing ferry facilities and various ferry types.

The SEIS identifies the East Lynn Canal Highway to Katzehin, with shuttle ferries to Haines and Skagway (Alternative 2B) as the preferred alternative. Recent reports by the Alaska Department of Fish and Game document use of the East Lynn Canal project area by a variety of wildlife species, including mountain goats, brown bears, moose, and wolverines. The SEIS concludes that impacts to wildlife from construction and operation of a West Lynn Canal Highway (Alternative 3) would be similar but smaller. Studies of wildlife use of the West Lynn Canal route have not been conducted, so the validity of this conclusion cannot be verified. We recommend that wildlife use along the West route be better evaluated, using methods similar to those used for the East Lynn Canal rout route to allow better comparison of the road alternatives.

Surveys for bald eagle nests on both sides of Lynn Canal have shown that the East route could disturb approximately twice as many eagle nests as the west route, suggesting that the west route would have lower impacts. The Fish and Wildlife Service will continue to coordinate with you and the Alaska Department of Transportation and Public Facilities to conduct surveys and evaluate measures to avoid and minimize impacts to eagles, to the extent practicable, and to permit impacts that cannot be avoided.

Ferry enhancement alternatives would use either the existing ferry terminal at Auke Bay (Alternatives 4A and 4C) or a new terminal at Sawmill Cove in Berner's Bay. Sawmill Cove is currently undeveloped, and provides a variety of wildlife habitats and outdoor recreational opportunities A large beach meadow, hidden from the salt water by a beach berm, offers excellent security for bears, moose, deer, and other species. The area is popular with campers, kayakers, hunters, and fishermen. These values would be impacted or lost by construction of a ferry terminal in Sawmill Cove.

We recommend that the Federal Highway Administration more fully evaluate the feasibility of operating a ferry terminal at nearby Cascade Point, which already has road access and a permitted marine access

Ms. Deborah Holman 2

facility (breakwater and barge ramp), or other sites along the Juneau road system that could be used. We believe that additional construction at this site would have much lower environmental impacts than construction at Sawmill Cove.

Thank you for this opportunity to provide our comments on this project. If you have any questions, please contact me at (907) 780-1181 or by email at steve_brockmann@fws.gov.

Sincerely

Steve Brockmann

Southeast Alaska Coordinator

cc: Jennifer Curtis, EPA, Anchorage Linda Shaw, NOAA, Juneau Jackie Timothy, ADF&G, Douglas Randy Vigil, ACOE, Juneau Tim Haugh, FHwA, Juneau



Alaska Division

July 9, 2018

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131)/71100

Steve Brockmann
United States Department of the Interior
U.S. Fish and Wildlife Service
Juneau Suboffice, Anchorage Field Office
3000 Vintage Blvd, Suite 201
Juneau, Alaska 99801

Dear Mr. Brockmann:

Thank you for your letter, dated November 24, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the U.S. Fish and Wildlife Service in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 586-7430 or Greg Lockwood, the DOT&PF Project Manager, at (907) 465-1828 if you have any additional questions or concerns.

Sincerely,

Tim A. Haugh

Environmental Program Manager

Enclosures: Responses to U.S. Fish and Wildlife Service Comments on the JAI Project Draft

SEIS (November 24, 2014)

cc: Greg Lockwood, Southcoast Region Preliminary Engineering & Development

Group Chief, DOT&PF



United States Department of the Interior

FISH A WILDLIFE SSISTACE

U.S. FISH AND WILDLIFE SERVICE Juneau Suboffice, Anchorage Field Office 3000 Vintage Blvd, Suite 201 Juneau, AK 99801

In Reply Refer To: FWS/AFES/AFWFO

In Reply Refer To: FWS/AFES/AFWFO

United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE Juneau Suboffice, Anchorage Field Office 3000 Vintage Blvd, Suite 201 Juneau, AK 99801

11/24/2014

Deborah Holman Alaska Department of Transportation and Public Facilities 6860 Glacier Highway Juneau, AK 99802-1648

Dear Ms. Holman:

Staff of the U.S. Fish and Wildlife Service has reviewed the Draft Supplemental Environmental Impact Statement (SEIS) for the Juneau Access Improvements Project. The SEIS evaluates seven action alternatives to improve surface transportation between Juneau and the head of Lynn Canal, plus a no action alternative. Action alternatives include new highways along either the east or west side of Lynn Canal, or enhanced ferry service using new or existing ferry facilities and various ferry types.

The SEIS identifies the East Lynn Canal Highway to Katzehin, with shuttle ferries to Haines and Skagway (Alternative 2B) as the preferred alternative. Recent reports by the Alaska Department of Fish and Game document use of the East Lynn Canal project area by a variety of wildlife species, including mountain goats, brown bears, moose, and wolverines. The SEIS concludes that impacts to wildlife from construction and operation of a West Lynn Canal Highway (Alternative 3) would be similar but smaller. Studies of wildlife use of the West Lynn Canal route have not been conducted, so the validity of this conclusion cannot be verified. We recommend that wildlife use along the West route be better evaluated, using methods similar to those used for the East Lynn Canal route to allow better comparison of the road alternatives.

RESPONSE: The Alaska Department of Fish and Game (ADF&G) studies in the East Lynn Canal project area were not conducted to provide information to support an evaluation of potential effects of Alternative 2B in the Supplemental Environmental Impact Statement (SEIS). Rather, they were conducted as mitigation required in the Federal Highway Administration (FHWA) 2006 Record of Decision for the Juneau Access Improvements (JAI) Project to assist ADF&G manage those populations. Extrapolation of regional data to areas in proximity and with similar topography and habitat types is appropriate for an alternatives analysis under the National Environmental Policy Act (NEPA) and is commensurate with other NEPA evaluations.

Surveys for bald eagle nests on both sides of Lynn Canal have shown that the East route could disturb approximately twice as many eagle nests as the west route, suggesting that the west route would have lower impacts. The Fish and Wildlife Service will continue to coordinate with you and the Alaska Department of Transportation and Public Facilities to conduct surveys and evaluate measures to avoid and minimize impacts to eagles, to the extent practicable, and to permit impacts that cannot be avoided.

RESPONSE: FHWA and the Alaska Department of Transportation and Public Facilities (DOT&PF) appreciate the extensive coordination with Fish and Wildlife Service on this project.

Ferry enhancement alternatives would use either the existing ferry terminal at Auke Bay (Alternatives 4A and 4C) or a new terminal at Sawmill Cove in Berner's Bay. Sawmill Cove is currently undeveloped, and provides a variety of wildlife habitats and outdoor recreational opportunities. A large beach meadow, hidden from the salt water by a beach berm, offers excellent security for bears, moose, deer, and other species.

RESPONSE: Impacts to wildlife from construction and operation of Alternatives 4B and 4D, including the Sawmill Cove Ferry Terminal, are addressed in Section 4.6.15 of the Final SEIS and Section 4.6.4 of the *2014 Update to Appendix Q – Wildlife Technical Report*.

The impact analysis specifically addresses these habitats, noting in Section 4.6.15 of the Final SEIS, "The beach fringe between Echo Cove and Sawmill Cove provides high-value habitat for many terrestrial mammals, including bears, martens, river otters, and wolves." Section 4.6.15 goes on to explain how the highway alignment for Alternatives 4B and 4D would have:

- Divided the home range of some bears that winter at higher elevations and move down to the coast during summer to forage, particularly for black bears that feed on salmon at Sawmill Creek
- Likely caused seasonal disturbance and displacement of brown bears using beaches near Sawmill Cove and Point St. Mary during ferry operations.
- Provided more access for people to beaches in the Sawmill Cove vicinity, potentially inhibiting the use of this area by wolves.
- Not fragmented the ranges of martens and river otters, as these species have small home ranges and readily cross roads.
- Affected the winter habitat of goats in the area from Echo Cove to Sawmill Cove.

The area is popular with campers, kayakers, hunters, and fishermen. These values would be impacted or lost by construction of a ferry terminal in Sawmill Cove.

RESPONSE: Increasing access to this area with a road and ferry terminal would have increased recreational opportunities, but changed the quality. Sections 4.4.1.3 and 4.6.1.3 of the Final SEIS address the potential impacts of the Sawmill Cove Ferry Terminal (Alternatives 3, 4B, and 4D) on land and resource uses. The change in quality is described in Section 4.6.1.3 as follows:

"A highway to Sawmill Cove would make it more accessible for people looking for a rustic but not pristine outdoor experience. It could also provide opportunities for outfitters to make more recreational trips available to the public in the region. Opening up the recreation opportunities of the coastline along the east side of Lynn Canal to Berners Bay would be perceived as a negative impact by those who enjoy the existing remote nature of the region, including some outfitters who currently provide wilderness trips there... Increases in hunting and fishing would be expected along the extension of the highway from Cascade Point to Sawmill Cove. As in other readily accessible regions of the state, the ADF&G would monitor the resources along Lynn Canal and adjust fish and game regulations, as necessary, to protect those resources from over utilization."

We recommend that the Federal Highway Administration more fully evaluate the feasibility of operating a ferry terminal at nearby Cascade Point, which already has road access and a permitted marine access facility (breakwater and barge ramp), or other sites along the Juneau road system that could be used. We believe that additional construction at this site would have much lower environmental impacts than construction at Sawmill Cove.

RESPONSE: Sites along the road system south of Berners Bay were dismissed during alternative screening due to basin characteristics and exposure to the weather. Had the Final SEIS preferred alternative included a ferry terminal in Berners Bay, DOT&PF would have investigated the suitability and availability of siting the ferry terminal at Cascade Point (see Section 4.9.2.10).

Thank you for this opportunity to provide our comments on this project. If you have any questions,

please contact me at (907) 780-1181 or by email at steve brockmann@fws.gov.

Sincerely

Steve Brockmann

Southeast Alaska

Coordinator cc: Jennifer Curtis, EPA, Anchorage

Linda Shaw, NOAA, Juneau Jackie Timothy, ADF&G, Douglas Randy Vigil,

ACOE, Juneau

Tim Haugh, FHWA, Juneau

MEMORANDUM

State of Alaska

Department of Fish and Game Division of Habitat

TO: Gary Hogins

Special Projects Manager

Department of Transportation and

Public Facilities Southeast Region

SUBJECT: Juneau Access DSEIS

ADF&G Comments

November 25, 2014

000S(131)/71100

FROM: Jackie Timothy

Southeast Regional Supervisor

PHONE NO: (907) 465-4275

DATE:

FILE NO:

The Alaska Department of Fish and Game (ADF&G) reviewed the Alaska Department of Transportation and Public Facilities (ADOT&PF) Draft Supplemental Environmental Impact Statement (DSEIS) for the Juneau Access Improvement Project. The project addresses surface transportation to and from Juneau within Lynn Canal.

We limited our review to highway build alternatives that would impact fish and wildlife resources and habitats for which we have statutory management responsibilities. This includes preferred Alternative 2B East Lynn Canal, Alternative 3 West Lynn Canal, Alternative 4B Berners Bay fast ferry, and Alternative 4D Berners Bay conventional monohull.

In the 2006 Record of Decision for the Juneau Access Improvements Project, DOT&PF agreed to fund ADF&G wolverine, brown bear, and moose population studies for three years, and mountain goat population studies for four years. When the project was enjoined in federal court, the wildlife studies changed to include species range. ADF&G provided scoping comments on March 5, 2012 requesting the DSEIS include data from ADOT&PF funded studies of wolverine (Lewis et al. 2012), brown bear (Flynn et al. 2012), moose (White et al. 2012a), and mountain goat (White et al. 2012b). DSEIS Appendix Z includes a 2014 update to the 2005 Addendum to Appendix Q Wildlife Technical Report and 2004 Wildlife Technical Report included in Appendix W of the 2006 Final EIS. ADOT&PF states this information remains valid and includes

- Wolverine home range concluding no alternative is likely to have an impact on wolverines or their populations in southeast Alaska.
- Brown bear population estimates and density, home range and habitat use, concluding wildlife underpasses and best management practices during construction and operation will reduce disturbance, displacement, bear/human interactions, and collisions

- Moose population estimates, distribution, and predicted habitat use, concluding wildlife underpasses and re-vegetation with non-palatable species will discourage browsing and reduce collisions.
- Mountain goat population estimates, distribution and predicted habitat use, concluding alternative 2B would intersect winter habitat in east Lynn Canal north of Comet to the Katzehin River and proposing, among others, spotting and hazing mountain goats from the area prior to routine avalanche control.

ADOT&PF estimates the terrestrial habitat loss from the highway build alternatives is one percent or less of the habitat available in the project study area, with the impacts to fish and wildlife resources from Alternative 2B greater than Alternative 3, and the impacts from Alternative 3 greater than Alternatives 4B and 4D. ADOT&PF concludes the wolverine, brown bear and moose habitat selection and use patterns would be similar on the west side of Lynn Canal in Alternative 3, with mountain goat habitat unlikely to be impacted. Alternatives 2B and 3 will increase public access to fish and wildlife resources in Lynn Canal, and ADOT&PF expects ADF&G will use the management tools available to manage increased harvest pressure.

ADF&G discovered inaccuracies in the DSEIS and occasional misapplication of information from the wildlife studies. ADOT&PF could improve the SEIS by incorporating the following information –

Page 3-69, paragraph 5: Moose use of the Katzehin flats should be addressed within this section and the map predicting relative probability of use during the summer should be included in the figures (White et al. 2012a).

Page 3-70, paragraph 2: Mountain goat wintering areas occur on the bluffs between Johnson Creek and Berners River and on the ridge east of Echo Cove. Some areas are not used by mountain goats due to lack of escape terrain. Please remove suitable forage from the penultimate sentence in the first shaded paragraph.

Page 3-75, paragraph 2: Figure 3-19 identifies locations within the study area that are frequented by humpback whales and Steller sea lions.

Figure 3-21: New maps are available for mountain goat (White et al. 2012b) and brown bear habitat (Flynn et al. 2012).

Figure 3-22: New maps are available for moose habitat (White et al. 2012a).

Page 4-84, paragraph 1: Though we have completed wildlife studies since ADOT&PF wrote section 4.3.15.3, the extent to which mountain goats may be disturbed by highway intersection of fragmented important winter range is unknown. Since mountain goats are sensitive to human disturbance and can experience nutritional deprivation during late winter, factors that result in increased energetic costs or restriction of suitable foraging areas have the potential to negatively impact local populations. It is unclear if the data from our recent studies will accurately represent important wintering areas if road construction results in changes in the way mountain goats use wintering areas.

Page 4-86, paragraph 1: Correct to reflect that moose in the Berners Bay area is managed under a drawing hunt and limited to 1 to 5 permits a year. The area along western Lynn Canal is managed as a registration hunt. The Katzehin River is managed as a Tier II limited entry subsistence hunt.

Page 4-91, bullet 10: ADOT&PF requests Title 16 fish habitat permits replace the Title 41 fish habitat permits previously issued for stream crossing structures. Sections 4.4.18 and 4.6.18 should be updated to acknowledge ADF&G fish habitat permits are issued under Title 16.

Page 4-135, paragraph 2: The Glacier Highway extension of Alternative 3 is adjacent to mountain goat wintering habitat in the vicinity of Echo Cove (White et al. 2012b). We request ADOT&PF not apply the White et al. (2012b) analyses to the West Lynn Canal Highway alternative.

Page 4-135, paragraph 3: The White et al. (2012b) studies show 25.3 km of the highway would intersect moderate to high use mountain goat wintering areas. Please update this paragraph.

Page 4-135, paragraph 4: ADF&G does not have data that supports the ADOT&PF claim that moose-vehicle collisions would be lower on the east side of Lynn Canal.

Page 4-215, paragraph 3: Studies in the Yakutat forelands indicate moose can be displaced by human activity associated with all-terrain vehicle use along trails. While moose can be seen along roads and in the vicinity of human activity, that does not mean moose do not avoid human activity.

Page 4-234, paragraph 4: Monitoring assesses, rather than mitigates, impacts.

Page 4-238, paragraph 3: There are no quantitative or qualitative analyses to support ADOT&PF's claim that there will be no Lynn Canal region mountain goat population-level effects from increased hunting pressure, habitat loss, and habitat fragmentation because ADF&G¹ would be monitoring the population and managing hunting accordingly.

Page 5-1, section 5.1, number 3: Reconcile "and to the extent certified seeds are available" with section 5.4 number 1: "Only certified seed mixtures would be used...".

Page 5-2, section 5.4, number 3: Reconcile "Construction equipment would be pressure washed..." with Terrestrial Habitat in 2014 Update to Appendix Q – Wildlife Technical Report section 5.4 number 2: "Construction equipment will be steam cleaned prior to use...".

Page 5-3, section 5.5, number 3: Please provide literature used to develop this recommendation and discuss the issue with your regional hydrologists and engineers.

Page 5-3, section 5.3, number 3: In-water work at anadromous and resident fish streams should be timed in accordance with the fish habitat permits.

-

¹ Insinuated

Page 5-4, section 5.9, number 1: Camps necessary during construction of the project will be operated in accordance with the Division of Environmental Health Food Safety & Sanitation Program that addresses drinking water, food safety, solid waste and wastewater. See temporary camp practices consolidated application and worksheet at http://dec.alaska.gov/eh/fss/forms/food/Temp Camp Application%20 Worksheet.pdf.

Page 5-4, section 5.9, number 3: Proofing.

Page 5-4, section 5.9, number 5: Change USFWS to ADF&G.

Page 5-4, section 5.9, number 6: Appropriately placed wildlife signs will help mitigate potential wildlife collisions.

Pages 5-4 and 5-5, section 5.9, numbers 9 and 11: ADOT&PF is committing to hazing wildlife prior to avalanche control or blasting. ADF&G recommends hazing mountain goats from helicopters as a last resort. ADOT&PF will be required to obtain a public safety permit from the ADF&G Division of Wildlife Conservation² prior to wildlife hazing.

Page 5-5, section 5.9, number 10: This commitment should be expanded to include strategically placed wildlife fences.

Page 5-5, section 5.9, numbers 12 and 13: Please commit to consulting with ADF&G Division of Wildlife Conservation staff during wildlife training program development.

Page 5-5, section 5.9: Please commit to limiting work in mountain goat over-wintering areas January through April.

Page 5-10, section 5.12.2: The long term effectiveness monitoring study of wildlife underpasses for brown bears should include effectiveness monitoring for moose in Berners Bay and the Katzehin River. These studies should also document mountain goat use of the underpasses. Mountain goat and moose pre and post-construction monitoring would determine the extent to which road intersection of winter range fragments and alters use of wintering habitat.

In addition to the inaccuracies we identified in the DSEIS, ADF&G discovered information in the *Appendix Z 2014 update to Appendix Q Wildlife Technical Report*³ that is invalidated by the studies we completed in 2012. ADOT&PF could improve the Wildlife Technical Report by incorporating the following information –

3.3 Species Accounts

3.3.2.1 Brown Bear *Ursus arctos*

- Page 11, paragraph 2: Figures B1, B2, and B3 in Appendix B.
- Page 12, paragraph 1: Figures B3, B4, and B5 in Appendix B.

² ADOT&PF can request a permit application by sending an email to dfg.dwc.permits@alaska.gov.

³ Which is an update to the 2005 Addendum to Appendix Q Wildlife Technical Report and 2004 Wildlife Technical Report included in Appendix W of the 2006 Final EIS.

- Page 12, paragraph 3: Year range 1998 to 2009 (Bethune 2011).
- Page 12, paragraph 3: Unit 1D average harvest 14 bears per year (Bethune 2011).
- Page 12, paragraph 3: Four brown bear were reported as defense of life or property in all of GMU 1 during July 1, 2006 to June 30, 2010 (Bethune 2011).

3.3.2.2 Marten *Martes americana*

• Page 12: Figure 2 is a wetlands classification map for Berners Bay.

3.3.2.3 Moose *Alces alces*

- Page 13, paragraph 1: Figures C1 and C2 in Appendix C.
- Page 13, paragraph 3: Figures C3 and C4 in Appendix C.
- Page 13, paragraph 3: There were 14 surveys conducted during the winter between 2006 and 2011. The figure referenced is a model that predicts where moose can be found through the winter.
- Page 13, paragraph 4: Figures C5 and C6 in Appendix C.
- Page 13, paragraph 5: Cite White et al. (2012a).

3.3.2.4 Mountain Goat *Oreamnos americanus*

- Page 14, paragraph 2: Sinclair Mt. population has not rebounded from 2006 levels.
- Page 14, paragraph 5: The GMU 1C harvest between 2001 and 2010 ranged from 30 to 60 goats per year (Scott 2012). The GMU 1D harvest between 2001 and 2010 ranged from 22 to 43 goats per year (Sell 2012).

3.3.2.5 Wolverine Gulo gulo

- Page 15, paragraph 1: Correct home ranges for male and female to show the medians; 521 km² and 71 km², respectively (Lewis et al. 2012).
- Page 15, paragraph 4: Average harvest in Unit 1C between 1997 and 2008 is 5 wolverines. Average harvest in combined Unit 1C and Unit 1D is 9 wolverines (Scott 2010, Crupi 2010). In Unit 1C, most wolverines are harvested in Berners Bay or on the west side of Lynn Canal (Scott 2010), so wolverine presence in the construction area is underrepresented.

4.2.2 Mammals

4.2.2.1 Wolverine

• Page 18: Alternative 1B would require no construction, and would result in no construction-related impact to brown bear, moose, marten, mountain goat and wolverine.

4.3 Alternative 2B – East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway

4.3.4.1 Brown Bear

• Page 21, paragraph 2: Describe the measures that will be used to minimize bears shot and killed in defense of life or property during construction or reference section where these measures are described.

4.3.4.2 Moose

• Page 22, penultimate sentence of last paragraph: Include lower Lace and Gilkey Rivers.

4.4 Alternative 3 – West Lynn Canal Highway

4.4.4.1 Brown Bears

• Page 28, paragraph 4: Bear use of habitats between Echo Cove and Sawmill Creek and proposed road corridor crossings are underestimated. This area is included in the home range of 2 collared females and 8 collared males (Flynn et al. 2012).

4.4.4.2 Moose

• Page 29, paragraph 4: Cows from Berners Bay also move into Yankee Basin along the beach fringe and road in the spring to calf.

4.4.4.3 Mountain Goat

- Page 29, paragraph 1: William Henry Bay.
- Page 30, paragraph 2: If close to wintering habitat, groups of goats could potentially be down on the highway during the winter months.

4.6 Alternatives 4B and 4D – FVF/Conventional Monohull Service from Berners Bay

4.6.4.1 Brown Bear

• Pages 35 and 36: Bear use of habitats between Echo Cove and Sawmill Creek and proposed road corridor crossings are underestimated on Page 28, paragraph 4 (Flynn et al. 2012). This area is included in the home range of 2 collared females and 8 collared males and their use of this habitat should be documented in this section.

5 Mitigation Measures

5.5 Terrestrial Mammals

- Page 39, number 1: Please work with Division of Wildlife Conservation staff to write best management practices to prevent wildlife habituation.
- Page 39, number 3: ADF&G recommends extending the bridges 50 m on either side rather than 50 ft. We will work with ADOT&PF during fish habitat permitting to address this recommendation.
- Page 39, number 4: ADF&G will work ADOT&PF during fish habitat permitting to ensure the Lace River bridge is aligned with the high use brown bear crossing area identified in Flynn et al. (2012).
- Page 39, number 5: Change USFWS to ADF&G.
- Page 39, number 6: ADF&G recommends the proposed long term wildlife underpass effectiveness monitoring study for brown bears include effectiveness monitoring for moose in Berners Bay and the Katzehin. These studies should also document mountain goat use of the underpasses. Mountain goat and moose pre and post-construction monitoring would determine the extent to which road intersection of winter range fragments and alters use of wintering habitat.

Staff from the Division of Wildlife Conservation are available to help ADOT&PF update the Wildlife Technical Report with the best available information.

In our March 5, 2012 scoping comments, we recommended ADOT&PF include Berners Bay herring spawn maps in the DSEIS. While ADOT&PF has described herring spawn areas in the narrative, Chapter 3 figures could also include ADF&G's Commercial Fisheries Division GIS shapefiles. The Chapter 3 narrative would be improved by including that the herring sac-roe fisheries provided for in regulation could resume if the Lynn Canal population recovered. Chapter 3 could also be updated with the NOAA April 2, 2014 final report concluding the endangered species listing of the Southeast Alaska Distinct Population Segment of Pacific herring is not currently warranted.

Public access provided under alternatives 2B, 3, 4B and 4D will improve the public's ability to harvest eulachon and herring spawn. While increased public access to these resources is noted in Chapter 4 of the DSEIS, the document could be improved by acknowledging in Chapter 2 the increase in management responsibilities for commercial fishery managers. Herring spawn habitat would be lost in Alternatives 3, 4B and 4D, so a commitment to replace the habitat in ferry terminal design would be appropriate. In Chapter 5, the commitment to time in-water work can specify Sawmill Creek ferry terminal in-water work will not occur between April 15 and May 31. Please also update the DSEIS index to include references to herring in Chapters 3, 4 and 5.

ADOT&PF documents 26 anadromous water bodies among the 90 or so streams within the proposed project area. The ADF&G anadromous waters catalog incorrectly lists the stream course, upper extent, and species composition of many of the fish-bearing water bodies in the project area. Most inaccuracies are a result of antiquated mapping practices that are resolved by tracking the stream course on foot using a global positioning system from the stream mouth to an anadromous fish passage barrier, sampling for salmonids using minnow traps, hand nets, or a backpack electrofisher, and digitizing the water body using ArcGIS mapping software. Sawmill Creek is an example of a stream documented as anadromous far above a barrier, Independence Creek is an example of unconfirmed species composition, and Glacier Creek is an example of a stream listed as anadromous but not found in the 2014 anadromous waters catalog. Habitat Division staff will begin correcting the anadromous waters catalog next spring and we will provide the corrected information to ADOT&PF as it becomes available.

The following recommendation, while outside ADF&G authorities, would improve the SEIS:

The information in the SEIS would be better understood if it was consolidated and reorganized. For instance, to review information about anadromous water bodies within the project area, the compact disc the Federal Highway Administration sent to me on September 15, 2014 contains Adobe Acrobat file JAIP 07 - Chapter 3 Affected Environment. Chapter 3 describes freshwater habitat in Lynn Canal and directs the reader to the Anadromous and Resident Fish Streams Technical Report (Appendix P) and the 2014 Update to Appendix P – Anadromous and Resident Fish Streams Technical Report (Appendix Z Update to P) for additional information on stream habitat in the project area. Appendix Z is not easily located as files are shown on the compact disc as Appendices Volumes 1 through 6, and the reader must review Volumes 1 through 5 before locating Appendix Z, which contains Appendix P and the Update to Appendix P.

Appendix P contains an errata sheet and the 2014 update to Appendix P contains an errata sheet triple the size of the Appendix P errata sheet.

Or, for example, to review anticipated impacts from a terminal in William Henry Bay, which is *south* of the Endicott River in the West Lynn Canal, Alternative 3, JAIP 07 - Chapter 3 Affected Environment, points to the Appendix Z update to N, 2014 Update to Appendix N – Essential Fish Habitat Assessment, Attachment A 2005 Addendum to Appendix N – Essential Fish Habitat Assessment, Appendix W – Technical Report Addenda January 2006, W-220, 3.1.3.2, Cumulative Effects, which says Alternative 3 would be on the shoreline approximately two miles *north* of the Endicott River.

Though I provide two specific examples here, I encountered equivalent DSEIS disorganization for every topic of ADF&G interest – for instance, see paragraph three of this memo. The Council on Environmental Quality requires clear and concise National Environmental Policy Act documents because the public has a role in the process and because the documents need to be useful to decision-makers. The public and decision-makers would benefit if the final SEIS was clear and concise.

Thank you for the opportunity to review and comment.

References

- Bethune, S. 2011. Unit 1 brown bear management report. Pages 1-18 in P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008 30 June 2010. Alaska Department of Fish and Game. Juneau, Alaska.
- Crupi, A.P. 2010. Unit 1D furbearer management report. Pages 39-47 in P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006 30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska.
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- Flynn, R.W., S.B. Lewis, L.R. Beier, G.W. Pendleton, A.P. Crupi, and D.P. Gregovich. 2012. Spatial use, habitat selection, and population ecology of brown bears along the proposed Juneau Access Improvements road corridor, Southeast Alaska. Final wildlife research report. ADF&G/DWC/WRR-2012-04. Alaska Department of Fish and Game, Juneau, Alaska.
- Scott, R. 2010. Unit 1C furbearer management report. Pages 30-38 in P. Harper, editor. Furbearer management report of survey and inventory activities 1 July 2006 30 June 2009. Alaska Department of Fish and Game. Project 7.0. Juneau, Alaska.

- Scott, R. 2012. Unit 1C mountain goat management report. Pages 33-46 [In] P. Harper, editor. Mountain goat management report of survey and inventory activities 1 July 2009 30 June 2011. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR 2012-3, Juneau, Alaska.
- Sell, S. 2012. Unit 1D mountain goat management report. Pages 47-63 [In] P. Harper, editor. Mountain goat management report of survey and inventory activities 1 July 2009 30 June 2011. Alaska Department of Fish and Game, Species Management Report ADF&G/DWC/SMR 2012-3, Juneau, Alaska.
- White, K.S., D.P. Gregovich, N.L. Barten, and R. Scott. 2012a. Moose population ecology and habitat use along the Juneau Access road corridor, Alaska. Final wildlife research report. ADF&G/DWC/WRR-2012-03. Alaska Department of Fish and Game, Juneau, Alaska.
- White, K.S., D.P. Gregovich, G.W. Pendleton, N.L. Barten, R. Scott, A. Crupi, and D.N. Larsen. 2012b. Mountain goat population ecology and habitat use along the Juneau Access road corridor, Alaska. Final wildlife research report. ADF&G/DWC/WRR-2012-02. Alaska Department of Fish and Game, Juneau, Alaska.

Email cc:

Al Ott, ADF&G Habitat, Fairbanks All, ADF&G Habitat, Juneau Dan Teske, ADF&G SF, Juneau Rich Chapell, ADF&G, Haines Dave Harris, ADF&G CF, Juneau Randy Bachman, ADF&G CF, Juneau Stephanie Sell, ADF&G WC, Juneau Jane Gendron, ADOT&PF, Juneau Deborah Holman, ADOT&PF, Juneau Steve Brockmann, USFWS, Juneau HCD, NMFS, Juneau Randy Vigil, USACE, Juneau Linda Speerstra, USACE, Sitka



Department of Transportation and Public Facilities

SOUTHCOAST REGION
PRECONSTRUCTION
DESIGN & ENGINEERING SERVICES

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July 9, 2018

Jackie Timothy Alaska Department of Fish and Game Division of Habitat P.O. Box 115526 Juneau, Alaska 99811

Dear Ms. Timothy:

Thank you for your letter, dated November 25, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Alaska Department of Fish and Game in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

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Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

Greg Lockwood

Southcoast Region

Preliminary Design and Environmental

Group Chief

Enclosures

Responses to Alaska Department of Fish and Game Comments on the JAI Project Draft SEIS (November 25, 2014)

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager

"Keep Alaska Moving through service and infrastructure."

MEMORANDUM

State of Alaska

Department of Fish and Game Division of Habitat

Gary Hogins TO:

Special Projects Manager

Department of Transportation and

Public Facilities Southeast Region

SUBJECT:

DATE:

FILE NO:

Juneau Access DSEIS

ADF&G Comments

November 25, 2014

000S(131)/71100

Jackie Timothy FROM:

Southeast Regional Supervisor

PHONE NO:

(907) 465-4275

The Alaska Department of Fish and Game (ADF&G) reviewed the Alaska Department of Transportation and Public Facilities (ADOT&PF) Draft Supplemental Environmental Impact Statement (DSEIS) for the Juneau Access Improvement Project. The project addresses surface transportation to and from Juneau within Lynn Canal.

We limited our review to highway build alternatives that would impact fish and wildlife resources and habitats for which we have statutory management responsibilities. This includes preferred Alternative 2B East Lynn Canal, Alternative 3 West Lynn Canal, Alternative 4B Berners Bay fast ferry, and Alternative 4D Berners Bay conventional monohull.

In the 2006 Record of Decision for the Juneau Access Improvements Project, DOT&PF agreed to fund ADF&G wolverine, brown bear, and moose population studies for three years, and mountain goat population studies for four years. When the project was enjoined in federal court, the wildlife studies changed to include species range. ADF&G provided scoping comments on March 5, 2012 requesting the DSEIS include data from ADOT&PF funded studies of wolverine (Lewis et al. 2012), brown bear (Flynn et al. 2012), moose (White et al. 2012a), and mountain goat (White et al. 2012b). DSEIS Appendix Z includes a 2014 update to the 2005 Addendum to Appendix Q Wildlife Technical Report and 2004 Wildlife Technical Report included in Appendix W of the 2006 Final EIS. ADOT&PF states this information remains valid and includes

- Wolverine home range concluding no alternative is likely to have an impact on wolverines or their populations in southeast Alaska.
- Brown bear population estimates and density, home range and habitat use, concluding wildlife underpasses and best management practices during construction and operation will reduce disturbance, displacement,

- bear/human interactions, and collisions
- Moose population estimates, distribution, and predicted habitat use, concluding wildlife underpasses and re-vegetation with non-palatable species will discourage browsing and reduce collisions.
- Mountain goat population estimates, distribution and predicted habitat use, concluding alternative 2B would intersect winter habitat in east Lynn Canal north of Comet to the Katzehin River and proposing, among others, spotting and hazing mountain goats from the area prior to routine avalanche control.

ADOT&PF estimates the terrestrial habitat loss from the highway build alternatives is one percent or less of the habitat available in the project study area, with the impacts to fish and wildlife resources from Alternative 2B greater than Alternative 3, and the impacts from Alternative 3 greater than Alternatives 4B and 4D. ADOT&PF concludes the wolverine, brown bear and moose habitat selection and use patterns would be similar on the west side of Lynn Canal in Alternative 3, with mountain goat habitat unlikely to be impacted. Alternatives 2B and 3 will increase public access to fish and wildlife resources in Lynn Canal, and ADOT&PF expects ADF&G will use the management tools available to manage increased harvest pressure.

ADF&G discovered inaccuracies in the DSEIS and occasional misapplication of information from the wildlife studies. ADOT&PF could improve the SEIS by incorporating the following information –

Page 3-69, paragraph 5: Moose use of the Katzehin flats should be addressed within this section and the map predicting relative probability of use during the summer should be included in the figures (White et al. 2012a).

RESPONSE: Section 3.3.2.3.2 of Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report provides additional detail regarding moose use of the Katzehin flats. Small populations of moose occur in Berners Bay and the lower Katzehin River areas. Based on nine aerial surveys between 2005 and 2011, the Katzehin River population was estimated between 30 and 40 moose, with distribution concentrated along the river corridor and delta areas near Alternative 2B (Figures C5 and C6 in Appendix C of the report). Figure C5 illustrates the relative probability of use during the summer.

Page 3-70, paragraph 2: Mountain goat wintering areas occur on the bluffs between Johnson Creek and Berners River and on the ridge east of Echo Cove. Some areas are not used by mountain goats due to lack of escape terrain. Please remove suitable forage from the penultimate sentence in the first shaded paragraph.

RESPONSE: The referenced statement allows for the existence of suitable wintering areas in the Berners Bay, Katzehin beach, and Slate Cove to Comet coastal areas. Per your comment, suitable forage has been removed from the cited sentence in the Final Supplemental Environmental Impact Statement (SEIS).

Page 3-75, paragraph 2: Figure 3-19 identifies locations within the study area that are frequented by humpback whales and Steller sea lions.

RESPONSE: Per your comment, the Final SEIS has been revised to cite the correct figure (Figure 3-20).

Figure 3-21: New maps are available for mountain goat (White et al. 2012b) and brown bear habitat (Flynn et al. 2012).

RESPONSE: The Draft SEIS Figure 3-21 illustrated that mountain goat and brown bear habitat is present in the project area. The Final SEIS contains the current information, either publically available or provided by the Alaska Department of Fish and Game (ADF&G).

Figure 3-22: New maps are available for moose habitat (White et al. 2012a).

RESPONSE: Draft SEIS Figure 3-22 illustrated that moose habitat is present in the project area. The Final SEIS contains the current information, either publically available or provided by ADF&G.

Page 4-84, paragraph 1: Though we have completed wildlife studies since ADOT&PF wrote section 4.3.15.3, the extent to which mountain goats may be disturbed by highway intersection of fragmented important winter range is unknown. Since mountain goats are sensitive to human disturbance and can experience nutritional deprivation during late winter, factors that result in increased energetic costs or restriction of suitable foraging areas have the potential to negatively impact local populations. It is unclear if the data from our recent studies will accurately represent important wintering areas if road construction results in changes in the way mountain goats use wintering areas

RESPONSE: The Final SEIS includes best available information from ADF&G regarding winter habitat areas. Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.3.4.4, recognizes uncertainty associated with habitat fragmentation due to construction activities. Per your comment, Section 4.3.15.3 of the Final SEIS has been revised to discuss impacts on the mountain goat winter range due to habitat fragmentation from construction.

Page 4-86, paragraph 1: Correct to reflect that moose in the Berners Bay area is managed under a drawing hunt and limited to 1 to 5 permits a year. The area along western Lynn Canal is managed as a registration hunt. The Katzehin River is managed as a Tier II limited entry subsistence hunt.

RESPONSE: Per your comment, the Final SEIS has been revised to state that the Berners Bay area is managed under a limited drawing hunt of one to five permits per year.

Page 4-91, bullet 10: ADOT&PF requests Title 16 fish habitat permits replace the Title 41 fish habitat permits previously issued for stream crossing structures. Sections 4.4.18 and 4.6.18 should be updated to acknowledge ADF&G fish habitat permits are issued under Title

16.

RESPONSE: Per your comment, Sections 4.4.18 and 4.6.18 of the Final SEIS have been revised to state that fish habitat permits are issued under Title 16.

Page 4-135, paragraph 2: The Glacier Highway extension of Alternative 3 is adjacent to mountain goat wintering habitat in the vicinity of Echo Cove (White et al. 2012b). We request ADOT&PF not apply the White et al. (2012b) analyses to the West Lynn Canal Highway alternative.

RESPONSE: Extrapolation of regional data to areas in proximity and with similar topography and habitat types is appropriate for an alternatives analysis under the National Environmental Policy Act (NEPA) and is commensurate with other NEPA evaluations. Additionally, Section 4.4.4.3 of the 2017 Update to Appendix Q – Wildlife Technical Report uses several broad conclusions from White et al. (2012b) about general habitat use by mountain goats to develop a good-faith analysis of potential effects from the construction, operation, and maintenance of Alternative 3 on the west side of Lynn Canal. To not apply these conclusions would limit a reasonable analysis of these effects due to the lack of region-specific information. However, we have noted the concern with the use of the White et al. (2012b) for the West Lynn Canal Highway alternative in the Wildlife Technical Report.

Page 4-135, paragraph 3: The White et al. (2012b) studies show 25.3 km of the highway would intersect moderate to high use mountain goat wintering areas. Please update this paragraph.

RESPONSE: Per your comment, Section 4.4.15 of the Final SEIS has been revised to state that the alternative could create the potential for vehicle collisions with mountain goats in moderate—high winter use areas.

Page 4-135, paragraph 4: ADF&G does not have data that supports the ADOT&PF claim that moose-vehicle collisions would be lower on the east side of Lynn Canal.

RESPONSE: Text stating that the moose population along the west side of Lynn Canal is more widespread and substantially larger than along the east side resulting in less moose-vehicle collisions is deleted from Section 4.4.15.3 of the Final SEIS.

Page 4-215, paragraph 3: Studies in the Yakutat forelands indicate moose can be displaced by human activity associated with all-terrain vehicle use along trails. While moose can be seen along roads and in the vicinity of human activity, that does not mean moose do not avoid human activity.

RESPONSE: Section 4.8.12.3 of the Draft and Final SEIS states that noise from construction and human disturbances may cause moose to avoid feeding areas in or near the project area during daytime hours when human disturbance is greatest. However, moose are known to adapt to human disturbances and construction noise, reducing the likelihood that moose would be adversely displaced or disturbed by construction noise and human presence during construction. These statements are consistent with ADF&G's comment.

Page 4-234, paragraph 4: Monitoring assesses, rather than mitigates, impacts.

RESPONSE: Monitoring, in this case, allows managers to make more appropriate decisions to avoid or lessen impacts to goat populations. Therefore, monitoring efforts would have contributed to mitigating effects.

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Page 4-238, paragraph 3: There are no quantitative or qualitative analyses to support ADOT&PF's claim that there will be no Lynn Canal region mountain goat population-level effects from increased hunting pressure, habitat loss, and habitat fragmentation because ADF&G¹ would be monitoring the population and managing hunting accordingly.

RESPONSE: The analysis in the Final SEIS finds that while there is potential for limited impacts, each would not likely have a population-level effect. The conclusion in Section 4.9.3.2 of the Final SEIS is based on this analysis and the knowledge that ADF&G would also be monitoring and managing mountain goat populations.

Page 5-1, section 5.1, number 3: Reconcile "and to the extent certified seeds are available" with section 5.4 number 1: "Only certified seed mixtures would be used...".

RESPONSE: The text in Section 5.4, Number 1 of the Final SEIS has been revised to delete the phrase "and to the extent certified seed mixes are available."

Page 5-2, section 5.4, number 3: Reconcile "Construction equipment would be pressure washed..." with Terrestrial Habitat in 2014 Update to Appendix Q – Wildlife Technical Report section 5.4 number 2: "Construction equipment will be steam cleaned prior to use...".

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report has been revised to be consistent with Section 5.4, Number 3 of the Final SEIS and states that "Construction equipment would be pressure washed...".

Page 5-3, section 5.5, number 3: Please provide literature used to develop this recommendation and discuss the issue with your regional hydrologists and engineers.

RESPONSE: Section 5.5, Number 3 is a design commitment to allow for fish passage at the ferry terminals that is based on National Marine Fisheries Service's (NMFS) recommendation. DOT&PF did not require or request supporting literature when agreeing to the commitment. Please contact NMFS for supporting literature.

Page 5-3, section 5.3, number 3: In-water work at anadromous and resident fish streams should be timed in accordance with the fish habitat permits.

RESPONSE: Per your comment, Section 5.5, Number 2 of the Final SEIS has been revised to state that in-water work timing would be in accordance with fish habitat permits.

¹ Insinuated.

Page 5-4, section 5.9, number 1: Camps necessary during construction of the project will be operated in accordance with the Division of Environmental Health Food Safety & Sanitation Program that addresses drinking water, food safety, solid waste and wastewater. See temporary camp practices consolidated application and worksheet at http://dec.alaska.gov/eh/fss/forms/food/Temp Camp Application%20 Worksheet.pdf.

RESPONSE: Section 5.9, Number 1 of the Final SEIS concerns handling food to reduce or eliminate wildlife attractants. Per your comment, if an action alternative had been selected, DOT&PF would have consulted with ADF&G.

Page 5-4, section 5.9, number 3: Proofing.

RESPONSE: Per your comment, Section 5.9, Number 3 of the Final SEIS has been corrected for typographical errors.

Page 5-4, section 5.9, number 5: Change USFWS to ADF&G.

RESPONSE: Per your comment, Section 5.9, Number 5 of the Final SEIS has been revised to reference consultation with ADF&G, not U.S. Fish and Wildlife Service (USFWS).

Page 5-4, section 5.9, number 6: Appropriately placed wildlife signs will help mitigate potential wildlife collisions.

RESPONSE: Per your comment, Section 5.9, Number 6 of the Final SEIS has been revised to state, "Roadway signs indicating wildlife presence would be placed in areas of high brown bear, moose, and mountain goat use to reduce potential vehicle collisions with wildlife."

Pages 5-4 and 5-5, section 5.9, numbers 9 and 11: ADOT&PF is committing to hazing wildlife prior to avalanche control or blasting. ADF&G recommends hazing mountain goats from helicopters as a last resort. ADOT&PF will be required to obtain a public safety permit from the ADF&G Division of Wildlife Conservation² prior to wildlife hazing.

RESPONSE: DOT&PF dropped the commitment to haze goats prior to avalanche control. DOT&PF would not use helicopters for hazing goats prior to construction rock blasting.

Page 5-5, section 5.9, number 10: This commitment should be expanded to include strategically placed wildlife fences.

RESPONSE: If Alternative 2B had been selected, location of potential fencing would have been developed as appropriate during final design. Because it was not selected, it is not included as a commitment in the Final SEIS.

Page 5-5, section 5.9, numbers 12 and 13: Please commit to consulting with ADF&G Division of Wildlife Conservation staff during wildlife training program development.

² ADOT&PF can request a permit application by sending an email to dfg.dwc.permits@alaska.gov.

RESPONSE: Per your comment, Section 5.9, Number 12 of the Final SEIS has been updated to reflect that DOT&PF would work with ADF&G during development of wildlife training programs for project construction.

Page 5-5, section 5.9: Please commit to limiting work in mountain goat over-wintering areas January through April.

RESPONSE: Limiting work in mountain goat over-wintering areas is not included as a commitment in the Final SEIS. Construction, as well as operations and maintenance work (e.g. avalanche control), would likely need to occur during this timeframe depending on seasonal conditions and schedule requirements.

Page 5-10, section 5.12.2: The long term effectiveness monitoring study of wildlife underpasses for brown bears should include effectiveness monitoring for moose in Berners Bay and the Katzehin River. These studies should also document mountain goat use of the underpasses.

Mountain goat and moose pre and post-construction monitoring would determine the extent to which road intersection of winter range fragments and alters use of wintering habitat.

RESPONSE: Specific commitments and mitigation measures for the JAI Project build alternatives are described by resource area in Sections 5.1 through 5.11 of the Final SEIS. As explained in Sections 5.1 through 5.11, most of these commitments and mitigation measures apply to any of the build alternatives; some apply only to road alternatives or certain ferry alternatives. However, because Alternative 1 – No Action has been identified as the preferred alternative, no mitigation is required or proposed; therefore, Section 5.12 has been deleted.

In addition to the inaccuracies we identified in the DSEIS, ADF&G discovered information in the *Appendix Z 2014 update to Appendix Q Wildlife Technical Report*³³ that is invalidated by the studies we completed in 2012. ADOT&PF could improve the Wildlife Technical Report by incorporating the following information –

3.3 Species Accounts

3.3.2.1 Brown Bear *Ursus arctos*

- Page 11, paragraph 2: Figures B1, B2, and B3 in Appendix B.
- Page 12, paragraph 1: Figures B3, B4, and B5 in Appendix B.
- Page 12, paragraph 3: Year range 1998 to 2009 (Bethune 2011).
- Page 12, paragraph 3: Unit 1D average harvest 14 bears per year (Bethune 2011).
- Page 12, paragraph 3: Four brown bear were reported as defense of life or property in all of GMU 1 during July 1, 2006 to June 30, 2010 (Bethune 2011).

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical

³ Which is an update to the 2005 Addendum to Appendix Q Wildlife Technical Report and 2004 Wildlife Technical Report included in Appendix W of the 2006 Final EIS

Report includes this information.

3.3.2.2 Marten Martes americana

• Page 12: Figure 2 is a wetlands classification map for Berners Bay.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 3.3.2.2, states, "In the project study area, marten primarily occur in high-volume old-growth forest habitat (Figure 8 of Appendix A – 2005 Addendum to Appendix Q, Wildlife Technical Report)."

3.3.2.3 Moose *Alces alces*

- Page 13, paragraph 1: Figures C1 and C2 in Appendix C.
- Page 13, paragraph 3: Figures C3 and C4 in Appendix C.
- Page 13, paragraph 3: There were 14 surveys conducted during the winter between 2006 and 2011. The figure referenced is a model that predicts where moose can be found through the winter.
- Page 13, paragraph 4: Figures C5 and C6 in Appendix C.
- Page 13, paragraph 5: Cite White et al. (2012a).

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report includes figure references.

3.3.2.4 Mountain Goat *Oreamnos americanus*

- Page 14, paragraph 2: Sinclair Mt. population has not rebounded from 2006 levels.
- Page 14, paragraph 5: The GMU 1C harvest between 2001 and 2010 ranged from 30 to 60 goats per year (Scott 2012). The GMU 1D harvest between 2001 and 2010 ranged from 22 to 43 goats per year (Sell 2012).

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report includes this information.

3.3.2.5 Wolverine *Gulo gulo*

- Page 15, paragraph 1: Correct home ranges for male and female to show the medians; 521 km² and 71 km², respectively (Lewis et al. 2012).
- Page 15, paragraph 4: Average harvest in Unit 1C between 1997 and 2008 is 5 wolverines. Average harvest in combined Unit 1C and Unit 1D is 9 wolverines (Scott 2010, Crupi 2010). In Unit 1C, most wolverines are harvested in Berners Bay or on the west side of Lynn Canal (Scott 2010), so wolverine presence in the construction area is underrepresented.

RESPONSE: Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 3.3.2.5, appropriately shows the disparity in home range size between male and female wolverine.

Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 3.3.2.5, includes the information provided per your comment in the second bullet;

however, the text makes it clear that a large portion of the harvest occurs in Berners Bay.

4.2.2 Mammals

4.2.2.1 Wolverine

• Page 18: Alternative 1B would require no construction, and would result in no construction-related impact to brown bear, moose, marten, mountain goat and wolverine.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.1.2, includes sections for brown bear, moose, marten, and mountain goat for impacts related to Alternative 1B. Wolverine were evaluated in the Draft SEIS Appendix Z 2014 Update to Appendix Q – Wildlife Technical Report.

4.3 Alternative 2B – East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway

4.3.4.1 Brown Bear

• Page 21, paragraph 2: Describe the measures that will be used to minimize bears shot and killed in defense of life or property during construction or reference section where these measures are described.

RESPONSE: Section 5.9, Numbers 11 through 13 of the Final SEIS contain the following mitigation measures for minimizing human-bear interactions:

- "11. All construction personnel on site would be required to attend wildlife awareness training and orientation
- 12. DOT&PF would work with ADF&G to develop a wildlife interaction plan prior to the start of construction for use by all personnel on site during construction to protect both people and wildlife. The plan would include topics such as safety measures for on-site personnel, (e.g., use of bear guards and bear spray); proposed storage and disposal of construction materials and trash; wildlife orientation training for on-site personnel; description of the handling of people/wildlife interactions, including contingencies in the event wildlife does not leave the site (e.g., hazing by trained staff); description of the layout of temporary buildings and work areas to minimize interactions between humans and bears/moose (e.g., use of electric fencing); and requirement to document and communicate the sighting of bears/moose on site or in the immediate area to all shift employees.
- 13. During construction, all garbage would be properly disposed of in closed bear-proof containers to avoid attracting bears."

4.3.4.2 Moose

• Page 22, penultimate sentence of last paragraph: Include lower Lace and Gilkey Rivers.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.3.4.2, includes the Lace and Gilkey River valleys in the referenced paragraph.

4.4 Alternative 3 – West Lynn Canal Highway

4.4.4.1 Brown Bears

• Page 28, paragraph 4: Bear use of habitats between Echo Cove and Sawmill Creek and proposed road corridor crossings are underestimated. This area is included in the home range of 2 collared females and 8 collared males (Flynn et al. 2012).

RESPONSE: Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.4.4.1, states that brown bears have been documented using areas just north of Echo Cove to Sawmill Cove.

4.4.4.2 Moose

• Page 29, paragraph 4: Cows from Berners Bay also move into Yankee Basin along the beach fringe and road in the spring to calf.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.4.4.2.2, states that the area is used by cows in the spring for calving.

4.4.4.3 Mountain Goat

- Page 29, paragraph 1: William Henry Bay.
- Page 30, paragraph 2: If close to wintering habitat, groups of goats could potentially be down on the highway during the winter months.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.4.4.3, page 29, paragraph 1 revises "Henry Bay" to "William Henry Bay."

Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.4.4.3, states that goats may be on the highway in winter and contrasts the potential with Alternative 2B.

4.6 Alternatives 4B and 4D – FVF/Conventional Monohull Service from Berners Bay

4.6.4.1 Brown Bear

• Pages 35 and 36: Bear use of habitats between Echo Cove and Sawmill Creek and proposed road corridor crossings are underestimated on Page 28, paragraph 4 (Flynn et al. 2012). This area is included in the home range of 2 collared females and 8 collared males and their use of this habitat should be documented in this section.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 4.6.4.1, states the number of brown bears using the habitats between Echo Cove and Sawmill Creek.

5 Mitigation Measures

5.5 Terrestrial Mammals

• Page 39, number 1: Please work with Division of Wildlife Conservation staff to write best management practices to prevent wildlife habituation.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 5.5, Number 1 states that DOT&PF would consult with ADF&G on best management practices to prevent wildlife habituation.

• Page 39, number 3: ADF&G recommends extending the bridges 50 m on either side rather than 50 ft. We will work with ADOT&PF during fish habitat permitting to address this recommendation.

RESPONSE: Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 5.5, Number 3 was developed during extensive coordination and through consensus with resource agencies as part of the 2006 Record of Decision (ROD). No additional modifications to the bridges would have been included had the alternative been selected.

• Page 39, number 4: ADF&G will work ADOT&PF during fish habitat permitting to ensure the Lace River bridge is aligned with the high use brown bear crossing area identified in Flynn et al. (2012).

RESPONSE: Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 5.5, Numbers 2 and 3 were developed in conjunction with resource agencies as part of the 2006 ROD. No additional modifications to the Lace River Bridge alignment would have been proposed. DOT&PF believes the siting of two wildlife undercrossings at high use crossing areas in combination with the bridge superstructure extensions would have provided sufficient bear crossings.

• Page 39, number 5: Change USFWS to ADF&G.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 5.5, Number 4 references consultation with ADF&G.

Page 39, number 6: ADF&G recommends the proposed long term wildlife underpass
effectiveness monitoring study for brown bears include effectiveness monitoring for
moose in Berners Bay and the Katzehin. These studies should also document
mountain goat use of the underpasses. Mountain goat and moose pre and postconstruction monitoring would determine the extent to which road intersection of
winter range fragments and alters use of wintering habitat.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix Q – Wildlife Technical Report, Section 5.5, states that brown bear effectiveness monitoring would include anecdotal information on moose and mountain goat use.

Staff from the Division of Wildlife Conservation are available to help ADOT&PF update the Wildlife Technical Report with the best available information.

In our March 5, 2012 scoping comments, we recommended ADOT&PF include Berners Bay herring spawn maps in the DSEIS. While ADOT&PF has described herring spawn areas in the narrative, Chapter 3 figures could also include ADF&G's Commercial Fisheries Division GIS shapefiles. The Chapter 3 narrative would be improved by including that the herring sac-roe fisheries provided for in regulation could resume if the Lynn Canal population recovered. Chapter 3 could also be updated with the NOAA April 2, 2014 final report concluding the endangered species listing of the Southeast Alaska Distinct Population Segment of Pacific herring is not currently warranted.

RESPONSE: Per your comment, Section 3.3.7 of the Final SEIS addresses the Pacific herring petition to list under the Endangered Species Act and the NMFS' conclusion that the listing was not currently warranted. Herring spawning map data provided by ADF&G are incorporated into Chapter 3 of the Final SEIS (see Figure 3-19).

Public access provided under alternatives 2B, 3, 4B and 4D will improve the public's ability to harvest eulachon and herring spawn. While increased public access to these resources is noted in Chapter 4 of the DSEIS, the document could be improved by acknowledging in Chapter 2 the increase in management responsibilities for commercial fishery managers. Herring spawn habitat would be lost in Alternatives 3, 4B and 4D, so a commitment to replace the habitat in ferry terminal design would be appropriate. In Chapter 5, the commitment to time in-water work can specify Sawmill Creek ferry terminal in-water work will not occur between April 15 and May 31. Please also update the DSEIS index to include references to herring in Chapters 3, 4 and 5.

RESPONSE: Per your comment, the Final SEIS includes an index reference to herring.

As stated in Section 5.5 of the Final SEIS, in-water work for fill placement, dredging, or pile driving would have been timed to avoid impacts to spawning and migrating fish species in accordance with the Title 16 fish habitat permits.

Chapter 2 is for alternative description only.

ADOT&PF documents 26 anadromous water bodies among the 90 or so streams within the proposed project area. The ADF&G anadromous waters catalog incorrectly lists the stream course, upper extent, and species composition of many of the fish-bearing water bodies in the project area. Most inaccuracies are a result of antiquated mapping practices that are resolved by tracking the stream course on foot using a global positioning system from the stream mouth to an anadromous fish passage barrier, sampling for salmonids using minnow traps, hand nets, or a backpack electrofisher, and digitizing the water body using ArcGIS mapping software. Sawmill Creek is an example of a stream documented as anadromous far above a barrier, Independence Creek is an example of unconfirmed species composition, and Glacier Creek is an example of a stream listed as anadromous but not found in the 2014 anadromous waters catalog. Habitat Division staff will begin correcting the anadromous waters catalog next spring and we will provide the corrected information to ADOT&PF as it becomes available.

RESPONSE: The description of anadromous waters in the Final SEIS is based on ADF&G updates to the catalog available online as of September 2017.

The following recommendation, while outside ADF&G authorities, would improve the SEIS:

The information in the SEIS would be better understood if it was consolidated and reorganized. For instance, to review information about anadromous water bodies within the project area, the compact disc the Federal Highway Administration sent to me on September 15, 2014 contains Adobe Acrobat file JAIP 07 - Chapter 3 Affected Environment. Chapter 3 describes freshwater habitat in Lynn Canal and directs the reader to the Anadromous and Resident Fish Streams Technical Report (Appendix P) and the 2014 Update to Appendix P – Anadromous and Resident Fish Streams Technical Report (Appendix Z Update to P) for additional information on stream habitat in the project area. Appendix Z is not easily located as files are shown on the compact disc as Appendices Volumes 1 through 6, and the reader must review Volumes 1 through 5 before locating Appendix Z, which contains Appendix P and the Update to Appendix P.

RESPONSE: The Final SEIS conforms to standard practices for the organization of FHWA NEPA documents.

Appendix P contains an errata sheet and the 2014 update to Appendix P contains an errata sheet triple the size of the Appendix P errata sheet.

RESPONSE: The Final SEIS conforms to standard practices for the organization of FHWA NEPA documents.

Or, for example, to review anticipated impacts from a terminal in William Henry Bay, which is *south* of the Endicott River in the West Lynn Canal, Alternative 3, JAIP 07 - Chapter 3
Affected Environment, points to the Appendix Z update to N, 2014 Update to Appendix N – Essential Fish Habitat Assessment, Attachment A 2005 Addendum to Appendix N – Essential Fish Habitat Assessment, Appendix W – Technical Report Addenda January 2006, W-220, 3.1.3.2, Cumulative Effects, which says Alternative 3 would be on the shoreline approximately two miles *north* of the Endicott River.

RESPONSE: Per your comment, Appendix Z 2017 Update to Appendix N – Essential Fish Habitat Assessment, Attachment A, Section 3.1.3.2, states that the terminal location is south of the Endicott River.

Though I provide two specific examples here, I encountered equivalent DSEIS disorganization for every topic of ADF&G interest – for instance, see paragraph three of this memo. The Council on Environmental Quality requires clear and concise National Environmental Policy Act documents because the public has a role in the process and because the documents need to be useful to decision-makers. The public and decision-makers would benefit if the final SEIS was clear and concise.

RESPONSE: The Final SEIS conforms to standard practices for the organization of FHWA

NEPA documents.

Thank you for the opportunity to review and comment.

References

- Bethune, S. 2011. Unit 1 brown bear management report. Pages 1-18 in P. Harper, editor. Brown bear management report of survey and inventory activities 1 July 2008 30 June 2010.
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- Lewis, S.B., R.W. Flynn, L.R. Beier, D.P. Gregovich, and N.L. Barten. 2012. Spatial use, habitat selection, and diets of wolverines along the proposed Juneau Access Improvements road corridor, Southeast Alaska. Final wildlife research report. ADF&G/DWC/WRR-2012-05. Alaska Department of Fish and Game, Juneau, AK.
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Email cc:

Al Ott, ADF&G Habitat,
Fairbanks All, ADF&G Habitat,
Juneau
Dan Teske, ADF&G SF, Juneau
Rich Chapell, ADF&G, Haines
Dave Harris, ADF&G CF, Juneau
Randy Bachman, ADF&G CF, Juneau
Stephanie Sell, ADF&G WC, Juneau
Jane Gendron, ADOT&PF, Juneau
Deborah Holman, ADOT&PF, Juneau
Steve Brockmann, USFWS, Juneau
HCD, NMFS, Juneau
Randy Vigil, USACE, Juneau
Linda Speerstra, USACE, Sitka



Department of Natural Resources

DIVISION OF MINING, LAND & WATER

400 Willoughby Avenue, M.S. = 1020 Post Office Box 111070 Juneau, Alaska 598 L. Laz-

> Telephone. (907) 465-3400 Egistimile: (907) 465-3884 Emaii: lee.cole@alaska.gov

November 25, 2014

Juneau Access Improvements Project Attn: Deborah Holman DOT&PF Southeast Region P.O. Box 112506 Juneau. AK 99811-2506

Re: Response to the Supplemental Environmental Impact Statement

Dear Ms. Holman:

Thank you for the opportunity to comment on the Supplemental Environmental Impact Statement concerning Juneau Access.

On June 26, 2006, the Department of Natural Resources, Division of Mining Land and Water for the Southeast Region ("DMLW") issued a Final Finding and Decision ("Final Decision") regarding the Juneau Access Project (See ADL 107463).

This Final Decision granted a public easement on State of Alaska tide and submerged land and shore land to the Alaska Department of Transportation and Public Facilities ("DOT&PF") for the construction and use of a road extending Glacier Highway from Echo Cove north around Berners Bay and along the eastern shore of Lynn Canal to a location approximately one mile north of Independence Creek. The easement granted was for approximately 43.3 acres with the final acreage to be determined by an as-built survey when construction of the improvements is completed.

The portion of the Juneau Access Project extending from one mile north of Independence Creek to the Katzehin River, including a ferry terminal at the Katzehin Delta, are not included in the previously published Final Decision. As of this date, DMLW has not received an Application for consideration of State land use authorizations for the northern portion of the project. Specifically, these land areas are identified in the Northern Southeast Area Plan ("NSEAP") and set forth in Figures 1 and 2 as H20, H40, H41 and HT-07. (See below).

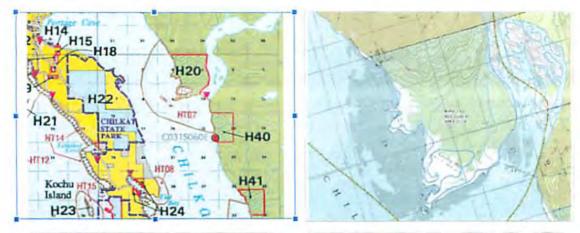


Fig. 1 NSEAP Management Unit H20

Fig.2 DMLW Mapper USGS view H20

Further, some of these lands are subject to a Municipal Entitlement determination by DMLW that is now in progress. (See ADL 108105.) This process has been in progress for several years but has been delayed while surveys of the affected areas are completed.

Here, DMLW's role is to provide the necessary State land use authorization for entry onto State land for the construction of the Juneau Access highway. DMLW has not received an Application to commence an adjudicatory process to determine if these lands are appropriate for such use with respect to these properties.

Alaska Statutes require an adjudicatory process for uses of State land. Until an adjudicatory process is completed, it is premature for DMLW to comment on probable outcomes concerning the approval of land uses for which no Application has been received. Therefore, once an Application is received by DMLW, the adjudicatory process can begin.

Respectfully submitted,

Robert H. Edwardson Regional Land Manager

6 Edwards

South East Region



Department of Transportation and Public Facilities

SOUTHCOAST REGION
PRECONSTRUCTION
DESIGN & ENGINEERING SERVICES

6860 Glacier Highway PO Box 112506 Juneau, Alaska 99811-2506 Main: 907.465.4444 Toll free: 800-575-4540 Fax: 907.465.4414 TTY-DDD 800-770-8973

July 9, 2018

Lee Cole Alaska Department of Natural Resources Division of Mining, Land & Water 400 Willoughby Avenue P.O. Box 111020 Juneau, Alaska 99811

Dear Mr. Cole:

Thank you for your letter, dated November 25, 2014, with your agency's comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Alaska Department of Natural Resources in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion. No application for consideration of State land use authorizations will be submitted at this time.

However, lands within the Lynn Canal corridor remain critical for potential future transportation projects, as the Department's mission to provide statewide connectivity for commerce, defense, recreation, and community development remain. A shape file of the project area is provided on CD and enclosed for inclusion to your database so it is viewable on Geographic Information System layers, such as Alaska Mapper. It provides alignments for both the Lynn Canal east and west side roads. We request that when applications concerning these lands are considered, DNR coordinate with DOT&PF per AS 38.05.945(b)(2)(D)(iii) prior to taking any action, and that DNR note these corridors in their area plans. DOT&PF thanks DNR for continued cooperation to ensure lands for highway corridors are retained in public ownership.

Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

Sincerely,

Greg Lookwood Southcoast Region

Preliminary Design and Environmental

Group Chief

Enclosures:

Responses to Alaska Department of Natural Resources Comments on the JAI Project Draft SEIS (November 25, 2014)

CD with JAI project area and roadway alignments for GIS integration

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager Gregory Weinert, DOT&PF, Southcoast Region Right-Of-Way Chief Heather Fair, DOT&PF, Statewide Right-Of-Way Chief



Department of Natural Resources

DIVISION OF MINING, LAND & WATER

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Email lee.cole@alaska.gov

November 25, 2014

Juneau Access Improvements Project Attn: Deborah Holman DOT&PF Southeast Region P.O. Box 112506 Juneau, AK 99811-2506

Re: Response to the Supplemental Environmental Impact Statement

Dear Ms. Holman:

Thank you for the opportunity to comment on the Supplemental Environmental Impact Statement concerning Juneau Access.

On June 26, 2006, the Department of Natural Resources, Division of Mining Land and Water for the Southeast Region ("DMLW") issued a Final Finding and Decision ("Final Decision") regarding the Juneau Access Project (See ADL 107463).

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The portion of the Juneau Access Project extending from one mile north of Independence Creek to the Katzehin River, including a ferry terminal at the Katzehin Delta, are not included in the previously published Final Decision. As of this date, DMLW has not received an Application for consideration of State land use authorizations for the northern portion of the project. Specifically, these land areas are identified in the Northern Southeast Area Plan ("NSEAP") and set forth in Figures 1 and 2 as H20, H40, H41 and HT-07. (See below).

RESPONSE: The Final SEIS identifies the Alterative 1 – No Action as the preferred alternative. No application for consideration of State land use authorizations will be submitted for the Juneau Access Improvements (JAI) Project at this time.

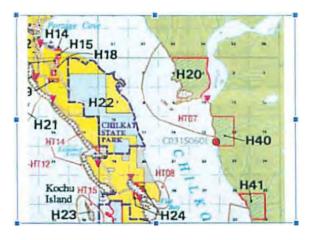




Fig. 1 NSEAP Management Unit H20

Fig.2 DMLW Mapper USGS view H20

Further, some of these lands are subject to a Municipal Entitlement determination by DMLW that is now in progress. (See ADL 108105.) This process has been in progress for several years but has been delayed while surveys of the affected areas are completed.

RESPONSE: DOT&PF's Southeast Alaska Transportation Plan (SATP), a long-term transportation plan, identified a need to improve surface transportation in the Lynn Canal Corridor via a road. DOT&PF has been in the process of updating its SATP for several years and released a Draft SATP in June 2014. The 2014 Draft SATP recommended a highway from Juneau to Katzehin with ferry service between Katzehin and Haines and Skagway (i.e., Alternative 2B, the preferred alternative in the 2014 Draft SEIS). The SATP is now in the process of being updated to change the planned improvement to be Alternative 1 – No Action, consistent with the preferred alternative for this Final EIS.

Planning for and maintaining a transportation corridor is consistent with DOT&PF's statute mission. Under AS 19.05.125, Purpose, it is one of DOT&PF's missions to establish and maintain a network of highway connectivity linking together cities and communities throughout the State for national and State defense; promotion of commerce and industry; resource extraction and utilization; and improvement of the economic and general welfare of the people of Alaska.

Congress recognizes the significance of community transportation corridors in Southeast Alaska. Transportation and utility rights-of-way and easements within the Tongass National Forest along the east and west sides of Lynn Canal were granted to the State of Alaska by Congress in SAFETEA-LU's Section 4407 as amended by the FAST Act.

Given DOT&PF's long-term planning goals, the public interest in retaining State ownership of the land outweighs the municipality's interest in obtaining the land, (AS 29.65.050 (c) Fulfillment of Land Entitlements). It is DOT&PF's policy to retain feesimple interest in transportation lands whenever possible. Divesting of lands with potential for future projects causes extensive project delays and raises the State's acquisition and relocation liabilities as the lands are developed outside of State ownership.

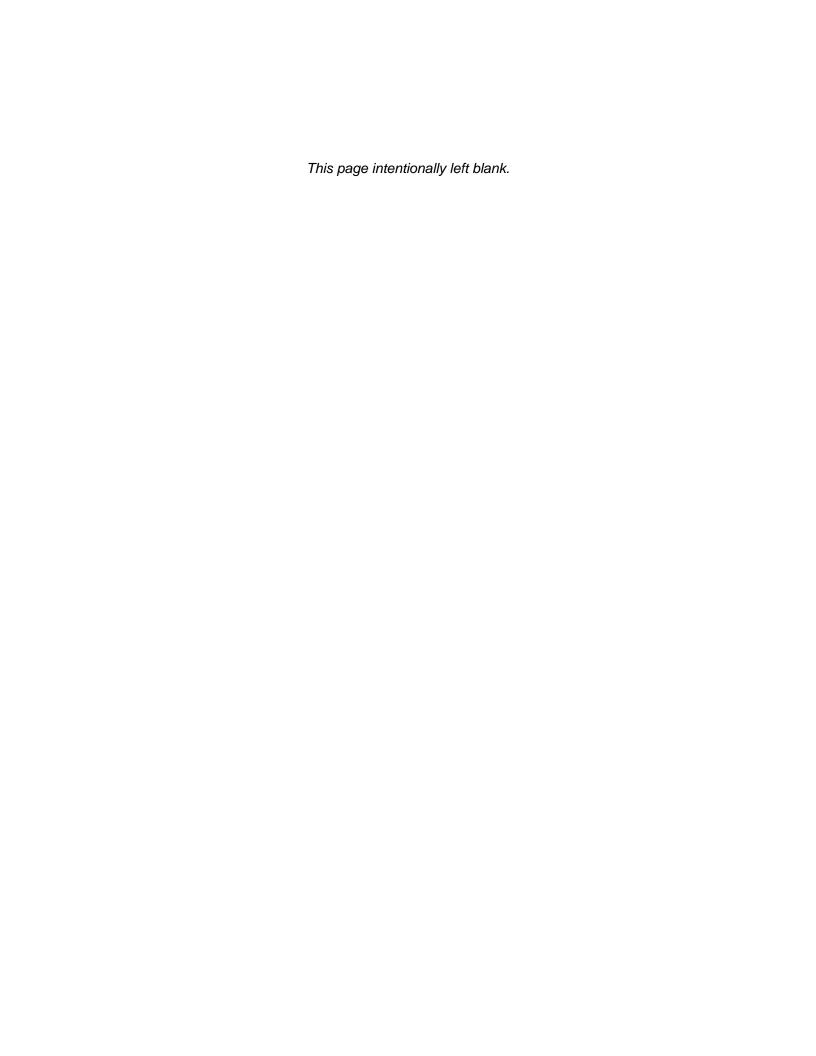
Here, DMLW's role is to provide the necessary State land use authorization for entry onto State land for the construction of the Juneau Access highway. DMLW has not received an Application to commence an adjudicatory process to determine if these lands are appropriate for such use with respect to these properties.

Alaska Statutes require an adjudicatory process for uses of State land. Until an adjudicatory process is completed, it is premature for DMLW to comment on probable outcomes concerning the approval of land uses for which no Application has been received. Therefore, once an Application is received by DMLW, the adjudicatory process can begin.

RESPONSE: As stated earlier, the Final SEIS now identifies Alternative 1 – No Action as the preferred alternative. Therefore, no application will be submitted for the JAI Project at this time.

Respectfully submitted,

Robert H. Edwardson Regional Land Manager South East Region





HAINES BOROUGH, ALASKA

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October 28, 2014

Juneau Access Improvement Project ATTN: Deborah Holman DOT&PF Southeast Region P.O. Box 112506 Juneau, AK 99811-2506 juneauaccess@alaska.gov

The position of the Borough has not changed regarding Alternative 2B, the state's preferred alternative. The Borough continues to oppose an East Lynn Canal road and continues to support improved marine access. (Resolutions attached.) This is in keeping with a 2003 McDowell survey that 67% of Haines residents preferred better ferry service than a road to Juneau (See Appendix EE at page 214).

Our concerns are primarily about:

- Safety Road would run underneath 41 active avalanche paths and 99 rock, debris, and landslides. Accidents and fatalities will occur, as will unpredictable travel delays.
- Reliability AMHS is not weather-dependent, offering reliable access to Juneau year round. If Alternative 2B is built, both road and air access will be weatherdependent. 19% of trips to Juneau are medical or business related, and 18% of Juneau trips are for jet service. Reliability is key.
- Emergency Services 20 miles of road will be in the Haines Borough, spreading our emergency service providers thin.
- Economy Alternative 2B will likely provide a net economic loss for Haines with expected retail leakage to Juneau and resulting decreased sales tax revenues.
- Foot Passengers Additional costs and inconvenience to this large segment of the traveling public is an on-going concern.
- Regional School Activities and Competitions Student travel is frequent and is almost always as AMHS walk-on. If built, Alternative 2B will force the District to either drive students to Juneau, or fly. Either option would be far more expensive

- for our District perhaps cost-prohibitive and we would have safety concerns for our students.
- Funding Priorities Existing infrastructure should be maintained including replacing aging AMHS vessels. With declining federal highway funding and declining state funds, Alternative 2B is too expensive to build and maintain. Local transportation priorities could be postponed or cancelled due to huge capital and maintenance costs for 2B.

Thank you for the opportunity to comment.

Sincerely,

Jan Hill, Mayor on behalf of the Haines Borough Assembly

Attachments:

HB Resolution 11-11-316

HB Resolution 07-11-116

HB Resolution 04-08-046

HB Resolution 418

Resolution, Haines Chamber of Commerce

HAINES BOROUGH, ALASKA Resolution No. 11-11-316

Adopted

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY REAFFIRMING ITS SUPPORT OF RESOLUTIONS 04-04-042 AND 07-11-116, AND ITS CONTINUED PREFERENCE FOR IMPROVED FERRY SERVICE RATHER THAN AN EAST LYNN CANAL HIGHWAY.

WHEREAS, the Alaska Department of Transportation and Public Facilities has requested public input on the Southeast Alaska Transportation Plan 2011 Update Scoping Report; and

WHEREAS, the 2011 Update Scoping Report Includes an alternative that would build an East Lynn Canal Highway; and

WHEREAS, through Resolutions 04-04-042 and 07-11-116 the Haines Borough has expressed and reaffirmed its preference for improved Alaska Marine Highway service in the Lynn Canal and opposed development of an East Lynn Canal Highway; and

WHEREAS, Appendix C of the Juneau Access Draft Environmental Impact Statement states a majority of residents surveyed in Juneau, Haines and Skagway prefer improved ferry service rather than road access to Juneau; and

WHEREAS, the Record of Decision of the Juneau Access Final Environmental Impact Statement determined an East Lynn Canal Highway would be twice as expensive to operate and maintain as existing ferry service; and

WHEREAS, the Golder Associates Geotechnical Investigation found 112 geological hazards that, in addition to 36 active avalanche paths, would endanger public safety and close an East Lynn Canal Highway frequently, thereby decreasing Juneau access; and

WHEREAS, the Juneau Access Final Environmental Impact Statement determined there would likely be 600 non-fatal and 8 fatal accidents over a 40 year period on an East Lynn Canal Highway; and

WHEREAS, the Alaska Marine Highway has an excellent safety record; and

WHEREAS, the Marine Transportation Advisory Board advocates investments in new ferries,

NOW, THEREFORE, BE IT RESOLVED that the Haines Borough Assembly:

Reaffirms its support of Resolutions 04-04-042 and 07-11-116 and its Section 1: continued preference for improved ferry service rather than an East Lynn Canal Highway;

Section 2: Recommends that the state focus planning and funding strategies for transportation improvements in Southeast Alaska on enhancing marine transportation options recommended by the Marine Transportation Advisory Board with special emphasis on the deployment of Alaska Class ferries and that consideration of a Berner's Bay ferry terminal include an inherent public transportation component to support walk-

on ferry passengers;

HAINES BOROUGH Resolution No. 11-11-316 Page 2

Section 3: Shall submit copies of this resolution to Andy Hughes, Planning Chief for the Southeast Alaska Transportation Plan, Governor Sean Parnell, Senator Albert Kookesh, and Representative Bill Thomas.

NAMES BORO

OCTOBER 17

ADOPTED BY A DULY CONSTITUTED QUORUM OF THE HAINES BOROUGH ASSEMBLY THIS 15^{th} DAY OF NOVEMBER 2011.

ATTEST:

Julie Gozzi, MMC, Borough Clerk

Stephanie Scott, Mayor

HAINES BOROUGH Adopted

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY REAFFIRMING ITS SUPPORT OF RESOLUTION 04-04-042 AND ITS PREFERENCE FOR IMPROVED FERRY SERVICE RATHER THAN AN EAST LYNN CANAL HIGHWAY.

Whereas, on October 29, 2007 Governor Sarah Palin's office issued a statement urging people to contact their legislators to support an East Lynn Canal Highway; and,

Whereas, the Haines Borough has repeatedly expressed its preference for improved Alaska Marine Highway service in the upper Lynn Canal and opposed the development of an East Lynn Canal Highway; and,

Whereas, the Haines Borough Assembly adopted resolution 04-04-042 on April 7, 2004, which states:

"WHEREAS, the Alaska Marine Highway System was created as a public transportation network, serving all Alaskans, supported in part by public funds; and,

WHEREAS, the Alaska Marine Highway System serves as Southeast Alaska's road system, effectively providing ferry service to connect the remote communities of Southeast Alaska and promote economic development within the region for over forty years; and,

WHEREAS, the construction of new roads would offer minimal enhancements to SE Alaska's transportation system due to the geographic challenges unique to this region; and,

WHEREAS, Alaska Marine Highway System is currently in need of investments to ensure continued and improved ferry service in the future; and

WHEREAS, the Haines economy is largely dependent upon being a transportation link between Southeast and interior Alaska, the Yukon, and Lower 48; and,

WHEREAS, a majority of Haines residents and businesses support improved marine access over a Juneau Road;

THEREFORE BE IT RESOLVED that the Haines Borough Assembly requests that state and federal governments focus planning and funding strategies for transportation improvements in Southeast Alaska on enhancing marine transportation within the region."; and,

Resolution E7-11-116

Whereas, the estimated funds needed for the proposed East Lynn Canal Highway have recently been increased to \$350 million, and this amount would significantly address the many needs of the Marine Highway System,

NOW, THEREFORE, BE IT RESOLVED by the Haines Borough Assembly:

- Section 1: That the Haines Borough Assembly reaffirms its support of Resolution 04-04-042 and preference for improved ferry service rather than an East Lynn Canal Highway;
- Section 2: That the Haines Borough Assembly requests the Governor establish a segregated fund for the purpose of replacing the aging fleet and construction of needed ferry terminal modifications;
- Section 3: That the Haines Borough pledges its full support and cooperation to develop the Haines Ferry Terminal into a regional hub that will support daily service to the ports of Juneau and Skagway; and
- Section 4: That copies of this resolution will be sent to Senator Albert Kookesh, Representative Bill Thomas, and Governor Sarah Palin.

ADOPTED by a duly constituted quorum of the Haines Borough Assembly on the $20^{\rm th}$ day of November, 2007.

	Fred Shields, Mayor
ATTEST:	

Julie Cozzi, Borough Clerk

HAINES BOROUGH

RESOLUTION 04-08-046

A RESOLUTION OF THE HAINES BOROUGH, EXPRESSING APPRECIATION FOR THE ALASKA MARINE HIGHWAY'S PROPOSED 2004/2005 FALL/WINTER/SPRING FERRY AND ADVOCATING FOR THE ESTABLISHMENT OF A HAINES-BASED SHUTTLE FERRY TO OPERATE BETWEEN HAINES AND SKAGWAY, BEGINNING IN THE SUMMER OF 2005.

WHEREAS, the Haines Borough is a coastal community that depends on the Alaska Marine Highway as a critical means of moving people, vehicles, and goods; and,

WHEREAS, the Alaska Marine Highway System has proposed a Fall/Winter/Spring schedule of service that is very favorable to the community of Haines; and,

WHEREAS, the Haines Borough Assembly recognizes and appreciates this level of service; and,

WHEREAS, the regional economy depends upon consistent and regular transportation service between Haines and Skagway; and

WHEREAS, the Department of Transportation's various plans for future transportation in the Upper Lynn Canal call for the deployment of a shuttle ferry between Haines and Skagway;

THEREFORE BE IT RESOLVED that the Haines Borough Assembly expresses appreciation for the Alaska Marine Highway's proposed 2004/2005 Fall/Winter/Spring ferry and advocates for the establishment of a Haines-based shuttle ferry to operate between Haines and Skagway beginning in the summer of 2005.

Adopted by a duly constituted quorum of the Haines Borough Assembly on this 4^{th} day of August, 2004.

Attest:

ie/Cozzi, Bordudh Clerk

SEAL SOCTOBER 17

FOFAL

SEAL:

Mike Case, Borough Mayor

HAINES BOROUGH RESOLUTION #418

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY OPPOSING THE CONSTRUCTION OF THE EAST LYNN CANAL ROAD, AS CURRENTLY PROPOSED FOR THE JUNEAU ACCESS PROJECT.

WHEREAS, construction of the East Lynn Canal Road as proposed by DOT, bypassing the community of Haines would be devastating to our economy, and

WHEREAS, the Haines Borough has one of the highest unemployment rates in the state due to loss of our sawmill and decline in the fishing industry, and

WHEREAS, there are other alternatives available that would not adversely affect the community of Haines or Skagway.

NOW THEREFORE, BE IT RESOLVED that the Haines Borough supports other alternatives for the Juneau Access Road that would be fair and equitable to both the Haines and Skagway communities.

ADOPTED:

ATTEST:

Clerk/Treasurer Martin,

Haines Chamber of Commerce

A resolution of the Haines Chamber of Commerce opposing construction of road options of the Juneau Access Project and supporting improved Ferry Service.

WHEREAS, the Department of Transportation and Public Facilities is currently taking public comment on proposed access improvements to Juneau; and

WHEREAS, the Juneau Access Project has identified the East Lynn Canal road as the preferred alternative; and

WHEREAS, the East Lynn Canal Road will cross designated wilderness lands (LUD-2) and will negatively impact wildlife habitat for bald eagles, sea lions and salmon; and

WHEREAS, the East Lynn Canal Road could negatively impact the Lynn Canal Commercial fishery due to construction and an increase in sports fishing activity as a result of improved access to the Lynn Canal; and

WHEREAS, the East Lynn Canal Road will traverse fifty-eight avalanche chutes and will have the highest avalanche hazard rating of any highway in North America, with the resulting increase in project and maintenance costs due to avalanche mitigation and clearing; and

WHEREAS, avalanches will result in the loss of any surface access due to road closures, will result in high maintenance costs and will create the potential for the loss of life to maintenance workers and users of the road; and

WHEREAS, increased maintenance costs due to the East Lynn Canal Road will further impact maintenance of existing State transportation facilities such as highways, airports, terminals and marine vessels, which are presently maintained at sub-standard levels; and

WHEREAS, according to Appendix C of the Juneau Access Draft Environmental Impact Statement a majority of residents surveyed in Juneau, Haines and Skagway prefer improved ferry service rather than road access to Juneau.

NOW THEREFORE BE IT RESOLVED, that the Haines Chamber of Commerce opposes construction of the East Lynn Canal Road and other road options as currently proposed by the State of Alaska Department of Transportation and Public Facilities and favors improved ferry service to the communities of Haines, Skagway and Juneau.

Adopted:

Janice M. Hill, President

11/18/97

TOTAL P.01



Department of Transportation and Public Facilities

SOUTHCOAST REGION
PRECONSTRUCTION
DESIGN & ENGINEERING SERVICES

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TTY-DDD 800-770-8973

July 9, 2018

Jan Hill Haines Borough P.O. Box 1209 Haines, Alaska 99827

Dear Ms. Hill:

Thank you for your letter, dated October 28, 2014, with comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Haines Borough in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

Singerely.

Greg Lockwood Southcoast Region

Preliminary Design and Environmental

Group Chief

Enclosures:

Responses to Haines Borough Comments on the JAI Project Draft SEIS (November 25, 2014)

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager



HAINES BOROUGH, ALASKA

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October 28, 2014

Juneau Access Improvement Project ATTN: Deborah Holman DOT&PF Southeast Region PO Box 112506 Juneau, AK 99811-2506 juneauaccess@alaska.gov

The position of the Borough has not changed regarding Alternative 2B, the state's preferred alternative. The Borough continues to oppose an East Lynn Canal road and continues to support improved marine access. (Resolutions attached.) This is in keeping with a 2003 McDowell survey that 67% of Haines residents preferred better ferry service than a road to Juneau (See Appendix EE at page 214).

Our concerns are primarily about:

• Safety - Road would run underneath 41 active avalanche paths and 99 rock, debris, and landslides. Accidents and fatalities will occur, as will unpredictable travel delays.

RESPONSE: The Department of Transportation and Public Facilities (DOT&PF) and Federal Highway Administration (FHWA) identified Alternative 1 – No Action as the preferred alternative in the Final Supplemental Environmental Impact Statement (SEIS)/Record of Decision (ROD). DOT&PF and FHWA examined the reliability and risk associated with avalanches and weather using the best information available and appropriate analysis techniques, and included avalanche risk mitigation in the design (e.g., alignment location, elevated embankments, and avalanche sheds) and in DOT&PF's operating plan for Alternatives 2B and 3. Section 4.3.8.2 of the Draft SEIS disclosed the avalanche hazard for Alternative 2B and demonstrated how the alternative included hazard reduction methods to improve safety for the corridor. There have been no fatalities to the traveling public on any of the highways ranked with the same Avalanche Hazard Index as Alternative 2B since implementation of a

full avalanche control program.

The 2017 Update to Appendix D – Technical Alignment Report in Appendix Z has been updated for the Final SEIS to include identification of the geotechnical hazards and proposed mitigation for each hazard based on preliminary design. Based on the current design, inadvertent road closures may have occurred over the lifetime of the Juneau Access Improvements (JAI) Project. It is expected that these closures would have required less than half a day to clean up. It is also expected that in the event of a full width road closure, single lane traffic would have been restored within 2 hours and two-lane traffic would have been restored within half a day. This is consistent with closures experienced on other Alaska highways with similar terrain.

• Reliability - AMHS is not weather-dependent, offering reliable access to Juneau year round. If Alternative 2B is built, both road and air access will be weather-dependent. 19% of trips to Juneau are medical or business related, and 18% of Juneau trips are for jet service. Reliability is key.

RESPONSE: For Alternative 2B, missed ferry sailings would likely have been the result of wind and wave conditions in the middle of Lynn Canal and not at the ferry terminal sites. From the current data, an assumption of 1 to 6 days per year could have been reasonably expected for days with vessel cancellations.

The upper magnitude wind speeds (1 minute average) in the middle of Lynn Canal in the Haines/Katzehin vicinity can vary 30 to 68 knots, causing mid canal wave conditions that could have potentially prevented ferry sailings. Based on the The Glosten Associates reports (available on the JAI Project website at www.juneauaccess.alaska.gov), these wind events could have been expected to occur 1 to 5 percent of the time, primarily from November through February. Assuming a period of 4 months or 120 days for the worst weather conditions, it can be assumed that 1 to 6 days per year may have been subjected to weather conditions that could have prevented a ferry crossing. The projected number of sailings that could have been missed depends on the number of sailings per day and if the inclement weather occurred during those sailing times.

Current data for the north and south wind directions suggests relatively low wave height (under two feet) near the Katzehin Ferry Terminal site regardless of the magnitude of the wind event. The Katzehin Ferry Terminal would have been somewhat exposed to the westerly direction. There is no current data presented for the westerly direction; however, the fetch distance would have been short and wave heights should have been relatively low.

While winds would have been strong, causing difficulty in berthing, the ferry mooring structures at the Katzehin and Haines Ferry Terminals would not likely have been significantly affected by wave and wind conditions from any direction. The ferry would have been able to safely weather storms at either port, assuming the moored vessel would have been properly safeguarded and monitored during extreme storm events.

The Draft SEIS acknowledged that adverse driving conditions would have occurred on the East Lynn Canal Highway in the winter, but anticipated that State maintenance crews would have kept the highway open under all but the most severe conditions. Such severe weather conditions could have called for road closures. DOT&PF and FHWA disclosed the impacts of potential road closures and mitigated those effects to the extent that travel delays and closures would have been minimized.

• Emergency Services - 20 miles of road will be in the Haines Borough, spreading our emergency service providers thin.

RESPONSE: Statewide, the Alaska State Troopers are responsible for general policing, patrols, and emergency response along rural roads, particularly outside of the areas associated with individual local governments. Alternative 2B would have fallen partially in the City and Borough of Juneau (CBJ; approximately 30 road miles north of Echo Cove to Eldred Rock) and partially in the Haines Borough (from Eldred Rock northward). Within the CBJ, the Juneau Police Department (JPD) would have been responsible for the primary response. The Alaska State Troopers based in Juneau would have provided the primary response for the segment of road north of the CBJ boundary. The Alternative 3 road on the west side of Lynn Canal would have fallen within the Haines Borough. Under Alternative 3, the primary response would have come from State Troopers based in Haines.

The SEIS indicates it is likely that emergency medical response would have come from these communities. In the Draft and Final SEIS, Section 3.1.4 and corresponding Socioeconomic Resources sections in Chapter 4 for each alternative provide basic information about services provided at each community and disclose the potential impacts to the service providers of having more road miles and more traffic within their areas of responsibility. See also Section 3.3 of Revised Appendix EE, *Socioeconomic Effects Technical Report*. Fire protection outside local fire service areas (i.e., along these road routes) would have come from the Alaska Division of Forestry and Tongass National Forest. Haines, Skagway, and Juneau all have search and rescue capabilities either through separate organizations, through their fire/rescue departments, or both. Overall, providers of public safety would have remained the same as today under all alternatives. The text of the Final SEIS has been reviewed and clarifications have been made to ensure the information above is clearly represented.

The agencies with the most resources available (State Troopers, JPD, and Capital City Fire and Rescue [CCFR]) say they are operating at minimal staffing levels given the extent of their current responsibilities and service areas. The SEIS and Revised Appendix EE disclose the potential that local agencies may have required further resources to continue to provide the same level of service.

• Economy - Alternative 2B will likely provide a net economic loss for Haines with expected retail leakage to Juneau and resulting decreased sales tax revenues.

RESPONSE: As stated in Section 4.3.5.3 of the Draft SEIS, sales tax revenue in Haines would have been expected to increase under Alternative 2B due to increased visitor spending of approximately \$6.9 million per year. Approximately \$1.3 million in new spending that would have occurred in Juneau with Alternative 2B would have been by Haines residents, reducing the net visitor spending in Haines to approximately \$5.6 million annually (see Table 4-17 in the Draft SEIS). This net increase in annual visitor spending in Haines would have generated as much as \$2.1 million in new payroll and about 60 additional jobs (increase of approximately 90 new residents).

Section 4.3.5.3 of the Draft SEIS also described how the increase in residents would have been expected to result in a demand for approximately 26 housing units (based on 3.4 persons per household). Improved access would have also been anticipated to enhance Haines's reputation as a retirement community, which would have also been expected to lead to additional demand for property in Haines. Land availability in Haines, and its drier climate, could have resulted in Juneau residents seeking seasonal or year-round housing in Haines. In addition, improved access between Haines and the Kensington Gold Mine could have resulted in a demand for housing in Haines by mine workers. Haines would have also received an increase in property tax revenues as a result of the potential increase in private property values.

• Foot Passengers - Additional costs and inconvenience to this large segment of the traveling public is an on-going concern.

RESPONSE: As explained in Section 1.4.1.1 of the SEIS, the State's primary responsibility is to provide transportation facilities for vehicles, not the transportation itself. Because of the nature of the Alaska Marine Highway System (AMHS), the vessels that move vehicles also accommodate walk-on passengers; however, this is a secondary function that is not provided on other highways in the State.

Walk-on passengers would have been accommodated on shuttle ferries. The road alternatives (2B and 3), however, represent a shift in the way transportation would have been provided in the corridor—away from a primarily public transportation mode that operates more like a public transit service, to a highway system where private vehicles would have provided most of the transportation (shorter, shuttle ferries would have provided links connecting the roadways). The SEIS acknowledges the impact to travelers wishing to not take a vehicle but also makes it clear that the State does not recognize a responsibility to provide public transportation. The cost of taking a vehicle would have been considerably cheaper under Alternative 2B than it would have been under Alternative 1 – No Action; therefore, there would have been less economic incentive to travel as a walk-on passenger. DOT&PF and FHWA recognize that this shift would have an effect on passengers who do not own vehicles (approximately 9 percent of the combined Juneau, Haines, and Skagway households). Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS described impacts to 'Pedestrians and Bicyclists' for Alternatives 2B and 3, including walk-on passengers.

Additional information about walk-on passengers has been added to Sections 4.3.7.5 and 4.4.7.5 of the Final SEIS. Travelers without vehicles would have been forced to rent vehicles, take a commuter flight, or travel in private vehicles or with private entities to accommodate this demand. The out-of-pocket user cost of travel to/from Juneau for a passenger with a car under Alternatives 2B and 3 would have been lower than the cost for a walk-on passenger under Alternative 1 – No Action, and it would have been more convenient to have a car to travel between Juneau and Katzehin. While transportation services may have been developed by private entities to accommodate walk-on passengers, the cost, frequency, and convenience of a bus or van service would have depended on the size of the market.

Walk-on passengers who would have relied on bus service to/from the Katzehin Ferry Terminal (if it developed) would have had less flexibility and opportunity to travel compared to travelers who drove, as it would have been likely that bus service would not have been available for every ferry sailing (i.e., walk-on passengers would have needed to time their travels with the bus schedule). It is anticipated that walk-on passengers relying on getting rides with others in private vehicles would have had more flexibility and shorter travel times than those relying on the bus.

• Regional School Activities and Competitions – Student travel is frequent and is almost always as AMHS walk-on. If built, Alternative 2B will force the District to either drive students to Juneau, or fly. Either option would be far more expensive for our District - perhaps cost-prohibitive - and we would have safety concerns for our students.

RESPONSE: FHWA and DOT&PF acknowledge that student transportation between Lynn Canal communities may have changed as a result of Alternative 2B. Additional information regarding the impact of Alternative 2B to student transportation has been added to Section 4.3.5.2 of the Final SEIS, and to Section 4.4.5.2 where Alternative 3 would have had corresponding effects. The cost of transporting students from Haines or Skagway to Juneau would have depended on a variety of factors, including the number of students and the need to overnight away from home. The opportunity for

students to travel between the communities may have increased due to reduced costs and the increased ability to make the trip within the same day.

Any transportation project proposed by DOT&PF and FHWA must meet established engineering standards and practices for safety and reliability. Therefore, all JAI Project alternatives would have been developed to be safe and reliable in accordance with those standards.

• Funding Priorities - Existing infrastructure should be maintained including replacing aging AMHS vessels. With declining federal highway funding and declining state funds, Alternative 2B is too expensive to build and maintain. Local transportation priorities could be postponed or cancelled due to huge capital and maintenance costs for 2B.

RESPONSE: Prioritizing the use of National Highway System transportation funds is the responsibility of the DOT&PF. That prioritization is done through the 4-year Statewide Transportation Improvement Program (STIP), which is published in draft form for public review and comment before approval. The STIP is modified each year to account for shifting priorities and project schedules around the State. The STIP is approved by the DOT&PF Commissioner and federal funding partners. The Legislature provides DOT&PF with authority to spend federal money and allocates funding for the State's match through the capital budget. FHWA funds are not available to be spent on routine maintenance on existing highways. AMHS receives Ferry Boat formula funds and is eligible for other types of FHWA funding as well. It is not possible to indicate specifically which other State transportation projects may have been postponed or cancelled if STIP funds would have been allocated for the construction of the JAI Project.

On December 4, 2015 the FAST Act, a 5-year transportation bill that provides stability in federal funding over the life of the bill, was signed into law. This bill includes slight increases in funding to Alaska.

DOT&PF and FHWA have identified Alternative 1 – No Action as the preferred alternative in the Final SEIS/ROD, and programmed funding will be allocated to other projects. DOT&PF's 2016–2019 STIP (Amendment 3, June 28, 2017) does not include funding for any JAI Project build alternatives.

Thank you for the opportunity to comment.

_Sincerely,

Jan Hill, Mayor on behalf of the Haines Borough Assembly

Attachments:

HB Resolution 11-11-316

HB Resolution 07-11-116

HB Resolution 04-08-046

HB Resolution 418

Resolution, Haines Chamber of Commerce

HAINES BOROUGH, ALASKA Resolution No. 11-11-316

Adopted

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY REAFFIRMING ITS SUPPORT OF RESOLUTIONS 04-04-042 AND 07-11-116, AND ITS CONTINUED PREFERENCE FOR IMPROVED FERRY SERVICE RATHER THAN AN EAST LYNN CANAL HIGHWAY.

WHEREAS, the Alaska Department of Transportation and Public Facilities has requested public input on the Southeast Alaska Transportation Plan 2011 Update Scoping Report; and

WHEREAS, the 2011 Update Scoping Report includes an alternative that would build an East Lynn Canal Highway; and

WHEREAS, through Resolutions 04-04-042 and 07-11-116 the Haines Borough has expressed and reaffirmed its preference for improved Alaska Marine Highway service in the Lynn Canal and opposed development of an East Lynn Canal Highway; and

WHEREAS, Appendix C of the Juneau Access Draft Environmental Impact Statement states a majority of residents surveyed in Juneau, Haines and Skagway prefer improved ferry service rather than road access to Juneau; and

WHEREAS, the Record of Decision of the Juneau Access Final Environmental Impact Statement determined an East Lynn Canal Highway would be twice as expensive to operate and maintain as existing ferry service; and

WHEREAS, the Golder Associates Geotechnical Investigation found 112 geological hazards that, in addition to 36 active avalanche paths, would endanger public safety and close an East Lynn Canal Highway frequently, thereby decreasing Juneau access; and

WHEREAS, the Juneau Access Final Environmental Impact Statement determined there would likely be 600 non-fatal and 8 fatal accidents over a 40 year period on an East Lynn Canal Highway; and

WHEREAS, the Alaska Marine Highway has an excellent safety record; and

WHEREAS, the Marine Transportation Advisory Board advocates investments in new ferries,

NOW, THEREFORE, BE IT RESOLVED that the Haines Borough Assembly:

Section 1: Reaffirms its support of Resolutions 04-04-042 and 07-11-116 and its continued preference for improved ferry service rather than an East Lynn Canal Highway;

Section 2: Recommends that the state focus planning and funding strategies for transportation improvements in Southeast Alaska on enhancing marine transportation options recommended by the Marine Transportation Advisory Board with special emphasis on the deployment of Alaska Class ferries and that consideration of a Berner's Bay ferry terminal include an inherent public transportation component to support walk-on ferry passengers;

HAINES BOROUGH Resolution No. 11-11-316 Page 2

Section 3: Shall submit copies of this resolution to Andy Hughes, Planning Chief for the Southeast Alaska Transportation Plan, Governor Sean Parnell, Senator Albert Kookesh, and Representative Bill Thomas.

ADOPTED BY A DULY CONSTITUTED QUORUM OF THE HAINES BOROUGH ASSEMBLY THIS 15^{th} DAY OF NOVEMBER 2011.

OCTOBER 17

ATTEST:

Julie Gozzi, MMC, Bordugh Clerk

Stephanie Scott, Mayor

HAINES BOROUGH Adopted

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY REAFFIRMING ITS SUPPORT OF RESOLUTION 04-04-042 AND ITS PREFERENCE FOR IMPROVED FERRY SERVICE RATHER THAN AN EAST LYNN CANAL HIGHWAY.

Whereas, on October 29, 2007 Governor Sarah Palin's office issued a statement urging people to contact their legislators to support an East Lynn Canal Highway; and,

Whereas, the Haines Borough has repeatedly expressed its preference for improved Alaska Marine Highway service in the upper Lynn Canal and opposed the development of an East Lynn Canal Highway; and,

Whereas, the Haines Borough Assembly adopted resolution 04-04-042 on April 7, 2004, which states:

"WHEREAS, the Alaska Marine Highway System was created as a public transportation network, serving all Alaskans, supported in part by public funds; and,

WHEREAS, the Alaska Marine Highway System serves as Southeast Alaska's road system, effectively providing ferry service to connect the remote communities of Southeast Alaska and promote economic development within the region for over forty years; and,

WHEREAS, the construction of new roads would offer minimal enhancements to SE Alaska's transportation system due to the geographic challenges unique to this region; and,

WHEREAS, Alaska Marine Highway System is currently in need of investments to ensure continued and improved ferry service in the future; and

WHEREAS, the Haines economy is largely dependent upon being a transportation link between Southeast and interior Alaska, the Yukon, and Lower 48; and,

WHEREAS, a majority of Haines residents and businesses support improved marine access over a Juneau Road;

THEREFORE BE IT RESOLVED that the Haines Borough Assembly requests that state and federal governments focus planning and funding strategies for transportation improvements in Southeast Alaska on enhancing marine transportation within the region."; and,

Resolution 07-11-116 Page Two

Whereas, the estimated funds needed for the proposed East Lynn Canal Highway have recently been increased to \$350 million, and this amount would significantly address the many needs of the Marine Highway System,

NOW, THEREFORE, BE IT RESOLVED by the Haines Borough Assembly:

- Section 1: That the Haines Borough Assembly reaffirms its support of Resolution 04-04-042 and preference for improved ferry service rather than an East Lynn Canal Highway;
- Section 2: That the Haines Borough Assembly requests the Governor establish a segregated fund for the purpose of replacing the aging fleet and construction of needed ferry terminal modifications;
- Section 3: That the Haines Borough pledges its full support and cooperation to develop the Haines Ferry Terminal into a regional hub that will support daily service to the ports of Juneau and Skagway; and
- Section 4: That copies of this resolution will be sent to Senator Albert Kookesh, Representative Bill Thomas, and Governor Sarah Palin.

ADOPTED by a duly constituted quorum of the Haines Borough Assembly on the $20^{\rm th}$ day of November, 2007.

ATTEST:	Fred Shields, Mayor	
Julie Cozzi, Borough Clerk	_	

Adopted

HAINES BOROUGH

RESOLUTION 04-08-046

A RESOLUTION OF THE HAINES BOROUGH, EXPRESSING APPRECIATION FOR THE ALASKA MARINE HIGHWAY'S PROPOSED 2004/2005 FALL/WINTER/SPRING FERRY AND ADVOCATING FOR THE ESTABLISHMENT OF A HAINES-BASED SHUTTLE FERRY TO OPERATE BETWEEN HAINES AND SKAGWAY, BEGINNING IN THE SUMMER OF 2005.

WHEREAS, the Haines Borough is a coastal community that depends on the Alaska Marine Highway as a critical means of moving people, vehicles, and goods; and,

WHEREAS, the Alaska Marine Highway System has proposed a Fall/Winter/Spring schedule of service that is very favorable to the community of Haines; and,

WHEREAS, the Haines Borough Assembly recognizes and appreciates this level of service; and,

WHEREAS, the regional economy depends upon consistent and regular transportation service between Haines and Skagway; and

WHEREAS, the Department of Transportation's various plans for future transportation in the Upper Lynn Canal call for the deployment of a shuttle ferry between Haines and Skagway;

THEREFORE BE IT RESOLVED that the Haines Borough Assembly expresses appreciation for the Alaska Marine Highway's proposed 2004/2005 Fall/Winter/Spring ferry and advocates for the establishment of a Haines-based shuttle ferry to operate between Haines and Skagway beginning in the summer of 2005.

Adopted by a duly constituted quorum of the Haines Borough Assembly on this $4^{\rm th}$ day of August, 2004.

Attest:

Clerk

NES BORO

SEAL OCTOBER 17 2002 Mike Case, Borough Mayor

SEAL:

Cozzi, Borg

10

HAINES BOROUGH RESOLUTION #418

A RESOLUTION OF THE HAINES BOROUGH ASSEMBLY OPPOSING THE CONSTRUCTION OF THE EAST LYNN CANAL ROAD, AS CURRENTLY PROPOSED FOR THE JUNEAU ACCESS PROJECT.

WHEREAS, construction of the East Lynn Canal Road as proposed by DOT, bypassing the community of Haines would be devastating to our economy, and

WHEREAS, the Haines Borough has one of the highest unemployment rates in the state due to loss of our sawmill and decline in the fishing industry; and

WHEREAS, there are other alternatives available that would not adversely affect the community of Haines or Skagway.

NOW THEREFORE, BE IT RESOLVED that the Haines Borough supports other alternatives for the Juneau Access Road that would be fair and equitable to both the Haines and Skagway communities.

ADOPTED:_

ATTEST:

Jack Clerk/Treasurer

118/97

Haines Chamber of Commerce

A resolution of the Haines Chamber of Commerce opposing construction of road options of the Juneau Access Project and supporting improved Ferry Service.

WHEREAS, the Department of Transportation and Public Facilities is currently taking public comment on proposed access improvements to Juneau; and

WHEREAS, the Juneau Access Project has identified the East Lynn Canal road as the preferred alternative; and

WHEREAS, the East Lynn Canal Road will cross designated wilderness lands (LUD-2) and will negatively impact wildlife habitat for bald eagles, sea lions and salmon; and

WHEREAS, the East Lynn Canal Road could negatively impact the Lynn Canal Commercial fishery due to construction and an increase in sports fishing activity as a result of improved access to the Lynn Canal; and

WHEREAS, the East Lynn Canal Road will traverse fifty-eight avalanche chutes and will have the highest avalanche hazard rating of any highway in North America, with the resulting increase in project and maintenance costs due to avalanche mitigation and clearing; and

WHEREAS, avalanches will result in the loss of any surface access due to road closures, will result in high maintenance costs and will create the potential for the loss of life to maintenance workers and users of the road; and

WHEREAS, increased maintenance costs due to the East Lynn Canal Road will further impact maintenance of existing State transportation facilities such as highways, airports, terminals and marine vessels, which are presently maintained at sub-standard levels; and

WHEREAS, according to Appendix C of the Juneau Access Draft Environmental Impact Statement a majority of residents surveyed in Juneau, Haines and Skagway prefer improved ferry service rather than road access to Juneau.

NOW THEREFORE BE IT RESOLVED, that the Haines Chamber of Commerce opposes construction of the East Lynn Canal Road and other road options as currently proposed by the State of Alaska Department of Transportation and Public Facilities and favors improved ferry service to the communities of Haines, Skagway and Juneau.

Adopted:

Janice M. Hill, President

11/12/97

TOTAL P.01



Municipality of Skagway

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Thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Statement (DSEIS) on the Juneau Access Improvements Project. This project has the potential to profoundly affect the future of Lynn Canal communities. The following comments cover a range of alternatives and address a variety of issues related to those alternatives. They are intended to provide direction to the Alaska Department of Transportation and Public Facilities (AKDOT) in developing more meaningful analysis of issues which will have direct impacts on the community of Skagway. We are including for the record the North Lynn Canal Ferry Service Analysis prepared for the Municipality of Skagway in June 2014 by McDowell Group. This report documents the high volume of traffic that historically has been generated between the communities of Skagway, Haines and Juneau. The report also discusses fare inequities in the AMHS system which highlights the need for a consistent AMHS fare structure methodology.

Economic Impacts

The plan is named Juneau Access Improvements Project (JAIP) and in this sense it is Juneau-centric in its conception and its execution. The emphasis is on improving access from Juneau to Haines and Juneau to Skagway. There is very little written in the document about the vital transportation link that exists between Haines and Skagway. Historically, this connection between the two communities has carried a disproportionately large amount of traffic compared to other segments of the Marine Highway around the state.

- 1. The highly popular Golden Circle Tour is a mainstay of summer tourism for Skagway, Haines, Haines Junction and Whitehorse. These communities have promoted this tour successfully for two decades. It has been the policy of our Municipality to support and encourage visitation by the independent traveler as a counter balance to total reliance on cruise ship traffic. Traditionally the independent traveler spends more money per capita than other visitors. Any proposal that would disconnect or bottleneck this important economic connection could harm this important market.
- 2. Insufficient capacity of the small Skagway/Haines shuttle ferry. Under Alternatives 2B, 4A, 4B, 4C and 4D the Skagway-Haines link would be serviced by a small shuttle ferry modeled after the *Lituya*. The *Lituya* features an open car deck design and is the smallest vessel in the Alaska Marine Highway System. It serves the 16.5 nautical-mile distance between Metlakatla and Ketchikan, a route which historically has carried less volume of passengers and vehicles than the Skagway/Haines route. The design for the small shuttle ferry planned for the Skagway/Haines route calls for a carrying capacity of 18 Alaska standard vehicles (ASV). However, rule of thumb on the Marine Highway states that the average RV requires twice the deck space as a car or pickup truck. Therefore, if the shuttle

were loaded with only RVs, the maximum the shuttle could carry would be nine RVs on any given trip between Haines and Skagway. The shuttle is scheduled to sail twice a day thereby creating opportunity for 36 ASVs or 18 RVs to move from Skagway to Haines each day. Size, weight and capacity restrictions could impact independent bus traffic moving between communities.

Based on historic patterns of traffic between our communities, the Municipality questions the ability of this shuttle to provide adequate capacity. The reasoning for designing a vessel with such limited capacity is not explained in the EIS. We note that in association with Alternative 3 (West Side Road) larger shuttle designs have been considered. We further note that under Alternative 2B, the small shuttle is taken out of service in winter and there is no direct connection between Skagway and Haines.

- 3. Traffic forecasts for the Haines/Skagway link are conspicuously absent. The DSEIS offers expansive analysis on traffic forecasts for the Juneau/Haines and Juneau/Skagway segments. However it treats the Haines/Skagway link as totally separate from Juneau Access and offers no analysis of traffic demand between the communities. It merely states that the demand between Haines and Skagway will be 53 ASV per day but the document is silent on how this number is arrived at. We believe that capacity engineered to this demand number would be insufficient to handle future growth and peaks in current demand such as week-end, special events and holidays.
- 4. Additional costs and inconvenience to foot passengers. traveling between communities without a vehicle has been an ongoing concern for the Municipality. Many of our residents, particularly seniors and school children, travel to Juneau without a vehicle. The Alaska Marine Highway System Marketing and Pricing Study conducted by the McDowell Group in 2000 estimated the number of foot passengers to be 45% of the total passengers. The potential costs to these passengers go unreported in the document. Conservative estimates of the costs for a person traveling without a vehicle between Katzehin and Auke Bay range from \$50 (van/bus) to \$180 (taxi). The draft EIS should provide more detail than merely stating it is "assumed a commercial system will be created." The additional costs to these users, whether bus or a taxi should be factored into the User Cost/Benefit Analysis. Or, the cost to the state should be reported if the state assumes the responsibility for transferring travelers between Auke Bay and Katzehin. Either way, the costs of transport between Katzehin and Auke Bay for travelers without a vehicle are real and should be identified.
- 5. North Lynn Canal Ticket Prices. In letters to the Federal Highway Administration (FHWA), the Municipality has raised the issue of the unusually high cost of travel in Lynn Canal. Per-mile passenger and vehicle fares for the 13-mile Haines-Skagway route remain the highest in the Southeast System.

It is difficult to determine from the DSEIS the actual cost of a ticket from Skagway to Haines. Prices vary depending on which alternative is being considered, which source

document you are reading and/or which vessel you are sailing on. For example, the 2012 HDR Ferry Fares Memo referenced in Appendix A of the Traffic Forecast Report indicates that for all alternatives other than Alternative 3, a ticket from Skagway to Haines will cost \$22.00/vehicle and \$7.50/passenger on the small shuttle. However, if you board a mainliner to travel to Haines it will cost you \$49.00/vehicle and \$31.00/passenger. Table A-22 of Appendix FF (User Benefit, Life Cycle Cost and Total Project Cost Report) presents a different pricing scenario.

To add to the confusion the Municipality has received correspondence from FHWA (August 20, 2014, letter from Division Director Garcia-Aline) which states "With regards to your specific concerns about the current fare for the Haines-Skagway ferry link, the Draft SEIS will provide the predicted fare for this link based on the current statewide fare structure, but it is my understanding that in all scenarios the fare would be reduced from the current price." To further add to the confusion, we were told by Deputy Commissioner Reuben Yost at AKDOT's public hearing in Skagway on October 23, 2014, that most likely the price for the Skagway/Haines link would not be reduced but the prices for other routes elsewhere in the region would be raised to be compatible with the prices that have been charged historically in Northern Lynn Canal.

The following table looks only at rates relevant to marine segments in the Preferred Alternative (2B) and shows how different the two pricing scenarios are:

Routes less than 20 miles	2014 DSEIS Pricing	2014 AMHS fare structure	
Skagway/Haines	\$22.00/vehicle	\$49.00/vehicle	
15 miles	7.50 pax	\$31.00/pax	
Skagway/Katzehin	\$24.00/vehicle	\$52.00/vehicle	
16 miles	8.00/pax	\$33.00/pax	

Assumptions: Using mileage provided in Table 1 of the HDR Ferry Fares memo referenced in Appendix A of the Traffic Forecast Report (2014 DSEIS.) Yellow highlights indicate fares prorated for distance (there is lack of consistency with regard to route distances throughout the source documents.)

Recalculating the price of a ticket from Skagway to Katzehin to reflect the current AMHS fares makes a dramatic illustration of how drastically the price of ticket from Skagway to Katzehin would change: for the proverbial family of four, the price balloons from \$52 to \$168.

In 2013, the AMHS contracted with Northern Economics to conduct a fare equalization study to develop a "fair and equitable tariff structure." The Municipality has requested on numerous occasions that the results of the AMHS fare equalization study be included in the Juneau Access EIS. The fare adjustments that will be made as a result of the study will have a direct effect on the ticket prices for ferries operating in Lynn Canal. The AMHS Fare Study is an important tool for evaluating user costs and benefits and should be

included in the EIS. Without knowing what the fares will be for Skagway routes or the methodology behind them, it is impossible to determine which alternatives will most benefit the residents of our community.

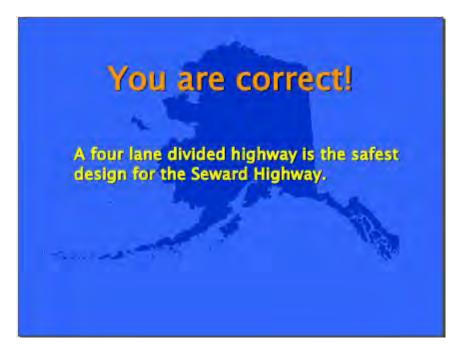
Skagway Ferry Float

The floating dock associated with the Skagway Ferry Terminal is an example of critical transportation infrastructure that needs to be refurbished and/or replaced. Ownership and use of the float is shared between the Municipality of Skagway and the State of Alaska and serves an important economic function for the community as well as the Alaska Marine Highway System. Small cruise ships, large fishing vessels, yachts and tugboats utilize this dock on a regular basis. It also serves as an emergency dock for Alaska Marine Lines and Petro Marine. It is imperative that any design changes to that dock be coordinated with the Municipality to ensure that they are compatible with the Municipality's uses.

Safety

Safety is one of Skagway's top priorities. The following safety issues should be addressed in the EIS with regard to the preferred alternative:

- 1. How will Homeland Security be handled at the "unmanned" Katzehin ferry terminal? What part of the responsibility for emergency services will fall to local municipalities?
- 2. The EIS contains many studies on avalanche hazards. From our experience icing and freezing rain may be a bigger concern in this coastal corridor. Please include studies of how coastal freeze/thaw weather phenomenon affect roads and document the measures that will be taken to protect the safety of travelers.
- **3.** People who fish north of the Katzehin River near the planned location of the terminal report high winds and large swells in this area. We have not found any reports or studies of sea conditions in this area. These should be included in the FIS.
- **4.** Many lives have been lost on the Seward Highway, a road that shares similarities to the proposed Katzehin road. Since 2006, planners and residents at numerous public meetings have been calling for a divided highway as the best and most effective engineering enhancement on the Seward Highway. The DSEIS should analyze the cost/benefits of making the road to Katzehin a divided highway.



2nd slide from DOT&PF presentation: "Funding for the Engineering "E" Seward Highway Traffic Safety

Katzehin Terminal Logistics

Many residents have raised questions about the logistics of the unmanned Katzehin terminal. The DSEIS leaves many of those questions unanswered:

- Where will passengers purchase tickets?
- Who will be responsible for snow removal, lane assignments, propane inspections?
- Are the fast turnaround times realistic? Wait times for passengers seem overly optimistic. How will a "reservationless" system work?
- What amenities will be available for people arriving at the terminal such as bathrooms, electricity and shelter? Will there be telephone service?
- Who will check identification?

Parks and Recreation Areas

Section 6.2.1 Identifies parks and recreation areas within the project area. In Skagway, the plan identifies Mollie Walsh Park and Pullen Creek Shoreline Park as municipal parks within the project area. Registry Rock and Dewey Lakes Recreation Area should be added to this list.

Funding Priorities and Cost Overruns

The Municipality of Skagway is concerned that many transportation projects of local and regional importance will be postponed or cancelled if the State allocates its sparse transportation money to this project. The EIS should also consider the issue of cost overruns which historically have

been incurred on mega-projects. The Skagway Ferry Float and the Moore Bridge are two examples of critical local infrastructure that require immediate refurbishment or replacement.

The Municipality requests an opportunity to comment on the Final.

The DSEIS discusses many scenarios that could have a profound effect on the economic future of our community. However many of the supporting documents that are referenced are not included or are buried in the DSEIS and cannot be discovered and retrieved within the timeframe of the comment period. The DSEIS has taken more than two years to produce and requires deep analysis. Many municipalities rely on volunteer committees to develop comments and are handicapped by their own public notice and public meeting requirements. This significantly limits the amount of available time for research and public vetting of comments. We ask that you provide the Municipality the opportunity to comment on the Final SEIS prior to the record of decision.

Attachments:

North Lynn Canal Ferry Service Analysis prepared for the Municipality of Skagway in June 2014 Correspondence with Federal Highway Administration HDR Ferry Fares Memo



Municipality of Skagway

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September 6, 2013

David Miller, Administrator Federal Highway Administration, Alaska Division P.O. Box 21648 Juneau, AK 99802

Dear Mr. Miller,

On August 29th, the Alaska Department of Transportation and Public Facilities announced that in accordance with provisions in the new federal transportation act commonly referred to as MAP-21, the department would conduct a streamlined public process for the Juneau Access Improvements Project Supplemental Environmental Impact Statement (EIS).

As you are aware, the previous EIS for this project was deemed inadequate by the courts and for the past two years the department has been collecting data and conducting extensive analysis for a revised study. It is the concern of the Municipality of Skagway that an abbreviated public process may not provide us with adequate opportunity to fully analyze this data and evaluate potential impacts to our community.

For this reason, the Skagway Borough Assembly would like to take the opportunity earlier rather than later to apprise you of our concerns and make the following requests:

- We request that the comment period on the draft EIS be extended to no less than 60 working days in order to provide adequate time for evaluation of alternatives by local officials and residents. We also request that the draft EIS not be released over the holidays as this would be counterproductive to substantive review.
- The Municipality of Skagway is in the final stages of developing its own coastal zone management program. As such we request that we be included in the planning process as a cooperating agency.
- We are concerned that the Alaska Marine Highway System (AMHS) price structure as it currently exists in Lynn Canal has resulted in severely skewed ticket prices which bear no relationship to cost per mile. We have been told by Deputy Commissioner Reuben Yost

that the fare structure system-wide is currently under review and a formal study has been instituted. We request that the results of that study be included in the EIS and applied to all marine segments for all alternatives. *

- Additionally, we request that any analysis of cost per mile whether for marine or road links include adequate explanation of underlying assumptions and methodologies.
- The Marine Highway System serves an important mass transit function in our region. Over the past ten years, our community has consistently voiced concerns about the large percentage of marine highway passengers who travel without a vehicle. We request that the EIS devote significant analysis to determining how under the various alternatives foot passengers will be transported between communities and what the added costs will be for the state and the end users in each situation.

Thank you for your consideration.

Sincerely,

Stan Selmer, Mayor

Municipality of Skagway

Senator Lisa Murkowski cc: Senator Mark Begich Congressman Don Young Governor Sean Parnell Senator Dennis Egan Representative Beth Kerttula

^{*}Examples of excessive ticket prices in Lynn Canal can be found in the 2008 Study by Northern Economics, Inc available on the AMHS website. This study shows that the a passenger between Haines and Skagway pays \$2.38 per nautical mile while a passenger between Juneau and Sitka pays only 34 cents per mile, a 700% difference. The DOT&PF Juneau Access website under Alternative 1B calls for a 20% reduction in fares for Lynn Canal. However, even with that reduction, passengers in Lynn Canal still would be paying nearly six times as much as travelers between Sitka and Juneau.



Alaska Division

October 10, 2013

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: 000S(131)/71100

Mr. Stan Selmer Mayor Municipality of Skagway P.O. Box 415 Skagway, AK 99840

Dear Mr. Selmer:

Thank you for your September 6, 2013, letter expressing interest in the Juneau Access Improvements (JAI) project and for sharing your concerns regarding the development of the Supplemental Environmental Impact Statement (SEIS) for the project. I will address your comments in the order they were presented in your letter.

Regarding your request for an extension of the comment period for the Draft SEIS to a period of no less than 60 days, I will note that the Federal Highway Administration (FHWA) normally provides a 45 day comment period on Draft Environmental Impact Statements (EISs). This length of comment period is typically sufficient. The JAI SEIS will be a document with limited changes in text from the prior approved Final EIS, where most of the information is not new; we believe the review should prove less demanding than a typical Draft EIS. For reviewers' convenience, the Draft SEIS will have all new information highlighted. Also of note, because of the sequence required for providing notice of an EIS's availability in the Federal Register, the documents are normally available for a week or ten days before the actual comment period technically begins, thus the comment period is effectively longer than 45 days. At this time, we believe that due to the nature and format of this particular document, that a 45 day comment period will be adequate.

In reference to your request to be included as a Cooperating Agency (due to the Municipality's ongoing efforts in developing a coastal zone management program), Cooperating Agency status on an FHWA EIS is typically limited to federal and state agencies with a jurisdiction by law and/or special expertise. Nevertheless, the FHWA is interested in the Skagway Borough's concerns relative to the coastal management program and will carefully consider all comments submitted by the Skagway Borough. Detailed responses to those comments will be provided in the Final SEIS.

Your next request relates to an Alaska Marine Highway System (AMHS) study that has been proposed to analyze fares across the AMHS system.

You expressed concerns specifically about current fare structure in the Lynn Canal and its apparent inequities compared to other portions of the system. You requested that the results of the study be incorporated into the JAI SEIS. We have confirmed with the Department of Transportation and Public Facilities (DOT&PF) that this study has not begun, and as a system-wide proposal, it is entirely separate from the JAI project in timing and in scope. However, it is important to note that one of the key goals of the project is to reduce user costs for transportation within the Lynn Canal corridor, and that the SEIS will address the potential impacts that each of the reasonable alternatives would have on AHMS fares in the Lynn Canal.

Regarding your desire that any analysis of travel costs per mile include adequate explanation of underlying assumptions and methodologies, I can assure you that the assumptions and methodologies behind all of the cost analyses provided in the SEIS will be adequately explained.

Your final request was that the EIS provide an analysis on how the various alternatives would impact AMHS foot passengers, including transportation between communities and any added costs. The JAI Final EIS approved in 2006 provided an analysis of the potential impacts of each reasonable alternative on AMHS foot passengers and the FHWA will ensure that the Draft SEIS provides a detailed update to that analysis, including any potential added costs.

Again, thank you for your interest in the Juneau Access Improvements project.

Sincerely

David C. Miller

Division Administrator

Electronically cc:

Lisa Murkowski, Senator Mark Begich, Senator Don Young, Representative Sean Parnell, Governor Dennis Egan, Senator Beth Kerttula, Representative Mike Vigue, DOT&PF, Project Manager



Municipality of Skagway

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March 25, 2014

David Miller, Administrator Federal Highway Administration, Alaska Division P.O. Box 21648 Juneau, AK 99802

Dear Mr. Miller,

In October of 2013, former Mayor Stan Selmer of Skagway wrote to you regarding a number of concerns of the Municipality related to the pending revised draft Environmental Impact Statement (EIS) on Juneau Access. In particular, Mayor Selmer addressed the issue of the skewed marine highway ticket price structure which currently exists in Lynn Canal and which bears no relationship to cost per mile. The community had been told by Deputy Commissioner Reuben Yost at a public meeting this past fall that the fare structure was currently under review and a formal study had been instituted. It was the Mayor's request that the results of that study be included in the EIS and applied to all marine segments for all alternatives.

In your response dated October 10, 2013, you stated that "We have confirmed with the Department of Transportation and Public Facilities (DOT&PF) that this study has not begun and as a system-wide proposal, it is entirely separate from the JAI project in timing and in scope."

However, at the most recent MTAB meeting on March 11, Captain Falvey of the Alaska Marine Highway (AMHS) announced that in fact a "fare equalization study" was in progress and a draft would be released in April.

Riders on the Alaska Marine Highway System between Skagway and Haines pay the highest ticket prices per mile of any marine segment in the entire system. This fact makes the subject and scope of the AMHS fare study very relevant to all marine alternatives being proposed for Lynn Canal.

We believe that it would undermine the integrity of the new EIS if the DOT&PF were to exclude the results of the AMHS study and adopt arbitrary pricing for Lynn Canal which bears no relationship to AMHS costs of operation or to pricing for other parts of the state.

In as much as the revised EIS and the new AMHS fare study are both scheduled to be released in April, we would like to reiterate our request that the results of that study be included in the pending EIS and be applied to all marine segments for all alternatives.

Thank you for your attention to this matter.

Mark Schaefer, Mayor Municipality of Skagway

Senator Lisa Murkowski cc: Senator Mark Begich Congressman Don Young Governor Sean Parnell Senator Dennis Egan Representative Sam Kito III



Municipality of Skagway

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SENT VIA EMAIL AND U.S. MAIL

July 28, 2014

Sandra Garcia-Aline
Alaska Division Director
Federal Highway Administration
P.O. Box 21648
Juneau, AK 99802
sandra.garcia-aline@dot.gov

Dear Ms. Garcia-Aline,

On behalf of the Municipality of Skagway I would like to congratulate you on your appointment as Alaska Division Director for the Federal Highway Administration. We look forward to working with you on the many important transportation issues that will shape the future of our community and our region.

In particular, the Municipality is planning to comment on the draft Environmental Impact Statement (EIS) for the Juneau Access Project. Recently we learned that the release of the draft has been delayed until late in 2014. We would like to request that the public comment period be extended from 45 days to 60 days in order to allow us adequate time to conduct a thorough review of the document and draft comprehensive comments.

It is our understanding that Alaska Marine Highway System (AMHS) is currently conducting a system-wide fare equalization study to review the equitability of Marine Highway fares statewide. In the past, Skagway has raised concerns about the unusually high cost of travel in northern Lynn Canal. Per-mile passenger and vehicle fares for the 13-mile Haines-Skagway link remain the highest in the Southeast System and are about 50-percent above the next highest per-mile fare. For this reason we would request that the new AMHS fare study (also scheduled to be released later this year) be included in the pending EIS and the results of the study be applied to all marine segments for all alternatives.

Our previous correspondence on these topics is attached. Thank you for your consideration and again, congratulations on your appointment.

Sincerely,

Mark Schaefer, Mayor





Alaska Division

August 20, 2014

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131)/71100

Mr. Mark Schaefer Mayor Municipality of Skagway P.O. Box 415 Skagway, AK 99840

RECEIVED

CEP 85 2014

MUNICIPALITY OF SKAGWAY

Dear Mayor Schaefer:

Thank you for your July 28, 2014, letter welcoming me to my new position as the Alaska Division Administrator for the Federal Highway Administration (FHWA). I also appreciate your interest in the Juneau Access Improvements (JAI) project and expression of concern regarding the development of the Supplemental Environmental Impact Statement (SEIS) for the project.

Regarding your request for an extension of the comment period for the Draft SEIS to a period of 60 days, FHWA normally provides a 45-day comment period on Draft Environmental Impact Statements (EISs). This length of comment period is typically sufficient. The JAI SEIS will be a document with limited changes in text from the prior approved Final EIS, where most of the information is not new; we believe the review should prove to be less demanding than a typical Draft EIS. For reviewers' convenience, the document will highlight all new information. Also, due to the sequence required for providing notice of an EIS's availability in the Federal Register, the documents are normally available for a week or ten days before the actual comment period technically begins, thus the comment period is effectively longer than 45 days. At this time, we believe that due to the nature and format of this particular document, a 45-day comment period will be adequate.

Your next request relates to an Alaska Marine Highway System (AMHS) statewide study that is underway to analyze fares across the entire AMHS system. You requested that the results of the study be incorporated into the JAI SEIS. We have confirmed with the Department of Transportation and Public Facilities (DOT&PF) that this study has begun, but is not expected to be released until February of next year. As a system-wide proposal, it is entirely separate from the JAI project in timing and in scope. While the study could potentially result in fare adjustments in Lynn Canal (and across the State), we understand that any changes would be effectively equal amongst the reasonable alternatives presented in the Draft SEIS. Thus, the results of the fare study will not change the comparative analysis.

However, it is important to note that one of the key goals of the project is to reduce user costs for transportation within the Lynn Canal corridor, and that the Draft SEIS will address the potential impacts that each of the reasonable alternatives would have on AMHS fares in the Lynn Canal. With regards to your specific concerns about the current fare for the Haines-Skagway ferry link, the Draft SEIS will provide the predicted fare for this link based on the current statewide fare structure, but it is my understanding that in all scenarios the fare would be reduced from the current price.

Again, thank you for your interest in the Juneau Access Improvements project.

Sincerely,

Sandra A. Garcia-Aline Division Administrator



Municipality of Skagway

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October 3, 2014

VIA EMAIL AND U.S. MAIL

Sandra Garcia-Aline, Administrator Alaska Division, Federal Highway Administration P.O. Box 21648 Juneau, AK 99802-1648 sandra.garcia-aline@dot.gov

Dear Ms. Garcia-Aline,

Thank you for your response to our previous correspondence regarding the Alaska Marine Highway System (AMHS) analysis of fares across the AMHS system.

As you know the issue of fare inequality has been a long-standing concern of our community. In past correspondence, the Municipality has raised the issue of the unusually high cost of travel in Lynn Canal. Per-mile passenger and vehicle fares for the 13-mile Haines-Skagway link remain the highest in the Southeast System and are about 50% above the next highest per-mile fare. In discussing this with AMHS we have been assured that the fare equalization study is the first step in moving the System toward a more balanced fare structure with rates for some links being increased and rates for other links being lowered. By their own admission AMHS has no current logarithm or formula for setting fares. We are concerned that this imbalance is being perpetuated in the Juneau Access Environmental Impact Statement (EIS) with rates for the various marine links being established in an arbitrary manner.

Ticket prices on the ferry system will be significantly impacted by the fare adjustments which will result from the AMHS fare equalization study. This analysis is an invaluable tool for evaluating end user costs associated with the various alternatives and should be integrated into the EIS.

Without this tool, the Municipality and residents of our community cannot adequately evaluate the various alternatives presented in the Juneau Access EIS. We respectfully request that the AMHS study be made public and the comment period be extended to allow adequate time for evaluation of alternatives in light of the new information.

Thank you for your consideration.

Sincerely,

Mark Schaefer, Mayor

CC: Pat Kemp, Commissioner, Alaska Dept. of Transportation & Public Facilities

Representative Sam Kito III

Senator Dennis Egan

North Lynn Canal Ferry Service Analysis

Prepared for: Municipality of Skagway



Research-Based Consulting

Juneau Anchorage

North Lynn Canal Ferry Service Analysis

Prepared for: Municipality of Skagway

Prepared by:



Juneau • Anchorage

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Introduction

The City of Skagway asked McDowell Group, Inc. to prepare a brief report regarding specific aspects of Lynn Canal ferry service, including the following:

- An analysis of AMHS day boat/Alaska Class Ferry capacity
- Analysis of Southeast Alaska AMHS per-mile fare costs
- Day boat/Alaska Class Ferry operating cost analysis
- Baseline historical Lynn Canal AMHS traffic data

This report supplements a report prepared in 2003 by McDowell Group for the City Skagway and Haines Borough. That report, "Analysis of Traffic on Lynn Canal Ferry Routes," summarized several important themes regarding the role of Lynn Canal within AMHS operations:¹

"The communities of Haines and Skagway are strategically located on the Alaska Marine Highway, generating significant traffic volumes. Haines and Skagway are two of the highest-volume ports in terms of passenger, vehicle and freight traffic and in terms of revenue contributed to the overall system."

"The combination of a high volume of passengers using local Lynn Canal service together with passengers from many distant ports making road connections through Haines and Skagway means the Lynn Canal market is an economic opportunity for the system that can help underwrite the essential service provided to lower volume communities."

"Four of every ten Alaska Marine Highway revenue dollars are related to Lynn Canal travel or freight. That is, 40 percent of System revenue comes from passengers or freight that, at some point in their voyages, pass through Lynn Canal."

This current study provides further data and analysis regarding the importance of optimized AMHS Lynn Canal service to the communities of Haines and Skagway as well as to the sustainability of the Alaska Marine Highway overall.

Key Findings

Key points noted in this analysis include the following:

• In 2013, approximately 1 in 5 north-bound Malaspina voyages (departing Juneau) had total car deck usage greater than the vehicle capacity of the day boat/ACF. Approximately 1 in 6 southbound voyages (arriving Juneau) had total car deck usage greater than day boat/ACF capacity.

¹ "Analysis of Traffic on Lynn Canal Ferry Routes." Prepared by McDowell Group for the Haines Borough and City of Skagway, July 15, 2003.

- Per-mile passenger and vehicle fares for the 13 nautical-mile Haines-Skagway link remain highest in the Southeast system and are about 50 percent above the next highest per-mile.
- Deployment of the new AMHS day boat/ACF should result in an overall reduction in the cost of providing ferry service in Lynn Canal. Day boat/ACF costs are expected to average \$173 per-mile for Juneau-Haines service and \$336 per-mile for the Haines-Skagway service. In FY2012, all vessels serving Lynn Canal combined operated at an average per-mile cost of \$527. The Malaspina (providing 40 percent of all Lynn Canal service miles in FY2012) operated at a per-mile cost of \$649.
- Passenger traffic between Skagway and Haines in 2013 reached the highest level since 2003. The traffic low-point was in the 2006-2007 period; passenger traffic has increased by about 60 percent since then. Vehicle traffic is up about 50 percent over the same period. The number of voyages between Skagway and Haines increased from 339 in 2007 to 583 in 2013, a 70 percent increase.
- Passenger traffic between Skagway and Juneau was up 4.5 percent in 2013 from 2012 and up 9 percent from 2011. However, passenger traffic between the two ports remains well below the 2007 and 2008 peak.

Day Boat/Alaska Class Ferry Capacity Analysis

This analysis identifies the number of Malaspina Lynn Canal voyages in 2012 and 2013 that carried more vehicles than could have been accommodated by the day boat/ACF, with capacity of 53 Alaska standard vehicles (ASV). Based on data provided by AMHS, in 2013, 19 percent of northbound voyages (departing Juneau) and 16 percent of southbound voyages (arriving Juneau) had total car deck usage of more than 1,060 feet. This is less than in 2012, when 33 percent of northbound voyages and 28 percent of southbound voyages had total car deck usage of more than 1,060 feet.

This data suggests that operating two day boat/ACF voyages between Juneau and Haines (or other capacity enhancement measures) may be required to meet peak-period demand.

It is important to note in 2013, the Malaspina carried 61 percent of total summer northbound (departing Juneau) vehicle traffic in Lynn Canal and 54 percent of southbound (arriving Juneau) traffic. In 2012, the Malaspina carried 62 percent of summer northbound and 57 percent of southbound vehicle traffic.

Table 1. Malaspina Northbound and Southbound Trips with Car Deck Use Greater than 1,060 feet, Summer 2013

<u>Nort</u>	<u>hbound</u>	<u>Southbound</u>		
Date	Car Deck Used (feet)	Date	Car Deck Used (feet)	
5/25/2013	1,124	5/27/2013	1,195	
6/14/2013	1,322	6/2/2013	1,306	
6/28/2013	1,234	6/11/2013	1,371	
6/29/2013	1,206	6/20/2013	1,522	
6/30/2013	1,262	7/4/2013	1,412	
7/19/2013	1,155	7/6/2013	1,160	
7/25/2013	1,306	7/7/2013	1,066	
7/26/2013	1,424	7/21/2013	1,168	
7/27/2013	1,204	8/2/2013	1,588	
8/3/2013	1,136	8/21/2013	1,318	
8/6/2013	1,083	8/28/2013	1,575	
8/10/2013	1,109	8/31/2013	1,634	
8/17/2013	1,341	9/2/2013	1,330	
8/30/2013	1,312	9/8/2013	1,438	
9/2/2013	1,410			
9/9/2013	1,385			
Total Trips Over Capacity: 16	% Trips Over Capacity: 19%	Total Trips Over Capacity: 14	% Trips Over Capacity: 16%	

Source: AMHS. Includes accompanied and unaccompanied vehicles.

Table 2. Share of Lynn Canal AMHS Vehicle Traffic Carried by Malaspina, Summer 2012 and 2013

	Total Vehicles	Malaspina Vehicles	Percent Malaspina
2012 Northbound	6,661	4,105	62%
2012 Southbound	6,688	3,826	57%
2013 Northbound	6,244	3,797	61%
2013 Southbound	6,603	3,591	54%

Source: AMHS, compiled by McDowell Group.

Table 3. Malaspina Northbound and Southbound Trips with Car Deck Use Greater than 1,060 feet, Summer 2012

<u>Nort</u>	<u>hbound</u>	<u>Southbound</u>			
Date	Car Deck Used (feet)	Date	Car Deck Used (feet)		
5/25/2012	1,476	5/27/2012	1,574		
5/26/2012	1,175	6/4/2012	1,094		
6/10/2012	1,651	6/6/2012	1,595		
6/12/2012	1,183	6/11/2012	1,138		
6/14/2012	1,090	6/17/2012	1,408		
6/15/2012	1,482	6/25/2012	1,068		
6/29/2012	1,299	7/7/2012	1,473		
6/30/2012	1,462	7/9/2012	1,321		
7/6/2012	1,646	7/14/2012	1,293		
7/13/2012	1,563	7/16/2012	1,064		
7/20/2012	1,241	7/21/2012	1,268		
7/21/2012	1,160	7/23/2012	1,378		
7/25/2012	1,257	7/28/2012	1,385		
7/26/2012	1,470	7/30/2012	1,620		
7/27/2012	1,613	7/31/2012	1,071		
7/28/2012	1,394	8/3/2012	1,224		
8/3/2012	1,182	8/4/2012	1,142		
8/4/2012	1,252	8/6/2012	1,389		
8/5/2012	1,122	8/17/2012	1,147		
8/10/2012	1,270	8/18/2012	1,335		
8/17/2012	1,218	8/27/2012	1,144		
8/21/2012	1,081	9/9/2012	1,664		
8/24/2012	1,075				
8/31/2012	1,613				
9/1/2012	1,226				
9/5/2012	1,132				
9/7/2012	1,510				
Total Trips Over Capacity: 27	% Trips Over Capacity: 33%	Total Trips Over Capacity: 22	% Trips Over Capacity: 28%		

Analysis of Southeast Per-Mile Fare Costs

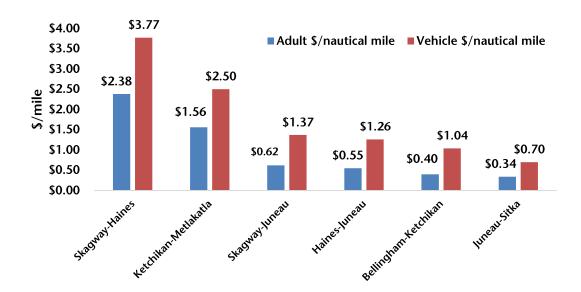
The following table provides per-mile passenger (adult) and vehicle (up to 19 feet) fares. Per-mile fares for the 13 nautical-mile Haines-Skagway link are highest in the Southeast system, both approximately 50 percent above the next highest per-mile fare, which is for the 16 nautical-mile Metlakatla-Ketchikan link.

Table 4. AMHS Per-Mile Fare Analysis

	Table 4. AMHS	rei-iville ra	re Arialysis		
Link	Adult Fare (12 years+)	Vehicle up to 19 feet	Nautical miles	Adult \$/nautical mile	Vehicle \$/nautical mile
Haines-Skagway	\$31	\$49	13	\$2.38	\$3.77
Skagway-Haines	\$31	\$49	13	\$2.38	\$3.77
Ketchikan-Metlakatla	\$25	\$40	16	\$1.56	\$2.50
Metlakatla-Ketchikan	\$25	\$40	16	\$1.56	\$2.50
Petersburg-Wrangell	\$33	\$64	41	\$0.80	\$1.56
Wrangell-Petersburg	\$33	\$64	41	\$0.80	\$1.56
Angoon-Sitka	\$35	\$104	67	\$0.52	\$1.55
Juneau-Hoonah	\$33	\$68	46	\$0.72	\$1.48
Gustavus-Pelican	\$31	\$68	46	\$0.67	\$1.48
Juneau-Kake	\$66	\$167	114	\$0.58	\$1.46
Kake-Juneau	\$66	\$167	114	\$0.58	\$1.46
Hoonah-Juneau	\$33	\$68	48	\$0.69	\$1.42
Juneau-Skagway	\$50	\$111	81	\$0.62	\$1.37
Skagway-Juneau	\$50	\$111	81	\$0.62	\$1.37
Juneau-Petersburg	\$66	\$167	123	\$0.54	\$1.36
Petersburg-Juneau	\$66	\$167	123	\$0.54	\$1.36
Juneau-Pelican	\$50	\$107	91	\$0.55	\$1.33
Pelican-Juneau	\$50 \$50	\$121	91	\$0.55	\$1.33
Juneau-Haines	\$30 \$37	\$121	68	\$0.55	\$1.33
Ketchikan-Prince Rupert	\$54	\$116	91	\$0.59	\$1.27
Haines-Juneau	\$37	\$86	68	\$0.54	\$1.26
Kake-Petersburg	\$35	\$79	65	\$0.54	\$1.22
Petersburg-Kake	\$35	\$79	65	\$0.54	\$1.22
Petersburg-Ketchikan	\$60	\$136	112	\$0.54	\$1.21
Juneau-Ketchikan	\$107	\$280	235	\$0.46	\$1.19
Ketchikan-Juneau	\$107	\$280	235	\$0.46	\$1.19
Hoonah-Kake	\$60	\$138	116	\$0.52	\$1.19
Juneau-Gustavus	\$33	\$70	62	\$0.53	\$1.13
Gustavus-Juneau	\$33	\$70	62	\$0.53	\$1.13
Sitka-Angoon	\$35	\$75	67	\$0.52	\$1.12
Angoon-Hoonah	\$33	\$70	63	\$0.52	\$1.11
Hoonah-Angoon	\$33	\$70	63	\$0.52	\$1.11
Angoon-Juneau	\$37	\$84	78	\$0.47	\$1.08
Juneau-Angoon	\$37	\$84	78	\$0.47	\$1.08
Bellingham-Ketchikan	\$239	\$617	595	\$0.40	\$1.04
Ketchikan-Bellingham	\$239	\$617	595	\$0.40	\$1.04
Ketchikan-Wrangell	\$37	\$91	89	\$0.42	\$1.02
Wrangell-Ketchikan	\$37	\$91	89	\$0.42	\$1.02
Kake-Sitka	\$37	\$87	115	\$0.32	\$0.76
Sitka-Kake	\$37	\$87	115	\$0.32	\$0.76
Angoon-Hoonah	\$33	\$70	63	\$0.52	\$1.11
Hoonah-Sitka	\$37	\$87	118	\$0.31	\$0.74
Sitka-Hoonah	\$37	\$87	118	\$0.31	\$0.74
Juneau-Sitka	\$45	\$92	132	\$0.34	\$0.70
Sitka-Juneau	\$45	\$92	132	\$0.34	\$0.70
Petersburg-Sitka	\$45	\$93	156	\$0.29	\$0.60
Sitka-Petersburg	\$45	\$93	156	\$0.29	\$0.60
	4.5	4,2		+ ~ · · ~ /	+ - 100

Source: AMHS, compiled by McDowell Group.

Figure 1. AMHS Per-Mile Fare Analysis, Selected AMHS Links Adult Passenger Fare and Vehicle Fare up to 19 Feet



It is interesting to note the variation in fares among links that are of generally similar distance. Juneau-Kake, at 114 nautical miles, has passenger and vehicle per-mile fares of \$0.58 and \$1.46, respectively. Hoonah-Sitka (118 nautical miles) and Juneau-Sitka (132 nautical miles) are approximately the same length, but are about half the cost on a per-mile basis.

Based on a 2008 report by Northern Economics, Skagway-Haines passenger fares are the highest in the statewide system and vehicle fares are the highest except Southcentral fares.²

Table 5. AMHS System-Wide and Regional Fare Ranges (One-Way), Per Nautical Mile

	<u>Adult Passenger</u>		Vehicle up	to 19 feet*
	Low	High	Low	High
System-wide	\$0.27	\$2.38	\$0.60	\$5.00
Southeast, Inside Passage	\$0.27	\$2.38	\$0.60	\$3.77
Southeast, Feeder	\$0.32	\$0.89	\$0.76	\$1.73
Cross Gulf	\$0.42	\$0.54	\$1.14	\$1.49
Southcentral	\$0.34	\$2.27	\$0.85	\$5.00
Southwest	\$0.37	\$1.94	\$0.98	\$3.18

^{*}Does not include driver.

Source: Northern Economics, 2008.

² "Passenger/Vehicle/Cabin Rate Study for the Alaska Marine Highway System." Prepared by Northern Economics for AMHS, 2008.

Day Boat/Alaska Class Ferry Operating Cost Analysis

The question of whether day boat/ACF service in Lynn Canal will result in lower overall corridor costs to the AMHS than current costs is a complex one, with no simple answer. The July 2013 Design Study Report provided estimates of day boat/ACF annual operating costs (see following table).

Table 6. Day Boat/ACF Annual Operating Costs (\$millions)

	Juneau-Haines	Haines-Skagway	Total
Manning	\$2.84	\$2.45	\$5.29
Fuel	\$2.25	\$1.15	\$3.40
Maintenance	\$0.67	\$0.67	\$1.34
Total	\$5.76	\$4.27	\$10.03

Source: Day Boat ACF Design Study Report, July 10, 2013.

These cost estimates are based on a service frequency of seven days per week for a 20-week summer period and four days per week for a 28-week winter period. The estimates also include a four-week overhaul. Cost estimates are based on the assumption that one day boat/ACF would make a single round trip each day Auke Bay-Haines-Auke Bay, while the other vessel would make two Haines-Skagway-Haines trips each service day.

Juneau Access alternatives include various options for using the day boat/ACF. In all of the "no-build" alternatives, mainliners would continue to serve northern Lynn Canal, in addition to day boat/ACF service.

As illustrated in the following tables, utilization of the day boat/ACF should result in an overall reduction in the cost of providing North Lynn Canal (NLC) ferry service. In FY2012, AMHS spent \$17.2 million providing service to NLC, excluding any shore-side costs. That included a total of 32,800 service miles, for all vessels combined, equating to an average per-mile cost of \$527. Per-mile costs ranged from a low of \$135 for the Fairweather to \$874 for the Columbia. The Malaspina (which provided 40 percent of all NLC service miles) had a per-mile cost of \$649, while the LeConte (33 percent of all NLC service miles) had a cost of \$395 per-mile.

Based on annual operating cost data provided in the Design Study Report, day boat/ACF costs should average \$173 per-mile for Juneau-Haines service and \$336 per-mile for the Haines-Skagway service. The Juneau-Haines estimate is based on 252 total round trips of 132.5 nautical miles, for a total of 33,390 nautical miles traveled (with total annual cost of \$5.76 million). The Haines-Skagway estimate is based on 504 total round trips of 25.2 nautical miles, for a total of 12,701 nautical miles traveled (with total annual cost of \$4.27 million).

Table 7. AMHS North Lynn Canal Non-Fuel Operating Costs, FY2012 (000\$)

Vessel	Total Vessel Days	NLC Days	% NLC	Total Non-Fuel Ops Costs	NLC Non-Fuel Ops Costs
Aurora	105.2	-	0.0%	\$4,969.7	\$-
Chenega	136.7	-	0.0%	6,526.4	-
Columbia	122.6	15.3	12.5%	15,170.6	1,894.2
Fairweather	226.8	5.8	2.5%	6,797.6	172.9
Kennicott	176.4	-	0.0%	14,983.8	-
LeConte	274.3	110.9	40.4%	9,145.5	3,697.0
Lituya	289.5	-	0.0%	1,410.6	-
Malaspina	156.3	99.7	63.8%	11,908.4	7,593.2
Matanuska	241.3	24.8	10.3%	16,609.6	1,707.9
Taku	276.8	0.8	0.3%	15,171.5	45.7
Tustumena	245.7	-	0.0%	10,688.8	-
Contract Vessels	8.6	-	0.0%	77.0	-
Total	2,260.0	257.2	11.4%	\$113,459.4	\$15,110.9

Table 8. AMHS North Lynn Canal Fuel Costs, FY2012 (000\$)

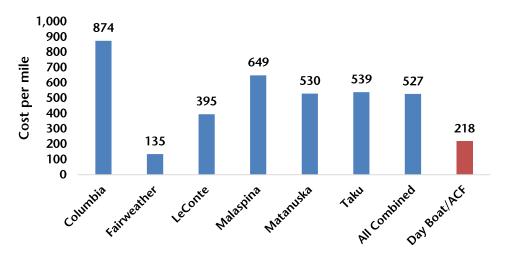
Vessel	Total Vessel Miles	NLC Miles	% NLC	Total Fuel Costs	NLC Fuel Costs
Aurora	27,010	-	0.0%	\$1,225.3	\$-
Chenega	40,874	-	0.0%	3,638.6	-
Columbia	53,193	2,444	4.6%	5,272.4	242.2
Fairweather	56,979	2,728	4.8%	4,071.4	194.9
Kennicott	61,911	-	0.0%	6,137.2	-
LeConte	53,825	10,708	19.9%	2,688.5	534.9
Lituya	16,608	-	0.0%	329.4	-
Malaspina	39,601	13,147	33.2%	2,827.6	938.7
Matanuska	79,750	3,640	4.6%	4,882.4	222.8
Taku	80,286	94	0.1%	4,262.5	5.0
Tustumena	57,198	-	0.0%	2,745.2	-
Contract Vessels	2,908	-	0.0%	-	-
Total	570,143.0	32,761.0	5.7%	\$38,080.6	\$2,138.6

Table 9. AMHS North Lynn Canal Vessel Per-Mile Costs, FY2012

Vessel	Total NLC Miles	Total NLC Costs (\$000)	Cost Per Mile
Aurora	-	-	-
Chenega	-	-	-
Columbia	2,444.0	\$2,136.5	\$874
Fairweather	2,728.0	\$367.9	\$135
Kennicott	-	-	-
LeConte	10,708.0	\$4,231.9	\$395
Lituya	-	-	-
Malaspina	13,147.0	\$8,531.9	\$649
Matanuska	3,640.0	\$1,930.7	\$530
Taku	94.0	\$50.7	\$539
Tustumena	-	-	-
Contract Vessels	-	-	-
Total	32,761.0	\$17,249.5	\$527

Source: AMHS, compiled by McDowell Group.

Figure 2. AMHS North Lynn Canal Vessel Per-Mile Costs, FY2012, and Anticipated Day Boat ACF Per-Mile Costs



Source: AMHS, compiled by McDowell Group.

Baseline Historical Lynn Canal Service and Traffic Data

The following tables provide a variety of historical data concerning AMHS ferry traffic and service in Lynn Canal. Table 10 provides a history of AMHS Lynn Canal fares. The data indicates the following:

- Haines-Skagway adult passenger fares in 2013 were about 80 percent above the 1999 level, while vehicle fares (for vehicles up to 19 feet) are up about 60 percent.
- Skagway-Juneau adult passenger fares in 2013 were about 65 percent above 1999; vehicle fares were up about 70 percent.

- Haines-Juneau adult passenger fare increased 54 percent since 1999. Vehicle fares were up 51 percent.
- Published Lynn Canal passenger and vehicle fares have been the current level since 2008.
- Based on the Anchorage Consumer Price Index (CPI), inflation in Alaska has totaled 43 percent since 1999.

Table 11 provides Lynn Canal AMHS traffic volume data for the 2000 to 2013 period. A brief analysis of the data reveals the following:

- In 2013 Haines-Skagway and Skagway-Haines passenger traffic reached the highest level since 2003. Since bottoming-out in the 2006-2007 period, passenger traffic between the two ports has increased by about 60 percent. Vehicle traffic is up about 50 percent over the same period. 2007 marked the low-point in ferry service frequency between Skagway and Haines, with only 180 Haines-Skagway trips and 159 Skagway-Haines trips.
- In 2013, 15,865 passengers and 6,742 vehicles made the trip between Skagway and Haines (bi-directional totals). In 2006, 10,014 passengers and 4,542 vehicles made the trip.
- Passenger traffic from Juneau-Skagway, though up about 5 percent in 2013 compared to 2012 (and 11 percent above 2011) remains below historical levels. In 2007 and 2008, passenger traffic from Juneau to Skagway averaged just under 14,200, about 1,300 more than the 2013 volume of 12,850 passengers.
- Skagway-Juneau passenger traffic was also up in 2013 from 2012 (up about 4 percent), but still well below 2007-2008. The 2013 total of 13,161 passengers was about 15 percent below the 2007-2008 average of about 15,510.
- The increase in Lynn Canal traffic between 2012 and 2013 is no doubt related to the increase in service frequency. There were 291 voyages from Haines to Skagway and 292 voyages from Skagway to Haines, both 7 percent above 2012.
- The number of Juneau-Haines and Haines-Juneau voyages was up 9 percent between 2012 and 2013.

Table 10. AMHS Lynn Canal Fares, 1999 to 2013

	Haines to	Skagway	Haines	to Juneau	Skagway t	to Juneau
	Skagway	to Haines	Juneau	to Haines	Juneau to	Skagway
Year	Adult	Car (19')	Adult	Car (19')	Adult	Car (19')
Summer 1999	17	31	24	57	32	78
October 1999-April 2000	17	31	24	57	32	78
Summer 2000	17	31	24	57	32	78
October 2000-April 2001	17	31	24	57	32	78
Summer 2001	19	33	26	60	35	82
October 2001-April 2002	18	32	24	58	32	79
Summer 2002	20	34	26	61	35	83
October 2002-April 2003	20	34	26	61	35	83
Summer 2003	21	34	27	61	37	83
October 2003-April 2004	25	39	31	67	40	89
Summer 2004	26	39	32	68	42	90
October 2004-April 2005	25	40	31	70	41	92
Summer 2005	27	43	33	75	44	98
October 2005-April 2006	27	43	33	75	44	98
Summer 2006	30	47	38	83	48	108
October 2006-April 2007	30	47	38	83	48	108
Summer 2007	30	47	38	83	48	108
October 2007-April 2008	31	49	37	86	50	111
Summer 2008	31	49	37	86	50	111
October 2008-April 2009	31	49	37	86	50	111
Summer 2009	31	49	37	86	50	111
October 2009-April 2010	31	49	37	86	50	111
Summer 2010	31	49	37	86	50	111
October 2010-April 2011	31	49	37	86	50	111
Summer 2011	31	49	37	86	50	111
October 2011-April 2012	31	49	37	86	50	111
Summer 2012	31	49	37	86	50	111
October 2012-April 2013	31	49	37	86	50	111
Summer 2013	31	49	37	86	50	111

Table 11. AMHS Lynn Canal Traffic, Full Year 2000 – 2013

	<u>Haines to</u>	<u>Skagway</u>	Skagway to Haines		Juneau to	<u> Haines</u>
Year	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles
2000	10,431	4,406	8,858	3,724	22,352	6,867
2001	8,690	3,747	6,813	2,894	18,112	5,809
2002	9,249	3,970	7,491	3,302	21,031	6,530
2003	9,213	3,985	7,530	3,306	19,617	6,243
2004	7,454	3,354	6,195	2,719	19,946	5,910
2005	6,688	2,983	5,456	2,329	19,632	5,773
2006	5,708	2,608	4,306	1,934	19,008	5,915
2007	5,637	2,606	4,617	2,061	21,441	6,525
2008	7,449	3,251	6,310	2,786	22,391	7,292
2009	7,390	3,324	6,525	2,841	19,509	6,519
2010	7,545	3,347	6,832	2,998	21,126	6,619
2011	7,137	3,277	6,493	2,844	21,671	6,959
2012	8,160	3,612	6,755	2,912	21,677	7,200
2013	8,506	3,702	7,359	3,040	21,686	7,255

	<u>Haines to</u>	<u>Juneau</u>	Skagway to Juneau		Juneau to	<u>Skagway</u>
Year	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles
2000	22,442	6,377	19,274	4,181	19,322	4,119
2001	18,170	5,571	14,772	3,110	14,652	3,154
2002	20,555	6,046	17,409	3,659	17,559	3,661
2003	18,758	5,941	15,952	3,466	15,783	3,556
2004	19,249	5,632	15,995	3,371	15,945	3,521
2005	19,105	5,414	14,758	3,105	14,323	3,148
2006	18,780	5,696	13,300	2,895	12,921	3,049
2007	20,874	6,321	15,377	3,424	14,163	3,275
2008	21,994	7,005	15,642	3,657	14,182	3,442
2009	19,963	6,723	13,580	3,294	13,583	3,478
2010	21,399	1,887	12,978	3,142	12,537	3,177
2011	21,957	7,202	12,190	2,908	11,584	2,917
2012	21,817	7,107	12,664	3,272	12,235	3,314
2013	22,021	7,399	13,161	3,275	12,850	3,283

Table 12. AMHS Lynn Canal Traffic, Summer 2000 – 2013

	<u>Haines to</u>	<u>Skagway</u>	Skagway to Haines		<u>Juneau to</u>	<u> Haines</u>
Year	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles
2000	9,118	3,933	7,735	3,276	15,136	4,556
2001	7,441	3,286	5,784	2,515	11,467	3,590
2002	8,003	3,476	6,472	2,927	13,605	4,124
2003	7,996	3,475	6,657	2,946	12,734	3,990
2004	6,298	2,862	5,359	2,367	13,066	3,656
2005	5,775	2,584	4,635	2,012	12,893	3,642
2006	5,231	2,403	3,881	1,775	14,946	4,597
2007	4,198	2,051	3,884	1,762	13,189	3,960
2008	5,738	2,555	5,190	2,326	14,169	4,460
2009	5,994	2,800	5,022	2,296	11,983	3,960
2010	6,295	2,830	5,580	2,503	12,949	4,018
2011	6,046	2,816	5,593	2,472	13,758	4,359
2012	6,911	3,035	5,808	2,471	13,271	4,397
2013	7,201	3,192	6,302	2,632	12,970	4,265

	<u>Haines to</u>	<u>Juneau</u>	Skagway to Juneau		<u>Juneau to</u>	<u>Skagway</u>
Year	Passengers	Vehicles	Passengers	Vehicles	Passengers	Vehicles
2000	14,473	3,941	15,976	3,104	16,275	3,126
2001	11,219	3,302	11,408	2,173	11,664	2,294
2002	12,627	3,671	13,702	2,610	14,271	2,687
2003	11,544	3,621	12,388	2,460	12,576	2,592
2004	12,191	3,426	12,899	2,494	12,989	2,641
2005	12,073	3,642	11,621	3,642	11,582	2,318
2006	14,678	4,436	11,377	2,320	10,954	2,430
2007	na	3,763	11,505	2,341	11,100	2,387
2008	13,891	4,322	11,150	2,336	10,187	2,283
2009	12,196	4,119	9,358	2,135	9,198	2,216
2010	12,898	4,189	9,453	2,135	8,909	2,110
2011	13,861	4,452	9,360	2,070	8,809	2,136
2012	12,877	4,247	9,204	2,215	8,829	2,341
2013	13,102	4,289	9,451	2,219	9,078	2,169

Table 13. AMHS Annual Number of Trips, 2000 – 2013

Year	Haines to Skagway	Skagway to Haines	Juneau to Haines	Haines to Juneau	Skagway to Juneau	Juneau to Skagway
2000	305	305	309	308	-	-
2001	278	281	281	284	1	4
2002	315	318	320	323	1	3
2003	317	319	321	324	1	3
2004	254	251	332	329	58	56
2005	253	250	341	338	64	63
2006	260	264	348	352	47	49
2007	180	159	348	327	107	86
2008	278	263	352	337	55	38
2009	254	275	295	317	22	45
2010	261	267	304	310	18	25
2011	303	304	336	338	6	8
2012	272	273	294	295	2	2
2013	291	292	321	321	2	2



Memo

Federal Project No: STP-000S(131) AKSAS Project No. 71100

To:	File	
From:	Laurie Cummings/Terri Morrell	Project: Juneau Access Improvements SEIS
CC:		Subject: Alternatives – Ferry Fares
Date:	August 30, 2012	Job No:

Background

The fares for the alternatives being studied in the SEIS were established based on direction given from Reuben Yost on August 17 and 24, 2012:

- The No Action fare is to be consistent with current AHMS Rates.
- The fares for Alternatives 2B and 3 should be calculated by inflating the 2004 fares reported in the FEIS relative to 2012 fares.
- The fare for Alternatives 4A and 4C should match the No Action because they have the same origin/destination points.
- The fares for Alternatives 4B and 4D should be the same. The rates will be based on the Alternative 1A fares but prorated based on distance.
- As in the *Proposed Marine Segments Fare Structures* (*Fare*) report, vehicle fares are rounded to the nearest dollar; passenger fares are rounded to the nearest half dollar.

Yost found the Summer 2004 fare sheet from the published AMHS schedule, which was used as the basis for the fares published in the 2006 FEIS. The fares were as follows:

- Adult Passengers (12 years and over)
 - o Auke Bay to Haines \$32.00
 - o Auke Bay to Skagway \$42.00
- Children (2–11 years) are ½ the adult passenger fare with children under 2 traveling for free
- Vehicles (15 feet to 19 feet long)
 - o Auke Bay to Haines \$68.00
 - Auke Bay to Skagway \$90.00

The AMHS Summer 2012 through April 2013 fares published on the AMHS website are as follows:

- Adult passengers (12 years and over)
 - Auke Bay to Haines \$37.00 (a 15.6 percent increase from the 2004 fare)
 - o Auke Bay to Skagway \$50.00 (a 19.0 percent increase from the 2004 fare)
- Children under 6 travel free. Children 6–11 years approximately ½ adult fare
- Vehicles (15 feet to 19 feet long)
 - O Auke Bay to Haines \$86.00 (a 26.5 percent increase from the 2004 fare)
 - O Auke Bay to Skagway \$111.00 (a 23.3 percent increase from the 2004 fare)

Phone (907) 644-2000

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Alternative 1A

This alternative is the No Action Alternative. For this SEIS, the 2012–2013 fares published by AMHS will be used. See Table 1 below.

Alternative 1B

Fares to be determined.

Alternative 2B

This alternative starts ferry service from Katzehin. For this SEIS, the 2004 fares published in the *Fare* report, which were \$12 for vehicles and \$4 for adult passengers going from Katzehin to Haines, were increased by the average of the AMHS fare increases from 2004 to 2012: 24.9 percent (average of 26.5 and 23.3 percent) and 17.3 percent (average of 15.6 and 19.0 percent) respectively. This resulted in 2012 values of \$14.98 for vehicles and \$4.69 for adult passengers, which were rounded to fares of \$15.00 and \$4.50 respectively. For trips from Katzehin to Skagway, 2004 fares of \$19.00 for vehicles and \$7.00 for adult passengers were increased by these same percentages. This resulted in 2012 values of \$23.73 and \$8.21 which were rounded to fares of \$24.00 and \$8.00 respectively. See Table 1 below.

Alternative 3

This alternative moves all traffic on shuttles between Sawmill Cove and William Henry Bay. The *Fare* report had published fares of \$16 for vehicles and \$6 for adult passengers. The average of the fare increases from 2004 to 2012 was 24.9 percent for vehicles and 17.3 percent for adult passengers. These percent increases were applied to fares reported in the 2006 FEIS and resulted in values of \$19.98 for vehicles and \$7.04 for adult passengers. These values were rounded to fares of \$20.00 and \$7.00 respectively.

This alternative relies on a shuttle to provide the connection between Haines and Skagway. The 2006 FEIS fares for the shuttle were \$18.00 for vehicles and \$6.50 for adult passengers. These fares were also increased by the above percentages. This resulted in 2012 values of \$22.48 and \$7.62, which were rounded to fares of \$22.00 and \$7.50 respectively. See Table 1 below.

Alternative 4A

This alternative has the same origins/destinations as the No Action Alternative. For purposes of this SEIS, the 2012–2013 fares published by AMHS will be used. See Table 1 below.

Alternative 4B

This alternative starts ferry service at Sawmill Cove with service to Haines (45 miles) and to Skagway (60 miles) (mileage taken from *Fare* report Table 1a). The mileage for Alternative 1A (78 miles from Auke Bay to Haines and 93 miles from Auke Bay to Skagway) was compared to the mileage from Sawmill Cove for each town. The 4B mileage to Haines is 57.7 percent of the 1A mileage. The 4B mileage to Skagway is 64.5 percent of the 1A mileage. These percentages were then applied to the 2012 fares for Alternative 1A for vehicles and passengers. For Sawmill Cove to Haines, this resulted in 2012 values of \$49.62 for vehicles and \$21.39 for adult passengers, which were rounded to fares of \$50.00 and \$21.50 respectively. For Sawmill Cove to Skagway, 2012 values were \$71.60 for vehicles and \$32.25 for adult passengers, which were rounded to fares of \$72.00 and \$32.00¹ respectively. See Table 1 below.

Alternative 4C

This alternative has the same origins/destinations as the No Action Alternative. For purposes of this SEIS, the 2012–2013 fares published by AMHS are used. See Table 1 below.

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¹ The value of \$32.25 was rounded down to \$32.00 following the round-to-even rule.

Alternative 4D

This alternative starts ferry service at Sawmill Cove with service to Haines (45 miles) and to Skagway (60 miles) (mileage taken from *Fare* report Table 1a). The mileage for Alternative 1A (78 miles from Auke Bay to Haines and 93 miles from Auke Bay to Skagway) was compared to the mileage from Sawmill Cove for each town. The 4D mileage to Haines is 57.7 percent of the 1A mileage. The 4D mileage to Skagway is 64.5 percent of the 1A mileage. These percentages were then applied to the 2012 fares for Alternative 1A for vehicles and passengers. For Sawmill Cove to Haines, this resulted in 2012 values of \$49.62 for vehicles and \$21.39 for adult passengers, which were rounded to \$50 and \$21.50 respectively. For Sawmill Cove to Skagway, 2012 values were \$71.60 for vehicles and \$32.25 for adult passengers, which were rounded to fares of \$72.00 and \$32.00 respectively. See Table 1 below.

Haines/Skagway Shuttle for Alternatives other than 3

All of the build alternatives in the SEIS have a new shuttle to provide a link between Haines and Skagway. Except for Alternative 3, this shuttle is only to accommodate Haines/Skagway traffic independent of traffic to/from Juneau. Although this link is provided for different traffic volumes and purposes in different alternatives, the same fares are proposed. Therefore the Haines-Skagway fares for all build alternatives are calculated as explained above for Alternative 3. Alternatives 1A and 1B rely on existing vessels that travel the entire length of Lynn Canal to provide a Haines-Skagway link and therefore the Haines-Skagway fares for these alternatives are based on the current published AMHS fares.

Table 1: Summary of 2012 Proposed Lynn Canal Ferry Fares for Each Alternative

Alternative	From	То	Miles	2012 Vehicle Fare \$ (15 to 19 feet long)	2012 Adult Passenger Fare \$
1A	Auke Bay	Haines	78	86.00	37.00
IA	Auke Bay	Skagway	93	111	50.00
1B	Auke Bay	Haines	78	TBD	TBD
18	Auke Bay	Skagway	93	TBD	TBD
2B	Katzehin	Haines	7	15.00	4.50
28	Katzehin	Skagway	16	24.00	8.00
3	Sawmill Cove	William Henry Bay	13	20.00	7.00
4A	Auke Bay	Haines	78	86.00	37.00
4A	Auke Bay	Skagway	93	111.00	50.00
4B	Sawmill Cove	Haines	45	50.00	21.50
4D	Sawmill Cove	Skagway	60	72.00	32.00
4C	Auke Bay	Haines	78	86.00	37.00
40	Auke Bay	Skagway	93	111.00	50.00
4D	Sawmill Cove	Haines	45	50.00	21.50
40	Sawmill Cove	Skagway	60	72.00	32.00
Haines- Skagway Shuttle			15	22.00	7.50
Haines/ Skagway Mainliner			15	49.00	31.00



Department of Transportation and Public Facilities

SOUTH COAST REGION
PRECONSTRUCTION
DESIGN & ENGINEERING SERVICES

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July 9, 2018

Monica Carlson Municipality of Skagway P.O. Box 415 Skagway, Alaska 99840

Dear Ms. Carlson:

Thank you for your letter, dated November 1, 2014, with your comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Municipality of Skagway in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

Sincerely.

Southcoast Region

Preliminary Design and Environmental Group Chief

Enclosures:

Responses to Municipality of Skagway Comments on the JAI Project Draft SEIS (November 1, 2014)

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager



Municipality of Skagway

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Thank you for the opportunity to comment on the Draft Supplemental Environmental Impact Statement (DSEIS) on the Juneau Access Improvements Project. This project has the potential to profoundly affect the future of Lynn Canal communities. The following comments cover a range of alternatives and address a variety of issues related to those alternatives. They are intended to provide direction to the Alaska Department of Transportation and Public Facilities (AKDOT) in developing more meaningful analysis of issues which will have direct impacts on the community of Skagway. We are including for the record the North Lynn Canal Ferry Service Analysis prepared for the Municipality of Skagway in June 2014 by McDowell Group. This report documents the high volume of traffic that historically has been generated between the communities of Skagway, Haines and Juneau. The report also discusses fare inequities in the AMHS system which highlights the need for a consistent AMHS fare structure methodology.

Economic Impacts

The plan is named Juneau Access Improvements Project (JAIP) and in this sense it is Juneau-centric in its conception and its execution. The emphasis is on improving access from Juneau to Haines and Juneau to Skagway. There is very little written in the document about the vital transportation link that exists between Haines and Skagway. Historically, this connection between the two communities has carried a disproportionately large amount of traffic compared to other segments of the Marine Highway around the state.

RESPONSE: DOT&PF and FHWA have identified the No Action Alternative as the preferred alternative in the Final Supplemental Environmental Impact Statement (SEIS). The purpose and need statement for the project is to improve surface transportation to and from Juneau in Lynn Canal. The Department of Transportation and Public Facilities (DOT&PF) and Federal Highway Administration (FHWA) have updated the data in Chapter 1 of the Draft SEIS since 2006 and have reconfirmed the project purpose and need. Because Juneau is a regional hub, with a substantial population and employment base, the demand for travel in and out of Juneau has been identified as driving the primary needs of the project. The purpose and need chapter documents legitimate transportation problems with the current system. The ferry connection between Haines and Skagway is affected by some of the alternatives, resulting in changes to vessels or schedules on that link. These changes are described in Chapter 2 and Chapter 4 of the SEIS. In general, alternatives evaluated in the SEIS replace or maintain the existing ferry link

between Haines and Skagway, continuing its operation in the same manner as it currently functions.

1. The highly popular Golden Circle Tour is a mainstay of summer tourism for Skagway, Haines, Haines Junction and Whitehorse. These communities have promoted this tour successfully for two decades. It has been the policy of our Municipality to support and encourage visitation by the independent traveler as a counter balance to total reliance on cruise ship traffic. Traditionally the independent traveler spends more money per capita than other visitors. Any proposal that would disconnect or bottleneck this important economic connection could harm this important market.

RESPONSE: DOT&PF and FHWA did not anticipate that the project would have impacted people's ability to complete the "Golden Circle Tour." None of the alternatives would have disconnected or been a bottleneck for the ferry connection between Haines and Skagway. Under Alternative 2B, a new Haines-Skagway shuttle ferry would have made two round trips between the communities daily. This ferry design was sized to accommodate 18 vehicles, providing the ability to transport 72 vehicles per day. According to the traffic forecasted for this link, the summer average daily traffic (ADT) would have been 53, providing sufficient ferry capacity for people who want to travel between Haines and Skagway.

As discussed in the Draft and Final SEIS, all the build project alternatives were projected to increase independent tourist visits to Lynn Canal communities, with Alternatives 2B and 3 projected to result in the largest increase in independent tourist visits (see Sections 4.3.5 and 4.4.5 of the Final SEIS).

2. Insufficient capacity of the small Skagway/Haines shuttle ferry. Under Alternatives 2B, 4A, 4B, 4C and 4D the Skagway-Haines link would be serviced by a small shuttle ferry modeled after the *Lituya*. The *Lituya* features an open car deck design and is the smallest vessel in the Alaska Marine Highway System. It serves the 16.5 nautical-mile distance between Metlakatla and Ketchikan, a route which historically has carried less volume of passengers and vehicles than the Skagway/Haines route. The design for the small shuttle ferry planned for the Skagway/Haines route calls for a carrying capacity of 18 Alaska standard vehicles (ASV). However, rule of thumb on the Marine Highway states that the average RV requires twice the deck space as a car or pickup truck. Therefore, if the shuttle were loaded with only RVs, the maximum the shuttle could carry would be nine RVs on any given trip between Haines and Skagway. The shuttle is scheduled to sail twice a day thereby creating opportunity for 36 ASVs or 18 RVs to move from Skagway to Haines each day. Size, weight and capacity restrictions could impact independent bus traffic moving between communities.

Based on historic patterns of traffic between our communities, the Municipality questions the ability of this shuttle to provide adequate capacity. The reasoning for designing a vessel with such limited capacity is not explained in the EIS. We note that in association with Alternative 3 (West Side Road) larger shuttle designs have been

considered. We further note that under Alternative 2B, the small shuttle is taken out of service in winter and there is no direct connection between Skagway and Haines.

RESPONSE: The sizing of the Haines-Skagway shuttle ferry is addressed in Chapter 4 and Attachment C of the Revised Appendix GG, *Marine Segments Technical Report*. As stated above, the design of the vessel serving the Haines-Skagway link was sized to meet the demand for travel on that link. The demand estimate for this link was prepared by the McDowell Group, the same firm that prepared the *North Lynn Canal Ferry Service Analysis* cited in the opening paragraph of this letter.

Under Alternatives 4A, 4B, 4C, and 4D, the mainliners would have continued to sail twice per week in summer and once per week in winter, providing additional capacity between Haines and Skagway. If there had been sufficient demand, the Alaska Marine Highway System (AMHS) could have increased the number of sailings between Haines and Skagway to provide additional capacity.

The Alternative 3 Haines-Skagway shuttle ferry was sized to account for Juneau-Skagway traffic in addition to the Haines-Skagway traffic only.

During winter, under Alternative 2B, only two of the three vessels would have operated at any one time due to 1) reduced traffic demand and 2) the need to perform annual maintenance. Each winter, each of the three vessels would have been serviced, one at a time, while the remaining two continued to operate. Even with two vessels operational in winter, there would have been multiple trips per day between Haines and Skagway under Alternative 2B, versus the few trips per week currently provided.

3. Traffic forecasts for the Haines/Skagway link are conspicuously absent. The DSEIS offers expansive analysis on traffic forecasts for the Juneau/Haines and Juneau/Skagway segments. However it treats the Haines/Skagway link as totally separate from Juneau Access and offers no analysis of traffic demand between the communities. It merely states that the demand between Haines and Skagway will be 53 ASV per day but the document is silent on how this number is arrived at. We believe that capacity engineered to this demand number would be insufficient to handle future growth and peaks in current demand such as week-end, special events and holidays.

RESPONSE: The ferry connection between Haines and Skagway was not identified as a direct component of the alternatives for improving access to and from Juneau in Lynn Canal. The traffic forecast for the Haines-Skagway link is in the *Juneau Access Haines/Skagway Traffic Forecast*, dated November 2012 (prepared by The McDowell Group). This report was not appended to the Draft SEIS because the Haines-Skagway link is not directly part of the alternatives being evaluated. Based in part on your comment, the revised *Juneau Access Haines/Skagway Traffic Forecast*, dated December 2016, has been included as an attachment to Revised Appendix AA, *Traffic Forecast Report* in the Final SEIS. As stated above, the ferry vessel serving the Haines-Skagway link would have been sized to accommodate the forecast demand. If more demand had developed than forecasted between Haines and Skagway, the presence of a dedicated Haines-Skagway

shuttle would have allowed AMHS to increase the number of sailings between these communities to provide additional capacity.

4. Additional costs and inconvenience to foot passengers. traveling between communities without a vehicle has been an ongoing concern for the Municipality. Many of our residents, particularly seniors and school children, travel to Juneau without a vehicle. The Alaska Marine Highway System Marketing and Pricing Study conducted by the McDowell Group in 2000 estimated the number of foot passengers to be 45% of the total passengers. The potential costs to these passengers go unreported in the document. Conservative estimates of the costs for a person traveling without a vehicle between Katzehin and Auke Bay range from \$50 (van/bus) to \$180 (taxi). The draft EIS should provide more detail than merely stating it is "assumed a commercial system will be created." The additional costs to these users, whether bus or a taxi should be factored into the User Cost/Benefit Analysis. Or, the cost to the state should be reported if the state assumes the responsibility for transferring travelers between Auke Bay and Katzehin. Either way, the costs of transport between Katzehin and Auke Bay for travelers without a vehicle are real and should be identified.

RESPONSE: The Draft SEIS does describe the user costs for walk-on passengers. The road alternatives (2B and 3) represent a shift in the way transportation would have been provided in the corridor—away from a primarily public transportation mode that operated more like a public transit service, to a highway system where private vehicles provided most of the transportation (publicly-owned shuttle ferries would have provided shorter links connecting the roadways). DOT&PF and FHWA recognized that this shift would have affected walk-on passengers. Sections 4.3.7.5 and 4.4.7.5 of the Draft SEIS described impacts to "Pedestrians and Bicyclists" for Alternatives 2B and 3, including walk-on passengers. The information included estimates of how many walk-on passengers might have been affected and how they would have been affected, including the anticipated changes in fares. Walk-on passengers are currently able to ride on a subsidized ferry for a long portion of the trip, and under Alternative 2B or 3 they would have needed to drive, use commercial transportation, or ride with another driver, which would have increased their total out of pocket cost.

Sections 4.3.7.5 and 4.4.7.5 of the Draft and Final SEIS indicate that under Alternative 2B, the cost would have ultimately depended on the size of the market but would have likely been in the range of \$42 to \$60 one-way between Juneau and Haines or Skagway based on the projected shuttle fares and rates on similar existing bus services. This would have placed the cost in the same range as the current AMHS adult passenger fares for the Juneau-Skagway and Juneau-Haines ferry links. The out of pocket user cost of travel to/from Juneau for a passenger with a car under Alternatives 2B and 3 would have been lower than the cost for a walk-on passenger under Alternative 1 – No Action, and it would have been more convenient to have a car to travel between Juneau and Katzehin. The anticipated fares for those choosing to walk-on or those who could not afford a vehicle have been updated and disclosed in the Final SEIS.

Based on AMHS information, DOT&PF believes the current percentage of walk on passengers to be closer to 30 percent as the ratio of passengers versus vehicles has declined over the past 15

years. Under Alternative 2B, a substantial segment of current walk-on traffic would have been expected to convert to personal vehicle travel. Given the distances along the road to access the Katzehin, William Henry Bay, and Sawmill Cove Ferry Terminals, walk-on traffic would not have found it nearly as convenient to access the ferries. It was assumed that the percentage of walk-on passengers would not exceed Alternative 1 – No Action volumes, and would likely have been lower, given the inconvenience and the reduced cost for vehicle travel.

Additional information regarding the impact of Alternative 2B to student transportation has been added to Section 4.3.5.2 of the Final SEIS, and to Section 4.4.5.2 where Alternative 3 would have had corresponding effects. The cost of transporting students from Haines or Skagway to Juneau would have depended on a variety of factors, including the number of students and the need to overnight away from home. The opportunity for students to travel between the communities may have increased due to reduced costs and the increased ability to make the trip within the same day.

Appendix FF (*User Benefit, Life-cycle Cost, and Total Life Cost Analyses*) of the Draft SEIS described in detail all the traveler costs included in the economic analysis, including travel time, fuel, vehicle maintenance, accident costs, insurance, etc. It is important to recognize that the travel cost figures used in the *User Benefit Analysis* are averages intended to represent a broad range of individual cost scenarios, ranging from the individual sharing personal vehicle expenses with three or four other travelers to the solo traveler who might have to hire some form of ground transportation to make a trip between Haines and Juneau. It is not possible to know with any degree of certainty how many travelers would have fallen into these and other categories of travelers. Because it is not possible to credibly predict the number of travelers who might have been seeking commercial transportation services to and from ferry terminals under various Juneau Access Improvements (JAI) Project alternatives, it is not specifically possible to predict the cost of such services.

The Draft SEIS provided an example for purposes of illustrating user cost. It was not meant to illustrate every possible scenario of vehicle type, number of occupants, or walk-on users. DOT&PF and FHWA recognize that there would have been cost implications due to changes in travel patterns like those mentioned in the comments, including costs to individuals traveling to Juneau to access the airport using Alternatives 2B or 3, costs to those travelers who may have used the existing ferry like a bus rather than as a highway, and cost savings for travelers coming or going beyond Haines or Skagway who did not wish to spend the night in a hotel (due to border closure or ferry schedule). Based on this comment, additional information has been added to Sections 4.3.7.5 and 4.4.7.5 (Other Transportation Impacts, under the Pedestrians and Cyclists subheading), as well as parallel subsections under the other alternatives, of the Final SEIS.

5. North Lynn Canal Ticket Prices. In letters to the Federal Highway Administration (FHWA), the Municipality has raised the issue of the unusually high cost of travel in Lynn Canal. Per-mile passenger and vehicle fares for the 13-mile Haines-Skagway route remain the highest in the Southeast System.

It is difficult to determine from the DSEIS the actual cost of a ticket from Skagway to Page **5** of **14**

Haines. Prices vary depending on which alternative is being considered, which source document you are reading and/or which vessel you are sailing on. For example, the 2012 HDR Ferry Fares Memo referenced in Appendix A of the Traffic Forecast Report indicates that for all alternatives other than Alternative 3, a ticket from Skagway to Haines will cost \$22.00/vehicle and \$7.50/passenger on the small shuttle. However, if you board a mainliner to travel to Haines it will cost you \$49.00/vehicle and \$31.00/passenger. Table A-22 of Appendix FF (User Benefit, Life Cycle Cost and Total Project Cost Report) presents a different pricing scenario.

RESPONSE: The fares for the direct Haines-Skagway shuttle ferry were anticipated to be the same for each alternative, except that under Alternative 1B they would have been lowered by 20 percent (it is for this reason that Table A-22 in Appendix FF (*User Benefit, Life-cycle Cost, and Total Life Cost Analyses* of the Draft SEIS) reports different fares for Alternative 1B). As you report, the fares for the Haines-Skagway shuttle were anticipated to be \$22.00/vehicle and \$7.50/passenger in the Draft SEIS. In winter, under Alternative 2B, there would have been no direct shuttle service between Haines and Skagway. This would have required travel to occur via Katzehin using the two Alternative 2B shuttles, which would have increased the cost of that trip (as reported Table A-22 of Appendix FF of the Draft SEIS).

The HDR Fare Memo (attached to Revised Appendix AA, *Traffic Forecast Report*) does not indicate that the fares would have been different for Alternative 3. The memo indicates (as was explained above) that the Haines-Skagway shuttle would have accommodated traffic between Haines and Skagway. That travel demand would have been independent from the traffic associated with the build alternatives to and from Juneau. The exception to this is under Alternative 3, which would have relied on the Haines-Skagway shuttle as part of the proposed alternative.

The fares have been updated for the Final SEIS, and a revised Fare Memo is attached to Revised Appendix AA, *Traffic Forecast Report*.

To add to the confusion the Municipality has received correspondence from FHWA (August 20, 2014, letter from Division Director Garcia-Aline) which states "With regards to your specific concerns about the current fare for the Haines-Skagway ferry link, the Draft SEIS will provide the predicted fare for this link based on the current statewide fare structure, but it is my understanding that in all scenarios the fare would be reduced from the current price." To further add to the confusion, we were told by Deputy Commissioner Reuben Yost at AKDOT's public hearing in Skagway on October 23, 2014, that most likely the price for the Skagway/Haines link would not be reduced but the prices for other routes elsewhere in the region would be raised to be compatible with the prices that have been charged historically in Northern Lynn Canal.

RESPONSE: Transportation problems on the Haines-Skagway link (to the extent there are any) are independent from the problems to and from Juneau in Lynn Canal being addressed in this SEIS. Decisions made regarding pricing for that link are made outside of this SEIS. The communications with the FHWA and DOT&PF that you refer to appear to be related to the AMHS Tariff Analysis.

The fare study examined AMHS tariff rates and tariff rates for similar ferry systems, looking at changes in fares made since the previous rate study was completed in 2008. It also looked for anomalies on routes of similar length within the AMHS system. As a result of the 2015 Rate Study, AMHS implemented a variable leveling tariff increase on all routes.

The following table looks only at rates relevant to marine segments in the Preferred Alternative (2B) and shows how different the two pricing scenarios are:

Routes less than 20 miles	2014 DSEIS Pricing	2014 AMHS fare structure
Skagway/Haines	\$22.00/vehicle	\$49.00/vehicle
15 miles	7.50 pax	\$31.00/pax
Skagway/Katzehin	\$24.00/vehicle	\$52.00/vehicle
16 miles	8.00/pax	\$33.00/pax

Assumptions: Using mileage provided in Table 1 of the HDR Ferry Fares memo referenced in Appendix A of the Traffic Forecast Report (2014 DSEIS.) Yellow highlights indicate fares prorated for distance (there is lack of consistency with regard to route distances throughout the source documents.)

Recalculating the price of a ticket from Skagway to Katzehin to reflect the current AMHS fares makes a dramatic illustration of how drastically the price of ticket from Skagway to Katzehin would change: for the proverbial family of four, the price balloons from \$52 to \$168.

RESPONSE: For Alternatives 1 – No Action (preferred), 4A, and 4C, the fares were based on 2012-2013 AMHS rates included in the Draft SEIS. For new routes that were shortened versions of existing AMHS routes, the AMHS fares were prorated by distance traveled. Alternative 1B fares were a 20 percent reduction of the Alternative 1 – No Action fares. For new routes less than 20 miles long (Alternatives 2B and 3), ferry fares were based on a flat fee to board the vessel and a cost per mile for the transit for both passengers and vehicles. These fares were lower than the existing AMHS fares due to efficiencies generated from using ferries designed as Day Boats with drive through loading and unloading, no reservation system expense, and the projected higher traffic volumes generated by frequent regularly scheduled service. Fares were commensurate with similarly operated ferry systems in other locations.

A memo documenting how the fares were developed has been added as an appendix to Revised Appendix AA, *Traffic Forecast Report*, in the Final SEIS.

In 2013, the AMHS contracted with Northern Economics to conduct a fare equalization study to develop a "fair and equitable tariff structure." The Municipality has requested on numerous occasions that the results of the AMHS fare equalization study be included in the Juneau Access EIS. The fare adjustments that will be made as a result of the study will have a direct effect on the ticket prices for ferries operating in Lynn Canal. The AMHS Fare Study is an important tool for evaluating user costs and benefits and should be included in the EIS. Without knowing what the fares will be

for Skagway routes or the methodology behind them, it is impossible to determine which alternatives will most benefit the residents of our community.

RESPONSE: The AMHS Tariff Analysis was completed in January 2015 and was made publicly available on the AMHS website. The fare study examined AMHS tariff rates and tariff rates for similar ferry systems, and looked at changes in fares made since the previous rate study was completed in 2008. It also looked for anomalies on routes of similar length within the AMHS. It considered the development and implementation of a change in tariff policy with the goal of creating a fair and equitable tariff structure. DOT&PF and FHWA have determined that the results of the study do not have an impact on the JAI Project.

Skagway Ferry Float

The floating dock associated with the Skagway Ferry Terminal is an example of critical transportation infrastructure that needs to be refurbished and/or replaced. Ownership and use of the float is shared between the Municipality of Skagway and the State of Alaska and serves an important economic function for the community as well as the Alaska Marine Highway System. Small cruise ships, large fishing vessels, yachts and tugboats utilize this dock on a regular basis. It also serves as an emergency dock for Alaska Marine Lines and Petro Marine. It is imperative that any design changes to that dock be coordinated with the Municipality to ensure that they are compatible with the Municipality's uses.

RESPONSE: FHWA has selected Alternative 1-No Action as the preferred alternative for the JAI Project in the Final SEIS/Record of Decision (ROD). If a build alternative had been selected that required modifications to the Skagway Ferry Float, DOT&PF would have coordinated those changes to the ferry float with the Municipality of Skagway during the design phase of JAI Project development.

Safety

Safety is one of Skagway's top priorities. The following safety issues should be addressed in the EIS with regard to the preferred alternative:

1. How will Homeland Security be handled at the "unmanned" Katzehin ferry terminal? What part of the responsibility for emergency services will fall to local municipalities?

RESPONSE: The operation of the proposed Katzehin Ferry Terminal would not have required staffing. Homeland Security and the U.S. Coast Guard do not require a separate security plan for unmanned terminals. The security for unmanned terminals is covered by the individual vessel security plans that are approved by the U.S. Coast Guard. Receiving approval for vessel security plans for vessels servicing Haines, Skagway, and Katzehin is not anticipated to be an issue. AMHS currently has several unmanned terminals in service.

Statewide, the Alaska State Troopers are responsible for general policing, patrols, and emergency

response along rural roads, particularly outside of the areas associated with individual local governments. Alternative 2B falls partially in the City and Borough of Juneau (CBJ; approximately 30 road miles north of Echo Cove to Eldred Rock) and partially in the Haines Borough (from Eldred Rock northward). Within the CBJ, the Juneau Police Department (JPD) would be responsible for the primary response. The Alaska State Troopers based in Juneau would have provided the primary response for the segment of road north of the CBJ boundary. The Alternative 3 road on the west side of Lynn Canal lies within the Haines Borough. Under Alternative 3, the primary response would have come from State Troopers based in Haines.

The SEIS indicates it is likely that emergency medical response would have come from these communities. In the Draft and Final SEIS, Section 3.1.4 and corresponding Socioeconomic Resources sections in Chapter 4 for each alternative provide basic information about services provided at each community and disclose the potential impacts to the service providers of having more road miles and more traffic within their areas of responsibility. See also Section 3.3 of Revised Appendix EE, *Socioeconomic Effects Technical Report*. Fire protection outside local fire service areas (i.e., along these road routes) would have been provided by the Alaska Division of Forestry and Tongass National Forest. Haines, Skagway, and Juneau all have search and rescue capabilities either through separate organizations, through their fire/rescue departments, or both. Overall, providers of public safety would have remained the same as today under all alternatives. The text of the Final SEIS has been reviewed and clarifications made to ensure the information above is clearly represented.

The agencies with the most resources available (State Troopers, JPD, and Capital City Fire and Rescue [CCFR]) indicated that they are operating at minimal staffing levels given the extent of their current responsibilities and service areas. The SEIS and Revised Appendix EE disclose the potential that local agencies may have required further resources to continue providing the same level of service.

2. The EIS contains many studies on avalanche hazards. From our experience icing and freezing rain may be a bigger concern in this coastal corridor. Please include studies of how coastal freeze/thaw weather phenomenon affect roads and document the measures that will be taken to protect the safety of travelers.

RESPONSE: Impacts due to icing, freezing rain, icing on bridge decks, and wind conditions on the highway alternatives would have been no different than for any other road in Southeast Alaska. Alternative 2B would have included a new maintenance station that would have been staffed full time, which would have improved maintenance response times to address adverse weather conditions. The Draft SEIS acknowledged that adverse driving conditions would have occurred on the East Lynn Canal Highway in winter, but anticipated that State maintenance crews would have kept the highway open under all but the most severe conditions. Such severe weather conditions may have called for road closures. DOT&PF and FHWA have disclosed the impacts of potential road closures and have mitigated those effects to the extent that travel delays and closures would have been minimized. Service to and from Juneau during a road closure would have been provided by running a ferry in Lynn Canal. Therefore, even during road closures, the flexibility for travel under the proposed road alternatives would have been at least as good as the existing service.

3. People who fish north of the Katzehin River near the planned location of the terminal report high winds and large swells in this area. We have not found any reports or studies of sea conditions in this area. These should be included in the EIS.

RESPONSE: Multiple studies of wind and waves prepared by The Glosten Associates were used as data sources for the SEIS. These documents are available on the JAI Project website at www.juneauaccess.alaska.gov. Significant research was conducted on the wind and wave climatology in Lynn Canal, as seen in the "Lynn Canal Wind and Wave Climatology Study for Vessel Operations." This study is based on the results of software that uses historical wind and geographic data to forecast nearshore wave heights. The upper magnitude wind speeds (1 minute average) in the middle of Lynn Canal in the Haines/Katzehin vicinity can vary 30 to 68 knots, causing mid canal wave conditions that could potentially prevent ferry sailings. Based on the Glosten Associates' reports, these wind events can be expected to occur 1 to 5 percent of the time, primarily during the months of November through February. Assuming a period of 4 months or 120 days for the worst weather conditions, it can be assumed that 1 to 6 days per year may have been subject to weather conditions that could have prevented a ferry crossing. The projected number of sailings that would have been missed depends on the number of sailings per day and if the inclement weather would have occurred during those sailing times.

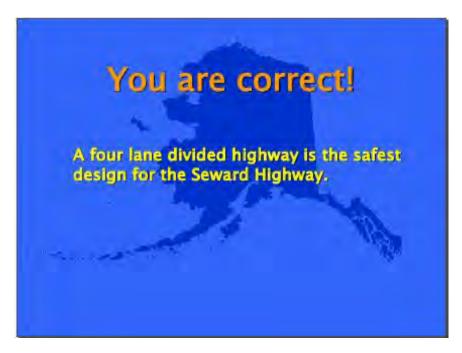
Current data for the north and south wind directions suggests relatively low wave height (under 2 feet) near the proposed Katzehin Ferry terminal, regardless of the magnitude of the wind event. The Katzehin Ferry Terminal would have been somewhat exposed to the westerly direction. There is no current data presented for the westerly direction. However, the fetch distance is short and wave heights would have been relatively low. While winds may have been strong, causing difficulty in birthing, the ferry mooring structures at the Katzehin and Haines Ferry Terminals would likely not have been significantly affected by wave and wind conditions from any direction. The ferry would have been able to safely weather storms at either port, assuming the moored vessel would have been properly safeguarded and monitored during extreme storm events.

Preliminary design for the Katzehin Ferry Terminal had a breakwater to the north and south of the terminal. The final design would have included consideration of prevailing wind and wave conditions. The use of this terminal would have been no more difficult than other ferry terminals in Lynn Canal.

4. Many lives have been lost on the Seward Highway, a road that shares similarities to the proposed Katzehin road. Since 2006, planners and residents at numerous public meetings have been calling for a divided highway as the best and most effective engineering enhancement on the Seward Highway. The DSEIS should analyze the cost/benefits of making the road to Katzehin a divided highway.

RESPONSE: A safety comparison with the Seward Highway is not valid, given the tremendous difference in forecasted traffic (655 ADT for East Lynn Canal Highway (Alternative 2B) versus 7,000 to 10,000 ADT on the Seward Highway). The Seward Highway had years of use with growing traffic before additional safety enhancements were installed. The East Lynn Canal Highway was

projected to have 10 times less traffic than the Seward Highway; the much lower traffic would have made for a statistically safer road. DOT&PF would have continually monitored the new road and made safety improvements if warranted. The level of safety upgrades planned for the Seward Highway were not anticipated to be needed for the JAI Project given the much lower traffic forecasted.



2nd slide from DOT&PF presentation: "Funding for the Engineering "E" Seward Highway Traffic Safety

Katzehin Terminal Logistics

Many residents have raised questions about the logistics of the unmanned Katzehin terminal. The DSEIS leaves many of those questions unanswered:

- Where will passengers purchase tickets?
- Who will be responsible for snow removal, lane assignments, propane inspections?
- Are the fast turnaround times realistic? Wait times for passengers seem overly optimistic. How will a "reservationless" system work?
- What amenities will be available for people arriving at the terminal such as bathrooms, electricity and shelter? Will there be telephone service?
- Who will check identification?

RESPONSE: The purpose of the JAI Project SEIS is to evaluate and disclose the proposed project's environmental impacts to meet the requirements of the National Environmental Policy Act (NEPA). Many operational and logistical details are not typically finalized until after an alternative is selected and design/construction moves forward. To the extent these operational details are known at this time (and relevant to understanding the impacts), they have been disclosed in the Draft and Final SEIS.

Responses to questions follow:

- Details of fare collection would have been determined during project design. It is possible
 fares would have been collected on board and possible fares would have been collected only
 in one direction.
- DOT&PF would have been responsible for the maintenance activities, including snow removal.
 Vehicle staging/lane assignment would have consisted of two choices (Haines or Skagway) and would have been clearly identified, allowing drivers to self-select a lane based on their destination. There would not have been propane inspections.
- The "reservationless" system would have worked on a first come, first serve basis, similar to ferries in Washington State and elsewhere.
- Turnaround times are realistic and consistent with turnaround times used by similarly operated ferry systems.
- Katzehin would have had a terminal building, but the size, building requirements, and
 passenger amenities had not been identified at this stage. Public support facilities would have
 included a heated terminal building with a waiting area and public restrooms. Telephone
 service is not planned for the terminal.
- Identification checks would not have been performed.

Parks and Recreation Areas

Section 6.2.1 Identifies parks and recreation areas within the project area. In Skagway, the plan identifies Mollie Walsh Park and Pullen Creek Shoreline Park as municipal parks within the project area. Registry Rock and Dewey Lakes Recreation Area should be added to this list.

RESPONSE: Neither of these areas is subject to use by any of the alternatives addressed in detail in the Draft and Final SEIS. Sections 3.1.1.6 (Land and Resource Uses) and 3.1.1.7 (Parks and Recreation Facilities) of the Draft and Final SEIS address parks and recreation in the project area. Section 6.2.1 referenced in the comment is for park and recreation lands protected by Section 4(f). Dewey Lakes Recreation Area already is mentioned in Section 3.1.1.7. FHWA examined the Dewey Lakes Recreation Area in its analysis for the 2005 Draft EIS and determined it was not a Section 4(f) property. It has not been formally considered since then because no alternative would affect it. Therefore, it is appropriate that it is not addressed in Section 6.2.1.

Registry Rock has been added to Section 3.1.1.7 of the Final SEIS as an attraction, although it appears no entity has designated it for park, recreation, or historic purposes. The 2009 Comprehensive Plan shows current ownership in the area of Registry Rock as Municipality of Skagway, current land use as Commercial, zoning as Industrial, and "Future Growth Designation" as "Waterfront Commercial Industrial." By Municipality of Skagway definition in its Municipal Code, municipal lands outside the Industrial zoned area are part of Dewey Lakes Recreation Area, so Registry Rock (inside the Industrial zone) is not part of the recreation area. These zoning designations and apparent lack of any separate designation as a park, recreation area, or historic site indicate that Registry Rock is not protected under Section 4(f). Therefore, it is appropriate that Section 6.2.1 does not discuss Registry Rock.

Funding Priorities and Cost Overruns

The Municipality of Skagway is concerned that many transportation projects of local and regional importance will be postponed or cancelled if the State allocates its sparse transportation money to this project. The EIS should also consider the issue of cost overruns which historically have been incurred on mega-projects. The Skagway Ferry Float and the Moore Bridge are two examples of critical local infrastructure that require immediate refurbishment or replacement.

RESPONSE: Prioritizing the use of National Highway System (NHS) transportation funds is the responsibility of DOT&PF. That prioritization is done through the 4-year Statewide Transportation Improvement Program (STIP), which is published in draft form for public review and comment before approval. The STIP is modified each year to account for shifting priorities and project schedules around the State. The STIP is approved by the DOT&PF Commissioner and federal funding partners. The Legislature provides DOT&PF with authority to spend federal money and allocates funding for the State's match through the capital budget. FHWA funds are not available to be spent on routine maintenance on existing highways. It is not possible to indicate specifically which other State transportation projects might have been postponed or cancelled if STIP funds had been allocated for the construction of the JAI Project. Alternative 1 – No Action Alternative has been selected as the preferred alternative and programmed funding will be allocated to other projects. DOT&PF's 2016–2019 STIP (Amendment 3, June 28, 2017) does not include funding for any JAI Project build alternatives.

Construction cost contingency has been applied to all alternatives. Please see the 2017 Update to Appendix D – Technical Alignment Report in Appendix Z for complete cost estimates of alternatives.

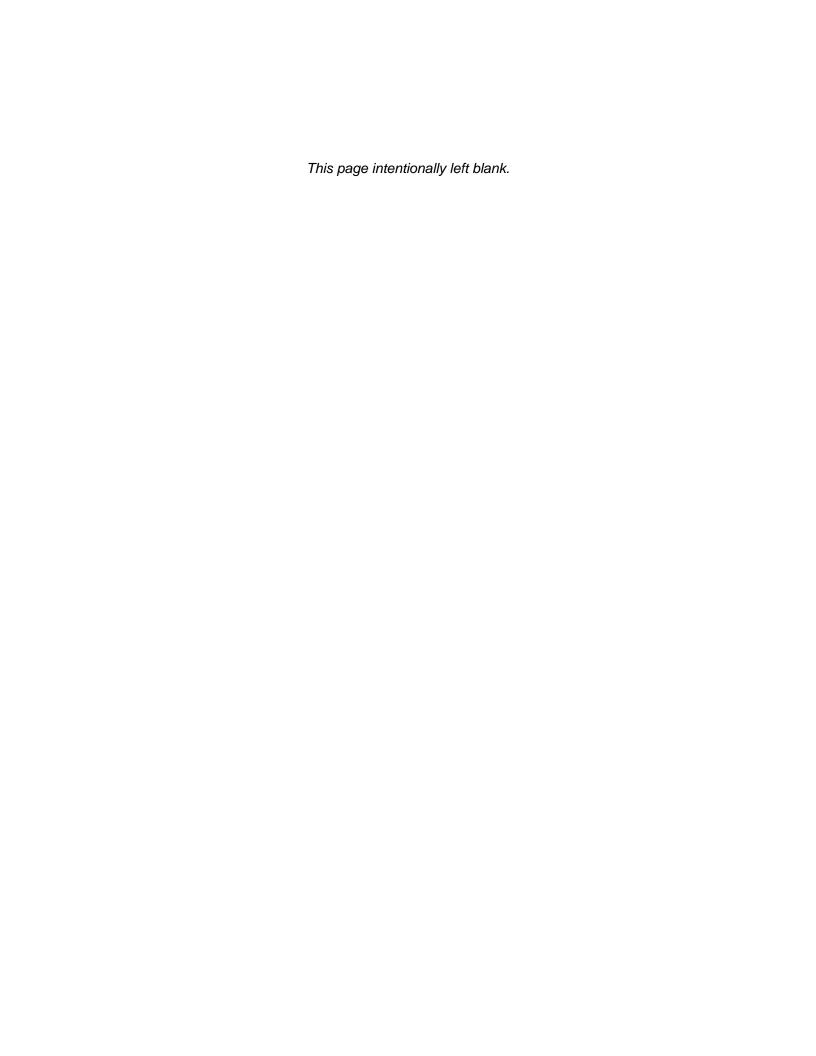
The Municipality requests an opportunity to comment on the Final.

The DSEIS discusses many scenarios that could have a profound effect on the economic future of our community. However many of the supporting documents that are referenced are not included or are buried in the DSEIS and cannot be discovered and retrieved within the timeframe of the comment period. The DSEIS has taken more than two years to produce and requires deep analysis. Many municipalities rely on volunteer committees to develop comments and are handicapped by their own public notice and public meeting requirements. This significantly limits the amount of available time for research and public vetting of comments. We ask that you provide the Municipality the opportunity to comment on the Final SEIS prior to the record of decision.

RESPONSE: FHWA has made the Final SEIS/ROD available. To ease your review of the Final SEIS, FHWA and DOT&PF have marked changes from the Draft SEIS with gray highlighting so that you can focus your search on what is new.

Attachments:

North Lynn Canal Ferry Service Analysis prepared for the Municipality of Skagway in June 2014 Correspondence with Federal Highway Administration HDR Ferry Fares Memo





Municipality of Skagway

GATEWAY TO THE KLONDIKE
P.O. BOX 415 SKAGWAY, ALASKA 99840
(PHONE) 907-983-2297 – Fax 907-983-2151

WWW.SKAGWAY.ORG

November 25, 2014

Sandra Garcia-Aline, Alaska Division Director Federal Highway Administration P.O. Box 21648 Juneau, Alaska 99802 sandra.garcia-aline@dot.gov

RE: Comments on Juneau Access Draft EIS by Skagway Port Commission

Dear Ms. Garcia-Aline,

The Skagway Port Commission appreciates the opportunity to comment on the Juneau Access Improvements Project Draft Supplemental Environmental Impact Statement (DSEIS). While the Commission is not taking any position on specific alternatives being proposed in the DSEIS it is essential that any alternative being proposed take into account the configuration and use of the Ferry Float in Skagway. The Commission's comments focus specifically on issues related to Port activity and how that activity integrates with the Port as a whole.

The Skagway Ferry Float is a jointly owned facility between the State of Alaska and the Municipality of Skagway. It is a critical piece of infrastructure for the Municipality and an essential component of the Port as a whole. The Municipality utilizes the East side of the existing float and any changes to the existing facility require proper consultation with the Municipality to ensure that present and future use of the facility for municipal purposes is protected and enhanced.

A variety of alternatives proposed in the DSEIS involve modifying the Skagway Ferry Float to accept shuttle ferries. Proposals that involve designs or infrastructure that are a departure from the configuration that presently exists have the potential to disrupt or impede the Municipality's ability to utilize its side of the ferry float. The Commission asks that the Municipality be properly consulted in the design, replacement and implementation process of any additional infrastructure or changes to the existing facility to allow for the docking of the proposed shuttle ferries.

Thank you,

Tim Bourcy, Chair Skagway Port Commission



Department of Transportation and Public Facilities

SOUTHCOAST REGION
PRECONSTRUCTION
DESIGN & ENGINEERING SERVICES

6860 Glacier Highway PO Box 112506 Juneau, Alaska 99811-2506 Main: 907,465,4444 Toll free: 800-575-4540 Fax: 907,465,4414 TTY-DDD 800-770-8973

July 9, 2018

Tom Cochran Municipality of Skagway Skagway Port Commission P.O. Box 415 Skagway, Alaska 99840

Dear Mr. Cochran:

Thank you for your letter, dated November 25, 2014, with your comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Skagway Port Commission and Municipality of Skagway in the JAI Project.

We have reviewed your letter and our attached response has been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

15-21

Greg Lockwood Southcoast Region

Preliminary Design and Environmental

Group Chief

Enclosures:

Responses to Skagway Port Commission Comments on the JAI Project Draft SEIS (November 25, 2014)

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager



Municipality of Skagway

GATEWAY TO THE KLONDIKE

P.O.BOX 415 SKAGWAY, ALASKA 99840

(PHONE) 907-983-2297-Fax 907-983-2151

WWW.SKAGWAY.ORG

November 25, 2014

Sandra Garcia-Aline, Alaska Division Director Federal Highway Administration P.O. Box 21648 Juneau, Alaska 99802 sandra.garcia-aline@dot.gov

RE: Comments on Juneau Access Draft EIS by Skagway Port Commission

Dear Ms. Garcia-Aline,

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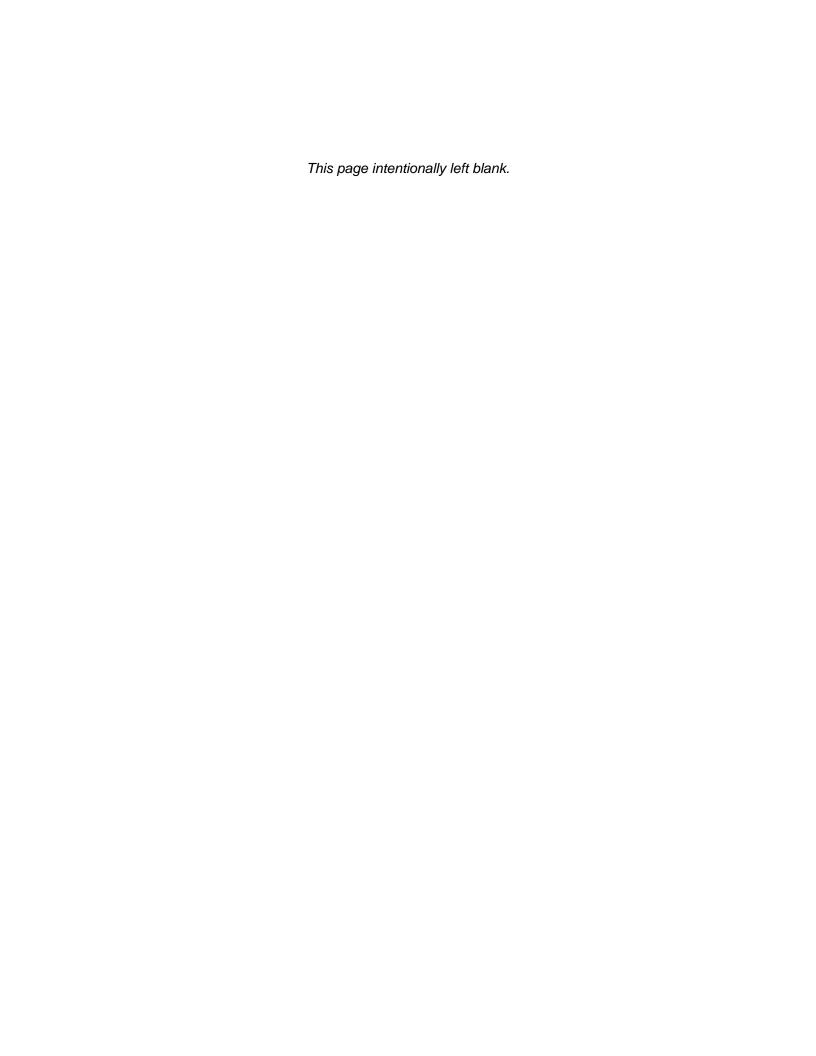
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A variety of alternatives proposed in the DSEIS involve modifying the Skagway Ferry Float to accept shuttle ferries. Proposals that involve designs or infrastructure that are a departure from the configuration that presently exists have the potential to disrupt or impede the Municipality's ability to utilize its side of the ferry float. The Commission asks that the Municipality be properly consulted in the design, replacement and implementation process of any additional infrastructure or changes to the existing facility to allow for the docking of the proposed shuttle ferries.

RESPONSE: FHWA has selected the No Action Alternative as the preferred alternative for the Juneau Access Improvements Project in the Final SEIS. If a build alternative had been selected that required modifications to the Skagway Ferry Float, DOT&PF would have coordinated those changes to the ferry float with the Municipality of Skagway during design phase of the project development.

Thank you,

Tim Bourcy, Chair Skagway Port Commission Federal Highway Administration DEC 0 1 2014 Juneau.Alaska





Douglas Indian Association Tribal Government

811 West 12th Street Juneau, Alaska 99801-1529 Phone: (907) 364-2916 Fax: (907) 364-2917



November 25, 2014



Ms. Deborah Holman
Juneau Access Improvements Project
Southeast Region
Alaska Department of Transportation and Public Facilities
P.O. Box 112506
Juneau, AK 99811-2506

Dear Ms. Holman,

We are in receipt of your invitation for comment on the Juneau Access Improvements Project Draft Supplemental EIS. We have met with and will continue to work closely with Goldbelt, Inc. on this matter and other projects that impact our traditional lands in the Juneau area.

The Douglas Indian Association (DIA) is the historical federally-recognized tribe of the Juneau and Douglas area whose members originate from the T'aaku Kwáan and A'akw Kwáan clans which have inhabited the Anax Yaa Andagan Yé (Douglas) and Dzantik'i Héeni (Juneau) region since time immemorial. Our traditional and historical territory encompasses the City and Borough of Juneau, as well as some areas to the east and north on Admiralty Island and the Chilkat Peninsula, to the south including Endicott Arm, and to the east into Canada in the areas of the Taku River and Atlin, B.C. (See attached map of our traditional and historic territories.)

After reviewing the project information included with your invitation, the Douglas Indian Association has determined that the preferred alternative is located near and may impact known sites of historic, traditional and cultural importance to DIA. In addition, other areas of significance to the Tribe may be affected as construction moves forward. The Tribe will continue to assert its continued presence as key stakeholders given the well-known ancient Tlingit archaeological sites in the Berners Bay area and the historical occupation of that area by our Tribal ancestors.

Page 4-42 of your document states under Section 4.3.4, "Consultations with Native Tribes and organizations have not indicated that this alternative would impact any traditional cultural properties." It would be helpful to know which "Native Tribes and organization were consulted since DIA, Goldbelt and Sealaska Corporation are fully aware of historic sites in Berners Bay.

In addition, Page 4-43 states, "DOT&PF and FHWA have consulted with the USFS and the SHPO regarding potential impacts to historic properties in the APE of Alternative 2B. On October 5, 2005, SHPO concurred with FHWA's determination that Alternative 2B would have no adverse effect on any historic property." And "In June 2012, following correspondence from FHWA detailing minor changes to Alternative 2B, the SHPO reconfirmed that a finding of no adverse effect remains appropriate for this alternative."

This is clearly an oversight on the part of SHPO and other agencies considering the evidence of a permanent historic Tlingit winter village with burial sites and petroglyphs in Berners Bay, which is well documented in oral tradition and archaeological research. (Please see the attached Alaska Heritage Resources Survey, which lists additional references on this site.) It is difficult to determine the precise corridor planned by the rough maps in the document, but it likely comes close to this and other sites of historic and traditional importance to the Tribe.

In the spring of 2013, DIA, Goldbelt Heritage Foundation, U.S. Forest Service, and the University of Alaska Southeast's Heritage Program monitored cultural sites in Berners Bay. Several sites were identified, including the Berners Bay Petroglyphs, Echo Cove Cabin, Sawmill Creek shell midden, Sawmill Creek cabin, Sawmill Creek sawmill, and Sawmill Creek shipway. We have attached a map with those sites identified, as well as photos from the survey. Additional surveys to continue to identify additional sites of historic, cultural, and traditional importance to the Tribe are planned.

As a further compelling example of DIA's concerns are that on October 7, 2014, the U.S. Forest Service was notified by campers at a Berners Bay site (along the preferred route) that they had discovered human remains, later found to belong to an "ancient" Native person. (Please see the attached e-mail and photograph resulting from that discovery.)

An additional issue about this preferred alternative is the impact it will have on subsistence resources accessed by our Tribal members, especially in the Berners Bay area. You have documented the existence of many of these resources, yet, some (such as herring in the Lynn Canal and Berners Bay areas) were not mentioned. We respectfully request that the ultimate standard of care be taken to minimize impact to those resources.

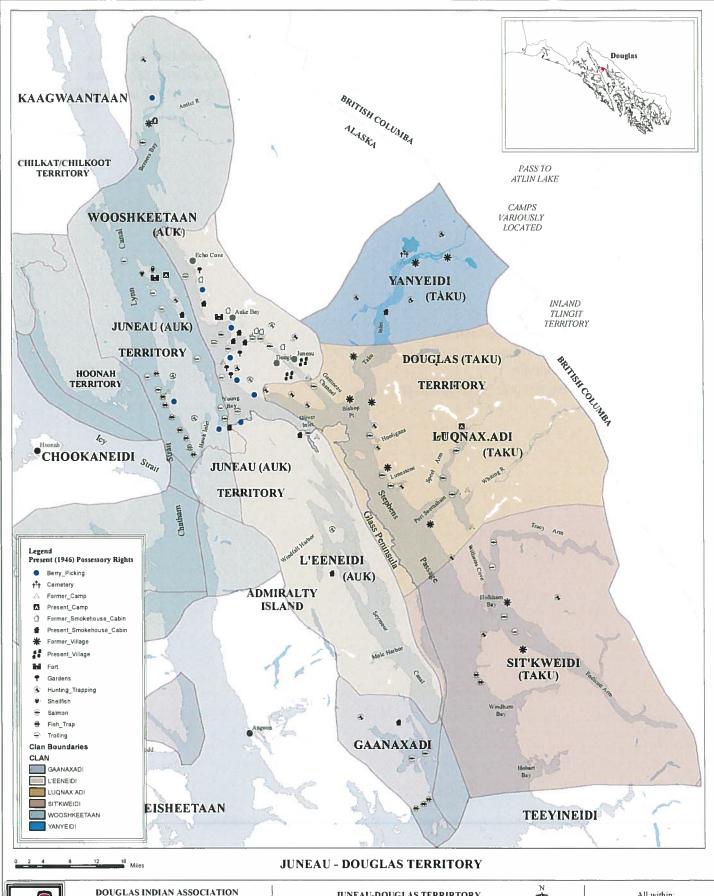
As this alternative advocates for construction in areas historically used and occupied by our Tribal ancestors, there will most certainly be sites of archeological importance uncovered. In accordance with 36 CFR 800.5(b), implementation regulations of Section 106 of the National Historic Preservation Act, should this alternative be approved, we would appreciate direct and early consultation with your agency as you move forward with construction, and immediate contact if anything of possible historic or cultural significance to the Tribe is disturbed through any work that is performed. In addition, when approaching areas where potential impact to these kinds of historic and cultural resources exists, we request that a cultural resource specialist be hired to be to monitor on-site construction activity, and that DIA Tribal Government officials or designees be involved in monitoring activities as well.

This project will undoubtedly have a yet to be realized impact on traditional resources and sacred sites that are greatly important to the Tribe. We look forward to your vigilance and utmost respect and care regarding our Tribal interests in approaching prospective construction, and to continued communication and cooperation with your agency.

Sincerely,

Andrea Cadiente-Laiti Tribal Administrator

cc: DIA Tribal Council
Goldbelt Incorporated
Goldbelt Heritage Foundation
Sealaska Corporation
U.S. Forest Service
Alaska State Historic Preservation Office





TRADITIONAL AND HISTORICIAL TERRITORY

HISTORICAL CLAN BOUNDRIES

JUNEAU-DOUGLAS TERRIRTORY

SHOWING ABORIGINAL USE AND OWNERSHIP AND PRESENT (1946) USES



All within: The State of Alaska Congressional District 01 Copper River Meridian

Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

Compiled: Wed Oct 08 09:26:30 AKDT 2014

This document contains restricted information. Unauthorized circulation is prohibited by law!

AHRS Number:

JUN-00062

Mapsheet(s):

JUNEAU C-3 (JUNC3)

Acreage:

Date Issued: 01-27-1978

MTRS(s):

C036S063E20

Resource Shape:

Point

Location Approximate:

No

Point Representation:

Lat: 58.73807545, Long: -134.93206686

Assigned To:

Site Name(s):

BERNERS BAY VILLAGE AND PETROGLYPHS

BERNERS BAY PETROGLYPH SITE

Alternate Name(s):

Associations:

Informal Association(s):

Formal Association(s):

Site Description:

[AHRS] Reported by informants as a permanent village site with winter houses, burials, and petroglyphs. Sealaska investigators located two fence-type grave sites destroyed by vandals on the western cliff above the beach. At the SE end of the site was a large cone or wedge-shaped piece of marble with petroglyphs of concentric rings, faces, eyes, orcas, halibut, a large bird, a wolf, and a bear-like image. Conflict exists between 1979 survey conducted by CPSU and 1982 USFS survey. CPSU investigators reported a 2.6m x 3.3m house pit, one grave house, two graves with balustrades, a petroglyph boulder, and modern camp remains. "Possible" house depession found in 1979 could not be substaniated by subsurface testing in 1982. Investigations in 1994 relocated the burials and petroglyph boulder and identified 3 additional boulders. The total number of petroglyphs at the site is 15. No evidence of middens or depressions were found. [see also JUN-040, Stevens reported a site with similar origin and characteristics, probably the same site.] [DOE] Site contains figure and geometric designs pecked on a large marble boulder above mean high tide line.

Site Significance:

[DOE] Site is said to embody symbolic value in the traditions of the Auke Tlingit. The killer whale is a principal crest for the Wuckitan Clan and the petroglyphs represent their claim to the bay. [AHRS] Reportedly a permanent village site with petroglyphs. May provide information on habitation and settlement patterns while showing past use of the area. Petroglyphs may have ceremonial, economic, or artistic meaning.

Location:

This site extends for approx 0.25 mi. along the NE shore of Berners Bay, at the mouth of the stream N of Sawmill Creek, approx 57km NNW of Juneau, SE Alaska.

AHRS References:

ADP 3330-6 file (Berners Bay Petroglyph site)

CRC/Yarborough 9/28/94 (see ADP 3330-6 Swmll Crk Shll Mddn)

CRC (Yarborough, M.) 08/11/96 (AS of Proposed Rd...Echo Cove)

Peck, C. 1990 (Interviews of Cecelia Kunz and Rosa Miller)

City and Borough of Juneau 1986

ANCSA 14(h)(1) Site Survey Form (Separate forms for each individual number)

Sealaska 1975 Native Cemetery & Historic Sites of Southeast Alaska

Document Repository References: 4

(09/01/2004) USFS



Noted historic debris on the north side of Fish Creek – west of (above) Douglas Highway as well as an historic trail. (Neither of these have been documented.)

Paleo-Shoreline Outcomes

Inventories with Negative results:

No paleoshoreline exposures along Blueberry Hill access trail between parking area and the Treadwell Ditch

No paleoshoreline exposures along 3 small drainages north of 9 Mile Creek west of (above) Douglas Highway. Inventories done to approximately 50m. Also – none noted along Fish Creek between approx. 40m and the highway.

An effort to id paleoshoreline exposures on 9 Mile creek above Douglas Highway produced negative results, but we aborted the effort early due to the amount of private property we seemed to be trespassing on.

Positive Paleoshoreline ID s and Test Pits

In collecting samples we kept careful vertical control and although many samples were collected in "bulk" we were careful to record depth range where collection occurred. At some locations, shell was plentiful enough that

UAS Campus TP#1 (Cabin Site) – No GM encountered.

UAS Campus TP #2 (Creek) – limited GM

UAS Campus TP 3# (Lake) No GM

UAS Campus Culvert Exposure – Great Exposure – sample not yet collected.

9 Mile TP 1 - No GM encountered

9 Mile TP 2 – GM encountered, bulk sample collected 8-9m

9 Mile TP 3 - Tributary - GM Encountered, bulk sample collected (13 m)

9 Mile TP #4 – Estuary – GM Encountered. Intertidal – following GM down gradient. Elevation uncertain 6-7m?

Peterson Creek #1 – (17 m north of pedestrian bridge) River bottom bulk "grab" sample. Water 2.5' deep.

Peterson Creek Exposure – upriver. Noted by Dan M and B. Deasis. No sample collected.

Treadwell 2nd Glory Hole TP! – bulk sample collected. Surface grab sample also collected.

Heritage Program UAS/DIA Collaborative Project: Cultural Site Monitoring in Berners Bay (Week 1) and Paleoshoreline Research and Sampling in Juneau Area (Week 2)

May 6 through May 17, 2013

Preliminary Project Summary

What went well

Provided a unique opportunity for 8 UAS students to participate in a direct way with an agency driven effort to monitor archeological sites and a fantastic opportunity for Eric Morrison to get out to Berner's Bay petroglyph site. Three students were of Tlingit heritage — one directly affiliated with Berners Bay. She was able to carry out her duty and privilege of acknowledging and thanking her ancestors, including the bears, the land and the trees, in a nurturing supportive collegial atmosphere. Her opposite, proided balance.

The same cadre of participants (with the exception of Eric Morrison and the switch out of one student) were able to participate in a full week of research into the question of the ages of LGM/early Holocene shorelines in southeast Alaska.

Boat support for 2 days in Berners with awesome help from Matt Thompson.

Monitored Sites and Other Heritage Program Outcomes

JUN 062 – Berners Bay Petroglyphs. We identified the four known petroglyph rocks and observed that on at least one, there are more petroglyphs than have been recorded to date. Students completed a partial inventory of timber extraction related debris at the site and Eric was on hand to make a visual assessment. He also observed the modern campsite.

JUN____ - Echo Cove Cabin – This site was monitored by a subset of students as a fill in activity when our departure from Echo Cove due to the failed William Henry Repeater.

JUN-673 - Sawmill Creek Shell Midden

JUN-674 - Sawmill Creek Cabin - interestingly we found the site, but no cabin remnants.

JUN - 675 - Sawmill Creek Sawmill

JUN – 676 – Sawmill Creek Shipway

Identified 2 CMTs and fully documented one during transit from outer beach "across" landform (peninsula) west of Sawmill Creek to the Sawmill area sites. Are merits much more intense archeological survey.

Noted a possibly historic cabin (partially intact) in the woods just off the south end of the parking lot at the Blueberry Hills Treadwell Ditch Trail access route. (I don't believe that this cabin has been documented. It's age is unknown.

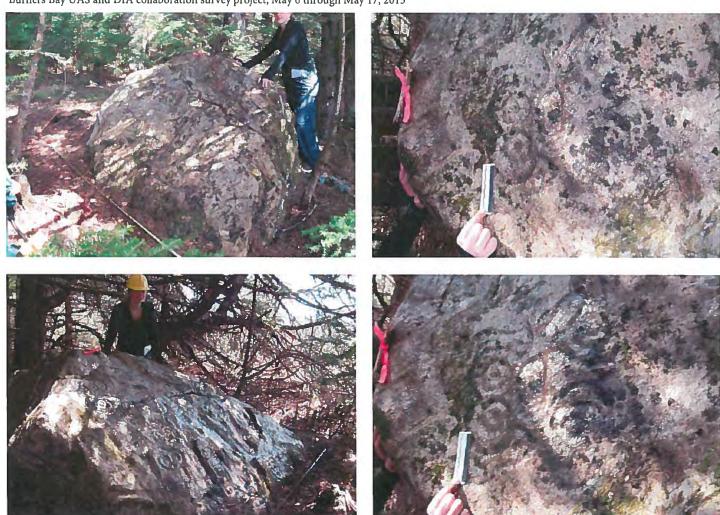
Auk Bay Elem School TP 1 – (small creek) bulk sample collected.

Auk Bay Elem School TP2 – (muskeg) 2 bulk samples collected. At different depths.

Recommendations:

- Earlier, detailed and realistic collaboratively reached plans that mesh with the goals of the program providing the funding.
 - O Dan's course description led students to believe they'd be on an extended field trip to Berners Bay with travel being by kayak or skiff. This may have been possible, but could not have come to fruition the way Myra had imagined. Full time boat support would have been absolutely essential. Budgeted time for pulling together logistics like boat, food, gear etc would have had to have been increased considerably. Planning that the FS archeologist could "multi-task" being the only FS sanctioned small boat operator, the only FS sanctioned riffle bearer etc was not realistic.
 - Eric expected that he would emerge from the trip with an inventory of all the "garbage" at the Petroglyph site and that we'd complete an inventory for archeological sites on the east shore of Berner's Bay.
- Clarity regarding who/which organization was driving the program.
- Early clearly assigned responsibilities for each organizational representative.
 - o I'd been told that FSL folks would take the lead for the paeloshoreline work. When meeting with them one week prior to the project, they revealed to me they'd made no such commitment.
- An agreement structure other than volunteer agreements would be much more effective. FS project leader (myself) became de-facto supervisor for entire crew (7 students, one UAS professor, and DIA's Environmental Planner). In that role, I had to be with them in the field pretty much the whole time and I had to ensure that they complied with every safety standard we'd expect of employees. Just the supervision, coordination side of things was complex. Pulling together and tracking gear (radios, probes, helmets) daily was work in itself. The responsibility for leading the archeological monitor effort and documentation was another layer.
- Baitchtal had intended to fund me to learn the paleoshoreline research methodology and gain experience. Instead, I was expected to provide expertise and leadership for students eager to learn. It was too early in my learning curve to push me into the role of an "expert."
- Volunteers including students are never free. Added pressures come with students as they
 expect (and have a right to expect) to have a quality learning experience.

Burners Bay UAS and DIA collaboration survey project, May 6 through May 17, 2013





















Gilliam, Myra -FS

From: John Hudson <odonatak@gmail.com>
Sent: Tuesday, October 07, 2014 8:11 PM

To: Cole, Forrest -FS
Cc: Gilliam, Myra -FS

Subject: Human Jawbone found in Berners Bay

Attachments: DSCN6873.JPG

Dear Mr. Cole,

Last July while camping on a beach in Berners Bay with a group of friends, someone in our party found a human jawbone near the high tide line (see photo attached). The bone was turned over to the state troopers and it's my understanding they passed it on to the state medical examiner who determined that it belonged to an "ancient" native person.

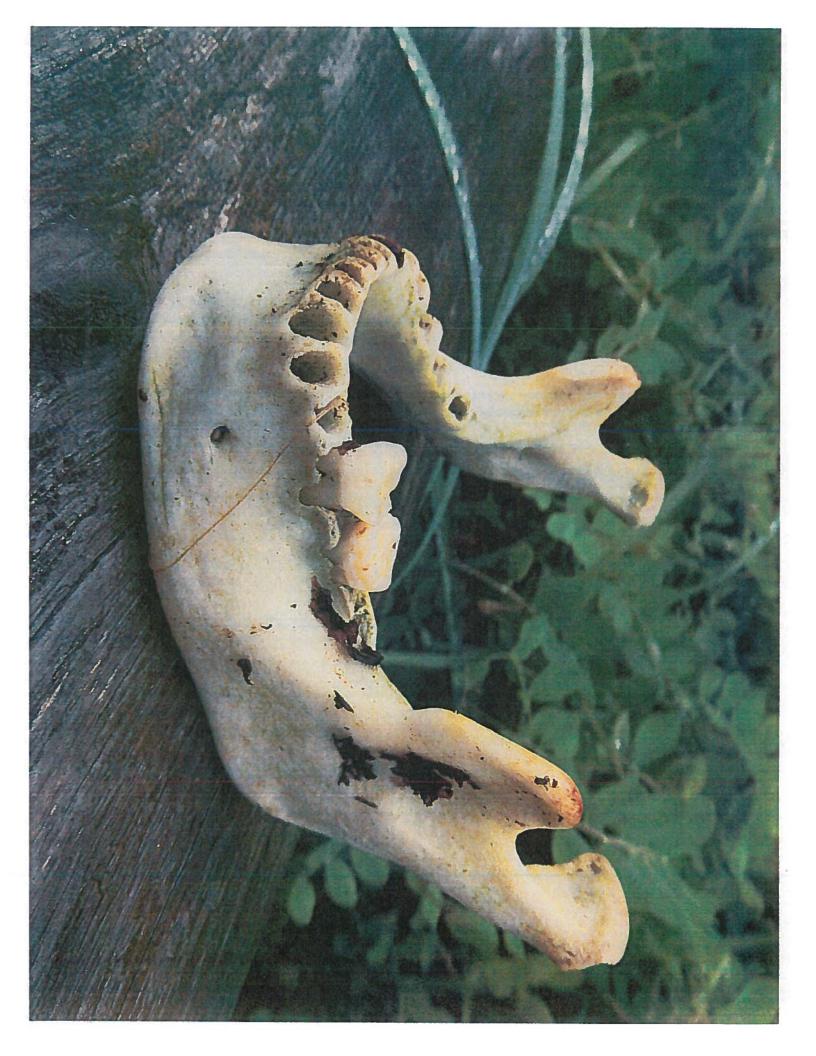
I suspect that the bone may have been eroded from a nearby stream bank on Forest Service land, transported to the beach by the stream, and then was washed up by the surf.

I wanted to make you aware of this find in case there is an interest in searching for other human remains in this area. The bone was found at:

58.7384, -134.9341. There are numerous petroglyphs near on this beach.

Thanks for looking into this matter.

John Hudson Juneau 790-2227





Department of Transportation and Public Facilities

Statewide Design & Engineering Services

3132 Channel Drive Juneau, Alaska 99811-2500 Main: 907.465.1828 Fax: 907.465.2016

January 15, 2016

Andrea Cadiente-Laiti Tribal Administrator Douglas Indian Association 811 West 12th Street Juneau, Alaska 99801-1529

Re: Juneau Access Improvements Draft Supplemental Environmental Impact Statement (SEIS) Project #711000

Dear Ms. Cadiente-Laiti:

Thank you for your review of the Draft Supplemental Environmental Impact Statement (SEIS) for the Juneau Access Improvements project. The Alaska Department of Transportation and Public Facilities (DOT&PF) in coordination with the Federal Highway Administration (FHWA) circulated the Draft SEIS for public review on September 15, 2014. I apologize for this late response to your November 25, 2014 letter. We are currently in the process of responding to comments. The Final SEIS and Record of Decision cannot be prepared until we complete this effort, since responses to all comments received will be included in the Final SEIS.

You expressed concerns that Alternative 2B (East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway) right-of-way road design was located near and may impact known sites of historic, traditional, and cultural importance. Concern was also noted for the impacts to subsistence resources. While Alternative 2B was identified in the Draft SEIS as the preferred alternative, all alternatives are still under consideration.

The FHWA and DOT&PF appreciate your concerns and the sensitivity of these cultural resources. We will be contacting you in the coming weeks to schedule a meeting to discuss your concerns and provide a status update.

Sincerely,

Gary Hogins Project Manager

Electronic cc: Michele Metz, Sealaska Corporation, Lands Manager

Tim Haugh, Federal Highway Administration, Environmental Program Manager

Laurie Mulcahy, DOT&PF Statewide Environmental Office, Cultural Resources Manager Judith E. Bittner, State Historic Preservation Office, State Historic Preservation Officer



Alaska Division

July 9, 2018

P.O. Box 21648 Juneau, AK 99802-1648 (907) 586-7418 (907) 586-7420 www.fhwa.dot.gov/akdiv

In Reply Refer To: STP-000S(131)/71100

Andrea Cadiente-Laiti Douglas Indian Association 811 West 12th Street Juneau, Alaska 99801

Dear Ms. Cadiente-Laiti:

Thank you for your letter, dated November 25, 2014, with your association's comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of the Douglas Indian Association in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 586-7430 or Greg Lockwood, the DOT&PF Project Manager, at (907) 465-1828 if you have any additional questions or concerns.

Sincerely,

Tim A. Haugh

Environmental Program Manager

Enclosures: Responses to Douglas Indian Association Comments on the JAI Project Draft

SEIS (November 25, 2014)

cc: Greg Lockwood, Southcoast Region Preliminary Engineering & Development

Group Chief, DOT&PF



Douglas Indian Association Tribal Government

811West 12th Street Juneau, Alaska 99801-1529 Phone: (907) 364-2916 Fax: (907) 364-2917



November 25, 2014



Ms. Deborah Holman Juneau Access Improvements Project Southeast Region Alaska Department of Transportation and Public Facilities P.O. Box 112506 Juneau, AK 99811-2506

Dear Ms. Holman,

We are in receipt of your invitation for comment on the Juneau Access Improvements Project Draft Supplemental EIS. We have met with and will continue to work closely with Goldbelt, Inc. on this matter and other projects that impact our traditional lands in the Juneau area.

The Douglas Indian Association (DIA) is the historical federally-recognized tribe of the Juneau and Douglas area whose members originate from the T'aaku Kwáan and A'akw Kwáan clans which have inhabited the Anax Yaa Andagan Yé (Douglas) and Dzantik'i Héeni (Juneau) region since time immemorial. Our traditional and historical territory encompasses the City and Borough of Juneau, as well as some areas to the east and north on Admiralty Island and the Chilkat Peninsula, to the south including Endicott Arm, and to the east into Canada in the areas of the Taku River and Atlin, B.C. (See attached map of our traditional and historic territories.)

After reviewing the project information included with your invitation, the Douglas Indian Association has determined that the preferred alternative is located near and may impact known sites of historic, traditional and cultural importance to DIA. In addition, other areas of significance to the Tribe may be affected as construction moves forward. The Tribe will continue to assert its continued presence as key stakeholders given the well-known ancient Tlingit archaeological sites in the Berners Bay area and the historical occupation of that area by our Tribal ancestors.

RESPONSE: Thank you for your continued input regarding the Juneau Access Improvements (JAI) Project. As reported in Section 3.1.3 of the Draft and Final Supplemental Environmental Impact Statement (SEIS), the Alaska Department of Transportation and Public Facilities (DOT&PF) and Federal Highway Administration (FHWA) understand that the project is located in an area that has been identified as culturally significant to Douglas Indian Association (DIA). As reported in Section 4.3.4 of the Final SEIS, DOT&PF and FHWA understand that Alternative 2B would have been located near known sites of historic, traditional, and cultural importance to DIA. However, the Final SEIS

identifies Alternative 1 – No Action as the preferred alternative.

Page 4-42 of your document states under Section 4.3.4,"Consultations with Native Tribes and organizations have not indicated that this alternative would impact any traditional cultural properties." It would be helpful to know which "Native Tribes and organization were consulted since DIA, Goldbelt and Sealaska Corporation are fully aware of historic sites in Berners Bay.

RESPONSE: Identification of prehistoric and historic resources and traditional cultural properties in the SEIS is based on record searches, surveys within the study area, and consultation with Native Tribes and organizations, U.S. Forest Service (USFS), and the Alaska State Historic Preservation Officer (SHPO). Reported sites have not been identified within the Area of Potential Effect (APE) for Alternative 2B (see Section 4.3.4 of the Final SEIS).

As discussed in Section 3.1.3 and Chapter 7 of the Draft SEIS, DOT&PF sent letters in September 2003 to 11 Tribal organizations, of which, six are Federally Recognized Tribes (Chilkoot Indian Association of Haines, Klukwan Inc., Golbelt Inc., Chilkat Village of Klukwan, Sealaska Corporation, DIA, Tlingit and Haida Central Council, Skagway Traditional Council, Auk Kwan Traditional Council, Sealaska Heritage Institute, and Hoonah Indian Association), SHPO, USFS, and National Park Service (NPS), inviting them to participate in the process of identifying cultural properties (prehistoric and historic) and determining the effects of the alternatives on such properties for the 2005 Draft SEIS. DOT&PF conducted follow-up phone calls and face-to-face meetings when requested by the Tribes and Native organizations. In August 2004, FHWA sent letters to these same entities, inviting them to comment on FHWA's determination of eligibility on historic properties for the National Register of Historic Places and determination of potential effects on any historic properties in the APE.

In 2012, SHPO was consulted and concurred with the APE for the project and field methodology. In addition, SHPO concurred with FHWA's determinations of eligibility for all historic properties within the APE of Alternative 2B (with minor changes to the site boundaries) as discussed in Section 4.3.4. The Tribes and Tribal organizations were additionally notified regarding opportunities for input through scoping outreach, the notice of availability, and the public hearing process as part of the 2014 Draft SEIS. FHWA and DOT&PF did not receive scoping comments from Tribes or Tribal organizations but did receive comments from DIA, Sealaska, and Auk Kwan on the Draft SEIS. FHWA and DOT&PF have responded to Draft SEIS comments in Appendix JJ, *Responses to Draft Supplemental Environmental Impact Statement Comments*, of the Final SEIS. The APEs have not changed between SHPO's concurrence and the Draft SEIS. Following the additional consultation described below, FHWA and DOT&PF have reviewed the existing analysis and determined that additional field investigations are not necessary (see paragraph below).

The investigations (research and field studies) of cultural resources presented in the Draft SEIS were a synthesis of several technical reports and memoranda prepared for the JAI Project between 1994 and 2005 regarding historic and archaeological sites in the APE. A follow-up literature review was conducted in 2012 to determine if any new information regarding cultural resources in the APE had become available since 2005. No new cultural resources were identified within the APE.

On February 25, 2016, meetings with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and SHPO verified that no previously unidentified sites of cultural or historic importance were missed.

In addition, Page 4-43 states, "DOT&PF and FHWA have consulted with the USFS and the SHPO regarding potential impacts to historic properties in the APE of Alternative 28. On October 5, 2005, SHPO concurred with FHWA's determination that Alternative 2B would have no adverse effect on any historic property." And "In June 2012, following correspondence from FHWA detailing minor changes to Alternative 2B, the SHPO reconfirmed that a finding of no adverse effect remains appropriate for this alternative."

This is clearly an oversight on the part of SHPO and other agencies considering the evidence of a permanent historic Tlingit winter village with burial sites and petroglyphs in Berners Bay, which is well documented in oral tradition and archaeological research. (Please see the attached Alaska Heritage Resources Survey, which lists additional references on this site.) It is difficult to determine the precise corridor planned by the rough maps in the document, but it likely comes close to this and other sites of historic and traditional importance to the Tribe.

RESPONSE: To protect sensitive site information, the data and analyses contained in these documents are only summarized in the Draft SEIS, although all of the information therein was used in making determinations of eligibility and findings of effect. For example, the locations of sensitive archaeological and burial sites were not disclosed in the Draft SEIS. It is understandable that a review of the Draft SEIS could lead to confusion in regards to the summary of this site information appearing not to include all site locations.

The Alaska Heritage Resources Survey (AHRS) was reviewed for the SEIS. Section 3.1.3 of the Final SEIS includes information regarding cultural resources within the project's APE, and Section 4.3.4 includes a discussion of project impacts to known historic properties under Alternative 2B (see other relevant Historical and Archaeological impacts sections under each alternative in Chapter 4). Reported locations of known cultural resources were considered during the development of the project. The likely presence of historic properties within the APE for each alternative was established through background research, consultations, and field investigations. FHWA determined that no known historic properties would be directly impacted by any reasonable alternative, and SHPO concurred with the determination that Alternative 2B would have no adverse effect on historic properties.

In a letter response from SHPO to DIA dated April 9, 2015, SHPO stated that:

Regarding the Juneau Access Project, our original concurrence with FHWA's finding of 'no adverse effect,' which was issued in 2005 and which was reevaluated and maintained in 2012, was based on our understanding that the preferred alternative selected—the Alternative 2B alignment—was conditioned upon the complete avoidance of sites of potential concern within the area of potential effects (APE). ... Other sites in the vicinity of the project, such as JUN-00673 (the Sawmill Creek Shell Midden), JUN-00062 (Berner's Bay Village & Petroglyph Site), SKG-00138 (Dayebas Creek Cache Pit), JUN-00670 (William Henry Bay Petroglyph), SKG-00136/SKG-01378 (Pyramid Island Shell Midden), and others were completely avoided and listed in the documentation that we received from FHWA as outside of the APE. Therefore, FHWA's finding of effect (and our subsequent concurrence) did not concern these sites as they were not within the APE.

The existence of burial sites and sites of cultural importance in the Berners Bay area was first noted during the initial archaeological literature review for this project, conducted in 1994. Their reported

locations were considered during the development of the inventory design and were factored into the field survey methodology. This design was developed in consultation with archaeologists from the USFS and Alaska Office of History and Archaeology. No known burial sites would be affected by any *alternative*.

FHWA and DOT&PF, along with the SHPO, had meetings on February 25, 2016, with Sealaska Corporation, Sealaska Heritage Institute, DIA, and Goldbelt Corporation to address the concerns expressed in comments on the Draft SEIS. As was discussed during those meetings, the AHRS database was reviewed for the SEIS. Reported locations of known cultural resources were considered during the development of the project, including the historic *Tlingit* winter village with burial sites and petroglyphs in Berners Bay. The presence of any historic properties within the APE for each alternative was established through record searches; surveys within the APE; and consultation with Native Tribes and organizations, USFS, and SHPO. Upon conclusion of these meetings, no previously unidentified sites of cultural or historic importance were identified, and FHWA maintains that their determination of no adverse effect on any cultural resources and historic properties is valid.

In the spring of 2013, DIA, Goldbelt Heritage Foundation, U.S. Forest Service, and the University of Alaska Southeast's Heritage Program monitored cultural sites in Berners Bay. Several sites were identified, including the Berners Bay Petroglyphs, Echo Cove Cabin, Sawmill Creek shell midden, Sawmill Creek cabin, Sawmill Creek sawmill, and Sawmill Creek shipway. We have attached a map with those sites identified, as well as photos from the survey. Additional surveys to continue to identify additional sites of historic, cultural, and traditional importance to the Tribe are planned.

RESPONSE: Thank you for providing information regarding the 2013 monitoring program and sites identified during that work. As mentioned above, the possible existence of burial sites and sites of cultural importance in the Berners Bay area was first noted during the initial archaeological literature review for this project, conducted in 1994. Their reported locations were considered during the development of the inventory design and were factored into the field survey methodology. This design was developed in consultation with archaeologists from the USFS and Alaska Office of History and Archaeology. The likely presence of historic properties within the APE for each alternative was established through background research, consultation, and field investigations. Field and aerial surveys did not identify historic properties within the project APE. Alternative 2B was developed to avoid cultural resources of potential concern. Based on research, consultation, and field investigations, no known historic properties would be directly impacted by any reasonable alternative.

As a further compelling example of DIA's concerns are that on October 7, 2014, the U.S. Forest Service was notified by campers at a Berners Bay site {along the preferred route) that they had discovered human remains, later found to belong to an "ancient" Native person. (Please see the attached e-mail and photograph resulting from that discovery.)

RESPONSE: Thank you for providing this updated information. The Final SEIS identifies Alternative 1 – No Action as the preferred alternative. As stated in Sections 4.8.3, 5.10, and 5.12.1 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains had been discovered during construction, work in the vicinity of the discovery would have been halted until the discovery was evaluated and appropriate consultation, including with Tribes as appropriate, was conducted per Section 106 of the National Historic Preservation Act. If the discovery had included human remains or associated funerary objects, it could also have been subject to the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA), and Tribal consultation would have been conducted per NAGPRA.

An additional issue about this preferred alternative is the impact it will have on subsistence resources accessed by our Tribal members, especially in the Berners Bay area. You have documented the existence of many of these resources, yet, some {such as herring in the Lynn Canal and Berners Bay areas) were not mentioned. We respectfully request that the ultimate standard of care be taken to minimize impact to those resources.

RESPONSE: The Draft SEIS relied on the latest available information and data. Reporting of subsistence use in the Draft and Final SEIS is based on the USFS Tongass Resource Use Cooperative Survey (1988); the Alaska Department of Fish and Game (ADF&G), Division of Subsistence, Subsistence Resource Use Patterns in Southeast Alaska: Summaries of 30 Communities (1994); and Scoping comments. Existing levels of subsistence harvest are discussed in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD, Land Use Technical Report, of the Draft SEIS.

Customary and traditional use of herring is noted in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD. Except where specifically called out, herring is included on the subsistence figures and in the text under the general category of finfish.

Project impacts to subsistence resources are discussed in Sections 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 of Appendix DD. FHWA has determined that none of the reasonable alternatives would significantly restrict subsistence uses.

As this alternative advocates for construction in areas historically used and occupied by our Tribal ancestors, there will most certainly be sites of archeological importance uncovered. In accordance with 36 CFR 800.5(b), implementation regulations of Section 106 of the National Historic Preservation Act, should this alternative be approved, we would appreciate direct and early consultation with your agency as you move forward with construction, and immediate contact if anything of possible historic or cultural significance to the Tribe is disturbed through any work that is performed. In addition, when approaching areas where potential impact to these kinds of historic and cultural resources exists, we request that a cultural resource specialist be hired to be to monitor on-site construction activity, and that DIA Tribal Government officials or designees be involved in monitoring activities as well.

This project will undoubtedly have a yet to be realized impact on traditional resources and sacred sites that are greatly important to the Tribe. We look forward to your vigilance and utmost respect and care regarding our Tribal interests in approaching prospective construction, and to continued communication and cooperation with your agency.

RESPONSE: As stated in Sections 4.8.3, 5.10, and 5.12.1 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains had been discovered during construction, work in the vicinity of the discovery would have been halted until the discovery was evaluated and appropriate consultation, including with Tribes as appropriate, would have been conducted per Section 106 of the National Historic Preservation Act. If the discovery had included human remains or associated funerary objects, it could also have been subject to the provisions of NAGPRA, and Tribal consultation would have been conducted per NAGPRA.

No build alternative was anticipated to disturb burials/burial sites in Berners Bay; therefore, no site-specific mitigation was proposed. However, as stated in Section 4.8.3 of the Draft SEIS, if a previously unknown cultural resource or burial site/human remains had been discovered during construction, work in the vicinity of the discovery would have halted until the discovery was evaluated and appropriate consultation, including with Tribes, would have been conducted consistent with Section 106 of the National Historic Preservation Act.

As a result of FHWA and DOT&PF's meetings on February 25, 2016, with Sealaska Corporation, Sealaska Heritage, DIA, Goldbelt Corporation, and the SHPO, it was noted that monitoring in specific areas may have been warranted if a build alternative had been approved. As previously mentioned, the Final SEIS identifies Alternative 1 – No Action as the preferred alternative.

Sincerely,

Andrea Cadiente-Laiti
Tribal Administrator

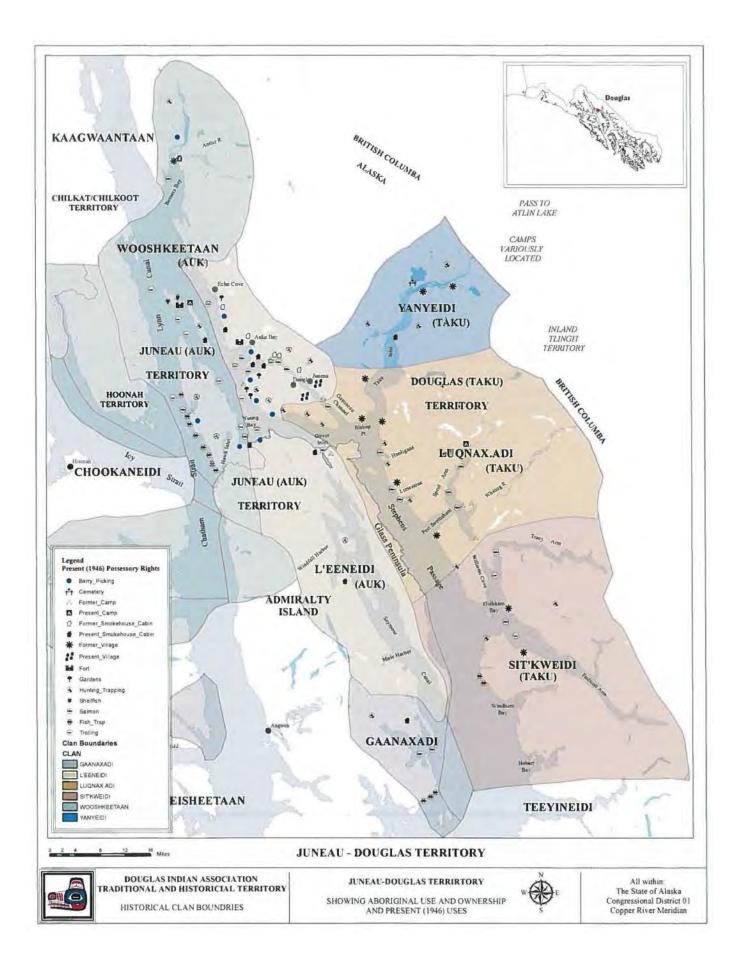
cc: DIA Tribal Council
Goldbelt Incorporated

Goldbelt Heritage Foundation

24

Sealaska Corporation U.S. Forest Service

Alaska State Historic Preservation Office



Alaska Heritage Resources Survey

Alaska Office of History and Archaeology

For information contact the Alaska Office of History and Archaeology at (907) 269-8721

Compiled: Wed Oct 08 09:26:30 AKDT 2014

This document contains restricted information. Unauthorized circulation is prohibited by law!

AHRS Number:

JUN-00062

Mapsheet(s):

JUNEAU C-3 (JUNC3)

Acreage:

Date Issued: 01-27-1978

MTRS(s):

C036S063E20

Resource Shape:

Point

Location Approximate:

No

Point Representation:

Lat: 58.73807545, Long: -134.93206686

Assigned To:

USFS

Site Name(s):

BERNERS BAY VILLAGE AND PETROGLYPHS

BERNERS BAY PETROGLYPH SITE

Alternate Name(s):

Associations:

Informal Association(s):

Formal Association(s):

Site Description:

[AHRS] Reported by informants as a permanent village site with winter houses, burials, and petroglyphs. Sealaska investigators located two fence-type grave sites destroyed by vandals on the western cliff above the beach. At the SE end of the site was a large cone or wedge-shaped piece of marble with petroglyphs of concentric rings, faces, eyes, orcas, halibut, a large bird, a wolf, and a bear-like image. Conflict exists between 1979 survey conducted by CPSU and 1982 USFS survey. CPSU investigators reported a 2.6m x 3.3m house pit, one grave house, two graves with balustrades, a petroglyph boulder, and modern camp remains. "Possible" house depession found in 1979 could not be substaniated by subsurface testing in 1982. Investigations in 1994 relocated the burials and petroglyph boulder and identified 3 additional boulders. The total number of petroglyphs at the site is 15. No evidence of middens or depressions were found. [see also JUN-040, Stevens reported a site with similar origin and characteristics, probably the same site.] [DOE] Site contains figure and geometric designs pecked on a large marble boulder above mean high tide line.

Site Significance:

[DOE] Site is said to embody symbolic value in the traditions of the Auke Tlingit. The killer whale is a principal crest for the Wuckitan Clan and the petroglyphs represent their claim to the bay. [AHRS] Reportedly a permanent village site with petroglyphs. May provide information on habitation and settlement patterns while showing past use of the area. Petroglyphs may have ceremonial, economic, or artistic meaning.

Location:

This site extends for approx 0.25 mi. along the NE shore of Berners Bay, at the mouth of the stream N of Sawmill Creek, approx 57km NNW of Juneau, SE Alaska.

AHRS References:

ADP 3330-6 file (Berners Bay Petroglyph site)

CRC/Yarborough 9/28/94 (see ADP 3330-6 Swmll Crk Shll Mddn)

CRC (Yarborough, M.) 08/11/96 (AS of Proposed Rd., Echo Cove)

Peck, C. 1990 (Interviews of Cecelia Kunz and Rosa Miller)

City and Borough of Juneau 1986

ANCSA 14(h)(1) Site Survey Form (Separate forms for each individual number)

Sealaska 1975 Native Cemetery & Historic Sites of Southeast Alaska

Document Repository References: 4

(09/01/2004) USFS



Noted historic debris on the north side of Fish Creek – west of (above) Douglas Highway as well as an historic trail. (Neither of these have been documented.)

Paleo-Shoreline Outcomes

Inventories with Negative results:

No paleoshoreline exposures along Blueberry Hill access trail between parking area and the Treadwell Ditch

No paleoshoreline exposures along 3 small drainages north of 9 Mile Creek west of (above) Douglas Highway. Inventories done to approximately 50m. Also – none noted along Fish Creek between approx. 40m and the highway.

An effort to id paleoshoreline exposures on 9 Mile creek above Douglas Highway produced negative results, but we aborted the effort early due to the amount of private property we seemed to be trespassing on.

Positive Paleoshoreline ID s and Test Pits

In collecting samples we kept careful vertical control and although many samples were collected in "bulk" we were careful to record depth range where collection occurred. At some locations, shell was plentiful enough that

UAS Campus TP#1 (Cabin Site) - No GM encountered.

UAS Campus TP #2 (Creek) - limited GM

UAS Campus TP 3# (Lake) No GM

UAS Campus Culvert Exposure - Great Exposure - sample not yet collected.

9 Mile TP 1 - No GM encountered

9 Mile TP 2 - GM encountered, bulk sample collected 8-9m

9 Mile TP 3 - Tributary - GM Encountered, bulk sample collected (13 m)

9 Mile TP #4 – Estuary – GM Encountered. Intertidal – following GM down gradient. Elevation uncertain 6-7m?

Peterson Creek #1 – (17 m north of pedestrian bridge) River bottom bulk "grab" sample. Water 2.5' deep.

Peterson Creek Exposure - upriver. Noted by Dan M and B. Deasis. No sample collected.

Treadwell 2nd Glory Hole TPI - bulk sample collected. Surface grab sample also collected.

Heritage Program UAS/DIA Collaborative Project: Cultural Site Monitoring in Berners Bay (Week 1) and Paleoshoreline Research and Sampling in Juneau Area (Week 2)

May 6 through May 17, 2013

Preliminary Project Summary

What went well

Provided a unique opportunity for 8 UAS students to participate in a direct way with an agency driven effort to monitor archeological sites and a fantastic opportunity for Eric Morrison to get out to Berner's Bay petroglyph site. Three students were of Tlingit heritage — one directly affiliated with Berners Bay. She was able to carry out her duty and privilege of acknowledging and thanking her ancestors, including the bears, the land and the trees, in a nurturing supportive collegial atmosphere. Her opposite, proided balance.

The same cadre of participants (with the exception of Eric Morrison and the switch out of one student) were able to participate in a full week of research into the question of the ages of LGM/early Holocene shorelines in southeast Alaska.

Boat support for 2 days in Berners with awesome help from Matt Thompson.

Monitored Sites and Other Heritage Program Outcomes

JUN 062 – Berners Bay Petroglyphs. We identified the four known petroglyph rocks and observed that on at least one, there are more petroglyphs than have been recorded to date. Students completed a partial inventory of timber extraction related debris at the site and Eric was on hand to make a visual assessment. He also observed the modern campsite.

JUN___ - Echo Cove Cabin - This site was monitored by a subset of students as a fill in activity when our departure from Echo Cove due to the failed William Henry Repeater.

JUN-673 - Sawmill Creek Shell Midden

JUN-674 - Sawmill Creek Cabin - interestingly we found the site, but no cabin remnants.

JUN - 675 - Sawmill Creek Sawmill

JUN - 676 - Sawmill Creek Shipway

Identified 2 CMTs and fully documented one during transit from outer beach "across" landform (peninsula) west of Sawmill Creek to the Sawmill area sites. Are merits much more intense archeological survey.

Noted a possibly historic cabin (partially intact) in the woods just off the south end of the parking lot at the Blueberry Hills Treadwell Ditch Trail access route. (I don't believe that this cabin has been documented. It's age is unknown.

Auk Bay Elem School TP 1 - (small creek) bulk sample collected.

Auk Bay Elem School TP2 -(muskeg) 2 bulk samples collected. At different depths.

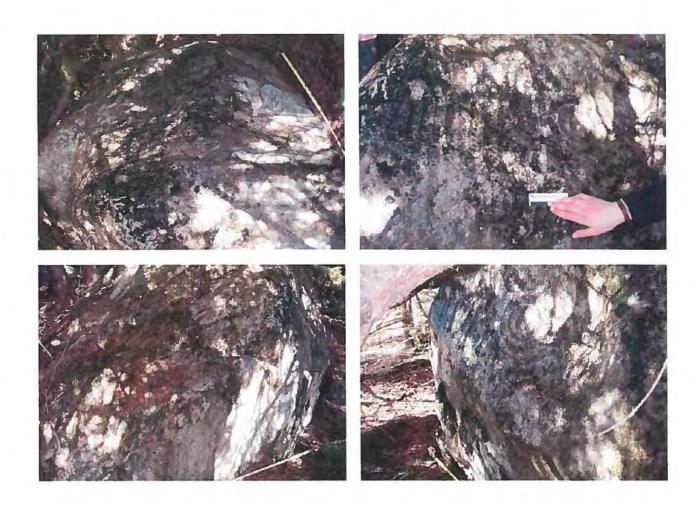
Recommendations:

- Earlier, detailed and realistic collaboratively reached plans that mesh with the goals of the program providing the funding.
 - O Dan's course description led students to believe they'd be on an extended field trip to Berners Bay – with travel being by kayak or skiff. This may have been possible, but could not have come to fruition the way Myra had imagined. Full time boat support would have been absolutely essential. Budgeted time for pulling together logistics like boat, food, gear etc would have had to have been increased considerably. Planning that the FS archeologist could "multi-task" – being the only FS sanctioned small boat operator, the only FS sanctioned riffle bearer etc – was not realistic.
 - Eric expected that he would emerge from the trip with an inventory of all the "garbage" at the Petroglyph site and that we'd complete an inventory for archeological sites on the east shore of Berner's Bay.
- Clarity regarding who/which organization was driving the program.
- Early clearly assigned responsibilities for each organizational representative.
 - I'd been told that FSL folks would take the lead for the paeloshoreline work. When
 meeting with them one week prior to the project, they revealed to me they'd made no
 such commitment.
- An agreement structure other than volunteer agreements would be much more effective. FS project leader (myself) became de-facto supervisor for entire crew (7 students, one UAS professor, and DIA's Environmental Planner). In that role, I had to be with them in the field pretty much the whole time and I had to ensure that they complied with every safety standard we'd expect of employees. Just the supervision, coordination side of things was complex. Pulling together and tracking gear (radios, probes, helmets) daily was work in itself. The responsibility for leading the archeological monitor effort and documentation was another layer.
- Baitchtal had intended to fund me to learn the paleoshoreline research methodology and gain experience. Instead, I was expected to provide expertise and leadership for students eager to learn. It was too early in my learning curve to push me into the role of an "expert."
- Volunteers including students are never free. Added pressures come with students as they
 expect (and have a right to expect) to have a quality learning experience.

Burners Bay UAS and DIA collaboration survey project, May 6 through May 17, 2013





















Gilliam, Myra -FS

From: John Hudson <odonatak@gmail.com>
Sent: Tuesday, October 07, 2014 8:11 PM

To: Cole, Forrest -FS
Cc: Gilliam, Myra -FS

Subject: Human Jawbone found in Berners Bay

Attachments: DSCN6873.JPG

Dear Mr. Cole,

Last July while camping on a beach in Berners Bay with a group of friends, someone in our party found a human jawbone near the high tide line (see photo attached). The bone was turned over to the state troopers and it's my understanding they passed it on to the state medical examiner who determined that it belonged to an "ancient" native person.

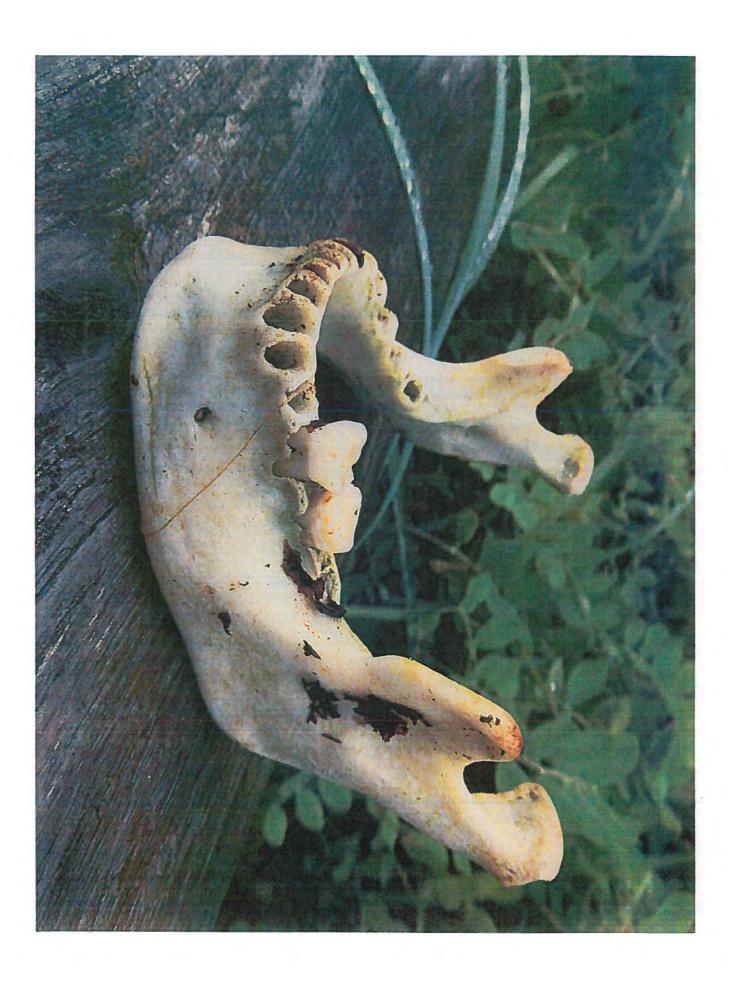
I suspect that the bone may have been eroded from a nearby stream bank on Forest Service land, transported to the beach by the stream, and then was washed up by the surf.

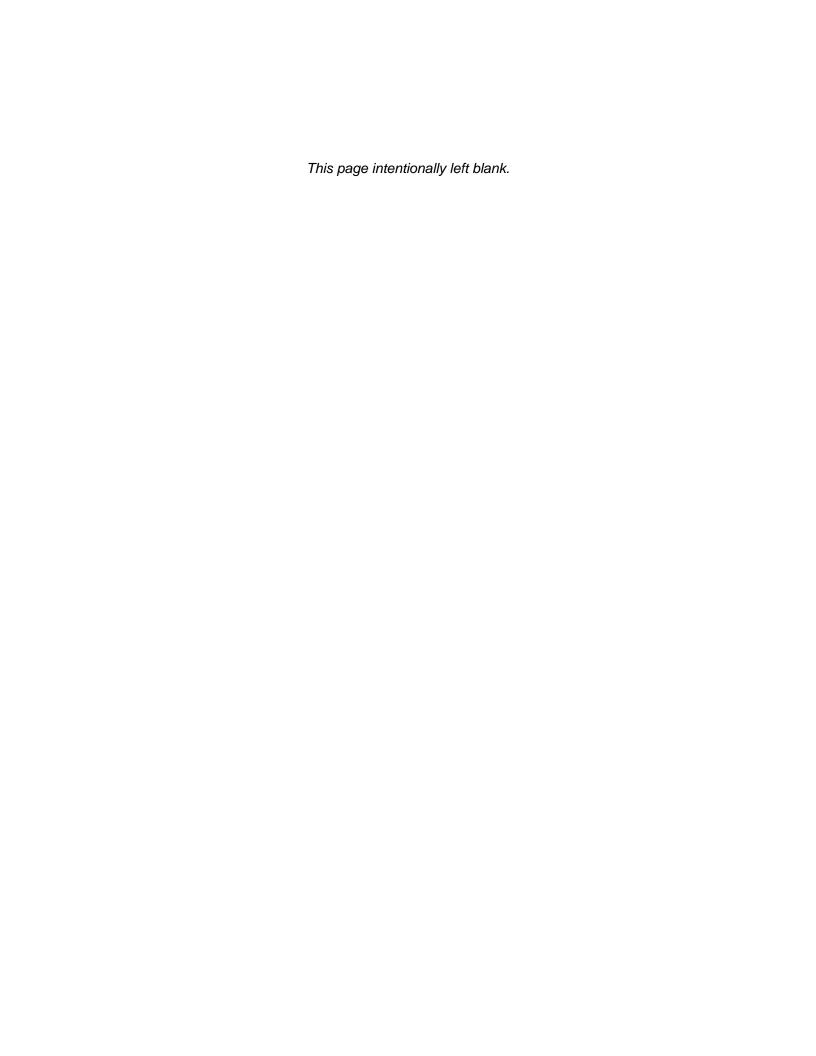
I wanted to make you aware of this find in case there is an interest in searching for other human remains in this area. The bone was found at:

58.7384, -134.9341. There are numerous petroglyphs near on this beach.

Thanks for looking into this matter.

John Hudson Juneau 790-2227







November 25, 2014

Ms. Deborah Holman, Administrative Coordinator ADOT&PF, Southeast Region Juneau Access Improvements Project SEIS P.O. Box 112506 Juneau, AK 99811-2506

RE: Juneau Access Improvements, Project #71100

Draft Supplemental Environmental Impact Statement (SEIS)

Dear Ms. Holman:

Sealaska Corporation is writing in response to the Draft Supplemental Environmental Impact Statement (SEIS) issued by the Alaska Department of Transportation and Public Facilities (ADOT/PF) in September 2014 on the proposed Juneau Access Improvements, Project #71100. Sealaska has previously gone on record supporting DEIS Alternative 2, East Lynn Canal Highway with Katzehin Terminal. This alternative, now known as Alternative 2B, in the Draft SEIS, best meets the needs of providing access to Juneau while meeting the concerns of the communities of Skagway and Haines.

As also stated in earlier correspondence, Sealaska is aware of several historical sites, one owned by Sealaska, that are within the vicinity of the Alternative 2B right-of-way road design. The Sealaska site is a shamanic site that warrants a broad buffer zone. Sites such as this are considered to be "shamanic landscapes" in recognition of their association with ongoing traditional cultural values, beliefs and practices of Tlingit Indians, and due to the fact that their geographic boundary extends over a larger area than the site of the burial or grave house itself. Sealaska would like to further consult with the ADOT/PF to ensure these sites are not impacted by the project or in the future by proximity to the road, but we would prefer not to identify these sites in a public comment document. Therefore, in-person consultation is requested. Sealaska will also expect to be notified of any potential or realized impacts to Native historical properties, known or newly revealed, as this project develops.

Sealaska is also concerned about the impact on the fisheries resources, in particular subsistence fisheries resources that are important to our Native traditional way of life. We would like to discuss this issue at the in-person consultation meeting, as well, to provide more details regarding those fisheries resources that are important for traditional subsistence uses.

We greatly appreciate any consideration that you can give to these concerns and to the in-person consultation meeting request. Please work through our Lands Manager, Michele Metz, at 907.586.9270 or michele.metz@sealaska.com to follow up on our request for consultation.

Sincerely,

SEALASKA CORPORATION

Jaeleen J. Araujo

VP General Counsel & Corporate Secretary

cc: Rosita Worl

President, Sealaska Heritage Institute

Brian Kleinhenz

Sealaska Natural Resources Manager



Department of Transportation and Public Facilities

Statewide Design & Engineering Services

3132 Channel Drive Juneau, Alaska 99811-2500 Main: 907.465.1828 Fax: 907.465.2016

January 15, 2016

Michele Metz Lands Manager Sealaska Corporation One Sealaska Plaza, Suite 400 Juneau AK, 99801

Re: Juneau Access Improvements
Draft Supplemental Environmental Impact Statement (SEIS)
Project #711000

Dear Ms. Metz:

Thank you for your review of the Draft Supplemental Environmental Impact Statement (SEIS) for the Juneau Access Improvements project. The Alaska Department of Transportation and Public Facilities (DOT&PF) in coordination with the Federal Highway Administration (FHWA) circulated the Draft SEIS for public review on September 15, 2014. I apologize for this late response to your November 25, 2014 letter. We are currently in the process of responding to comments. The Final SEIS and Record of Decision cannot be prepared until we complete this effort, since responses to all comments received will be included in the Final SEIS.

You expressed concerns that Alternative 2B (East Lynn Canal Highway to Katzehin, Shuttles to Haines and Skagway) right-of-way road design was located near and may impact known sites of historic, traditional, and cultural importance. Concern was also noted for the impacts to fisheries resources. While Alternative 2B was identified in the Draft SEIS as the preferred alternative, all alternatives are still under consideration.

The FHWA and DOT&PF appreciate your concerns and the sensitivity of these cultural resources. We will be contacting you in the coming weeks to schedule a meeting to discuss your concerns and provide a status update.

Sincerely,

Gary Hogins Project Manager

Electronic cc: Jaeleen J. Araujo, Sealaska Corporation, VP General Counsel and Corporate Secretary

Rosita Worl, Sealaska Heritage Institute, President

Brian Kleinhenz, Sealaska Corporation, Natural Resource Manager

Tim Haugh, Federal Highway Administration, Environmental Program Manager

Laurie Mulcahy, DOT&PF Statewide Environmental Office, Cultural Resources Manager Judith E. Bittner, State Historic Preservation Office, State Historic Preservation Officer



Department of Transportation and Public Facilities

SOUTHCOAST REGION PRECONSTRUCTION DESIGN & ENGINEERING SERVICES

6860 Glacier Highway PO Box 112506 Juneau, Alaska 99811-2506 Main: 907,465,4444 Toll free: 800-575-4540 Fax: 907,465,4414

TTY-DDD 800-770-8973

July 9, 2018

Jaeleen J. Kookesh Sealaska Corporation One Sealaska Plaza, Suite 400 Juneau, Alaska 99801

Dear Ms. Kookesh:

Thank you for your letter, dated November 25, 2014, with your comments on the Juneau Access Improvements (JAI) Project Draft Supplemental Environmental Impact Statement (SEIS). We appreciate the participation of Sealaska Corporation in the JAI Project.

We have reviewed your letter and have made appropriate revisions to the Final SEIS. Our attached responses have been embedded in a reprint of your letter.

We anticipate releasing a combined Final SEIS/Record of Decision very soon. FHWA has identified Alternative 1 – No Action as the Preferred Alternative in the Final SEIS. Governor Walker announced on December 15, 2017, that the "No Build Alternative" is the State's Preferred Alternative. Please see Section 2.5 of the Final SEIS for further discussion.

Please do not hesitate to contact me at (907) 465-1828 if you have any additional questions or concerns.

Sincerely,

Southcoast Region

Preliminary Design and Environmental

Group Chief

Enclosures:

Responses to Sealaska Corporation Comments on the JAI Project Draft SEIS (November 25, 2014)

Electronic cc:

Tim Haugh, FHWA, Environmental Program Manager



November 25, 2014

Ms. Deborah Holman, Administrative Coordinator ADOT&PF, Southeast Region Juneau Access Improvements Project SEIS P.O. Box 112506 Juneau, AK 99811-2506

RE: Juneau Access Improvements, Project #71100

Draft Supplemental Environmental Impact Statement (SEIS)

Dear Ms. Holman:

Sealaska Corporation is writing in response to the Draft Supplemental Environmental Impact Statement (SEIS) issued by the Alaska Department of Transportation and Public Facilities (ADOT/PF) in September 2014 on the proposed Juneau Access Improvements, Project #71100. Sealaska has previously gone on record supporting DEIS Alternative 2, East Lynn Canal Highway with Katzehin Terminal. This alternative, now known as Alternative 2B, in the Draft SEIS, best meets the needs of providing access to Juneau while meeting the concerns of the communities of Skagway and Haines.

As also stated in earlier correspondence, Sealaska is aware of several historical sites, one owned by Sealaska, that are within the vicinity of the Alternative 2B right-of-way road design. The Sealaska site is a shamanic site that warrants a broad buffer zone. Sites such as this are considered to be "shamanic landscapes" in recognition of their association with ongoing traditional cultural values, beliefs and practices of Tlingit Indians, and due to the fact that their geographic boundary extends over a larger area than the site of the burial or grave house itself. Sealaska would like to further consult with the ADOT/PF to ensure these sites are not impacted by the project or in the future by proximity to the road, but we would prefer not to identify these sites in a public comment document. Therefore, in-person consultation is requested. Sealaska will also expect to be notified of any potential or realized impacts to Native historical properties, known or newly revealed, as this project develops.

RESPONSE: Thank you for providing information regarding cultural resources of concern to Sealaska. To protect sensitive site information, the data and analyses contained in these

documents were only summarized in the Draft SEIS, although all of the information therein was used in making determinations of eligibility and findings of effect. For example, the locations of sensitive archaeological and burial sites was not disclosed in the Draft SEIS. It is understandable that a review of the Draft SEIS could lead to confusion in regards to the summary of this site information appearing not to include all site locations.

Identification of prehistoric and historic resources and traditional cultural properties in the SEIS is based on record searches, surveys within the study area, and consultation with Native Tribes and organizations, U.S. Forest Service (USFS), and the Alaska State Historic Preservation Officer (SHPO). As reported in Section 3.1.3 of the Final Supplemental Environmental Impact Statement (SEIS), the Alaska Department of Transportation and Public Facilities (DOT&PF) and Federal Highway Administration (FHWA) understand that the project is located in an area that has been identified as culturally significant to Sealaska. The Final SEIS identifies Alternative 1 – No Action as the preferred alternative. As reported in Section 4.3.4, DOT&PF and FHWA understand that Alternative 2B would have been located near known sites of historic, traditional, and cultural importance to Sealaska. Alternative 2B was developed to avoid cultural resources of potential concern. The sites referenced in the letter (above) are not located within the Area of Potential Effect (APE) for Alternative 2B (see Section 4.3.4 of the Final SEIS). Based on research, consultation, and field investigations, FHWA determined Alternative 2B would have no adverse effect on historic properties, and SHPO concurred with that determination (see Section 4.3.4).

FHWA and DOT&PF, along with the SHPO, had meetings on February 25, 2016, with staff from Sealaska Corporation, Sealaska Heritage Institute, Douglas Indian Association, and Goldbelt Corporation to address the concerns expressed in comments on the Draft SEIS. As was discussed during those meetings, the Alaska Heritage Resources Survey (AHRS) database was reviewed for the SEIS. No previously unidentified sites of cultural or historic importance were identified during the February 25, 2016, meeting discussions. Upon conclusion of these meetings, FHWA maintains that their determination of no adverse effect on any cultural resources and historic properties is valid.

Sealaska is also concerned about the impact on the fisheries resources, in particular subsistence fisheries resources that are important to our Native traditional way of life. We would like to discuss this issue at the in-person consultation meeting, as well, to provide more details regarding those fisheries resources that are important for traditional subsistence uses.

RESPONSE: As discussed during the February 25, 2016, meeting, the Draft SEIS relied on the latest available information and data. Reporting of subsistence use in the Draft and Final SEIS is based on the USFS Tongass Resource Use Cooperative Survey (1988); the Alaska Department of Fish and Game (ADF&G), Division of Subsistence, *Subsistence Resource Use Patterns in Southeast Alaska: Summaries of 30 Communities* (1994); and Scoping comments. Existing levels of subsistence harvest were discussed in Section 3.1.6 of the Draft SEIS and Section 3.2.4 in Appendix DD, *Land Use Technical Report*, of the Draft SEIS.

Customary and traditional use of herring was noted in Section 3.1.6 of the Draft SEIS and Section 3.2.4 of Appendix DD. Except where specifically called out, herring was included on the subsistence figures and in the text under the general category of finfish.

Project impacts to subsistence resources were discussed in Section 4.2B.6, 4.3.6, 4.4.6, 4.5.6, and 4.6.6 of the Draft SEIS and Sections 4.1.4.2, 4.1.5.2, and 4.1.6.2 of Appendix DD. FHWA has determined that none of the reasonable alternatives would significantly restrict subsistence uses.

We greatly appreciate any consideration that you can give to these concerns and to the in-person consultation meeting request. Please work through our Lands Manager, Michele Metz, at 907.586.9270 or michele.metz@sealaska.com to follow up on our request for consultation.

Sincerely,

SEALASKA CORPORATION

Jaeleen J. Araujo VP General Counsel & Corporate Secretary

cc: Rosita Worl President, Sealaska Heritage Institute Brian Kleinhenz Sealaska Natural Resources Manager

