Record of Decision
Juneau Access Improvements Project
State Project Number: 71100
Federal Project Number: STP-000S(131)

I. Decision

This Record of Decision (ROD) was developed pursuant to 40 CFR 1505.2 and 23 CFR 771.127. The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), has identified a need to improve surface transportation to and from Juneau within the Lynn Canal corridor in Southeast Alaska. The purpose of this improvement is to:

- Provide the capacity to meet transportation demand in the corridor
- Provide flexibility and improve opportunity for travel
- Reduce travel times between the Lynn Canal communities of Juneau, Haines, and Skagway
- Reduce state costs for transportation in the corridor
- Reduce user costs for transportation in the corridor

The project purpose and need are fully described in Chapter 1 of the *Juneau Access Improvements Final Environmental Impact Statement* (Final EIS).

The selected alternative for the Juneau Access Improvements Project is Alternative 2B. This alternative consists of a 50.8-mile two-lane highway from the end of Glacier Highway at Echo Cove to a point north of the Katzehin River delta. A new ferry terminal at the end of the new highway would provide shuttle ferry service to Haines and Skagway using a three-vessel system. Alaska Marine Highway System (AMHS) service would end at Auke Bay and the M/V *Fairweather*, a fast vehicle ferry (FVF) would no longer operate in Lynn Canal.

In compliance with the National Environmental Policy Act (NEPA) of 1969 (as amended), 40 CFR Parts 1500-1508, and FHWA regulations (23 CFR Parts 771, 772, and 777), a Draft EIS for the Juneau Access Improvements Project was approved on June 23, 1997, and circulated for comment until December 15, 1997. An environmental reevaluation of this document was prepared in January 2003; DOT&PF and FHWA determined that a Supplemental Draft EIS was required because of modifications in project alternatives and the need for new environmental studies. Public scoping meetings for the Supplemental Draft EIS were held in Juneau, Haines, and Skagway from April 8 through 10, 2003. A Supplemental Draft EIS was approved on January 11, 2005, and circulated for comment until March 21, 2005. DOT&PF and FHWA held Public Hearing sessions on February 16 and 17, 2005 in Juneau, February 23, 2005 in Haines, and February 24, 2005 in Skagway.

A Final EIS that addressed all substantive comments received on the Supplemental Draft EIS was approved on January 18, 2006 and is incorporated by reference here. A notice of its availability was published in the *Federal Register* on February 10, 2006. The Final EIS identified Alternative 2B as the Preferred Alternative and was distributed to the public and federal and state agencies beginning on January 23, 2006. Substantive comments received on the Final EIS and responses are provided in the Appendix to this ROD. The Appendix also contains a summary of other comments received. For more detailed information on topics presented in this ROD, please refer to the Final EIS.

Numerous issues were identified by the public and responsible agencies during scoping for and review of the 1997 Draft EIS and the 2005 Supplemental Draft EIS. The primary concerns that have been voiced about the project include:

- Impacts to marine and terrestrial wildlife within the Lynn Canal region and particularly in Berners Bay.
- Impacts to quality of life in Lynn Canal communities caused by improved access.
- Impacts of avalanche risk and poor weather conditions on the safety and reliability of the East Lynn Canal Highway.
- Impacts to cruise ship schedules and visits, and potential negative economic effects on Skagway due to reduced numbers of port calls.
- Increased transportation costs for Haines residents resulting from increased reliance on passenger vehicles to travel to and from Juneau.

All of these concerns were addressed in the Final EIS. All reasonable alternatives under consideration (including the No Action Alternative) have been developed to a comparable level of detail in the Final EIS, and their comparative merits have been evaluated. All of the adverse impacts were weighed against the project's projected beneficial impacts, particularly those related to meeting the purpose and need for improved surface transportation to and from Juneau. Based on analysis of alternatives presented in the Final EIS, public and agency input, and the beneficial and adverse impacts on the natural, social, and economic environments, DOT&PF and FHWA have selected Alternative 2B (see Section 2.3.2 of the Final EIS) for design and construction. This decision is based on the following considerations (see Section II of this ROD for more detail on all of the alternatives considered in the Final EIS).

II. Basis for Decision

Improved Capacity: Providing adequate capacity is a fundamental transportation responsibility. One of FHWA's most important considerations regarding an alternative's ability to meet the purpose and need for this project is the capacity provided combined with a reasonable expectation that the capacity can and will be utilized. All of the reasonable alternatives involve ferry links. The alternative with the shortest ferry links can provide the greatest capacity with the lowest user costs. Low user costs, when combined with reasonable travel times and frequent trip opportunity, increase the likelihood the capacity provided would be used. Extending Glacier Highway 50.8 miles to a Katzehin terminal, with a 7 mile shuttle run to Haines and a 15 mile shuttle run to Skagway, will increase summer capacity in Lynn Canal to 1,276 vehicles per day in 2038. Alternative 2B will generate and accommodate an estimated 670 annual Average Daily Traffic (ADT) in 2038. This would be approximately 72 percent of the forecast unconstrained 2038 demand in the corridor (930 annual ADT).

Improved Travel Flexibility and Opportunity: Lynn Canal summer travel demand is approximately four times greater than winter demand. Alternative 2B will provide a substantial improvement in summer travel flexibility and opportunity in the Lynn Canal corridor. Currently there are approximately ten trips per week to both Haines and Skagway in summer. Under the No Action Alternative this is expected to drop to seven or eight as two mainline vessels are phased out. Travel opportunity and flexibility under Alternative 2B will be determined by shuttle ferry frequency from the new terminal at Katzehin. In summer there will be eight roundtrips per day to Haines and six roundtrips per day to Skagway.

In winter, trip frequency will be affected by both shuttle ferry schedules and highway avalanche control closures. The winter shuttle ferry service will be scheduled for six roundtrips per day to Haines and four roundtrips per day to Skagway. In winter, the highway for Alternative 2B may

be closed an average of 16.5 times per year for avalanche control with a total projected closure time of about 34 days per year. Service to and from Juneau in the Lynn Canal corridor during road closures will be by one or more of the shuttle ferries that will be part of Alternative 2B. Generally, a shuttle ferry will be used for this purpose if the road were closed for more than one day. The larger of the two winter shuttles proposed for this alternative could transport 106 vehicles/day. The smaller could transport 68 vehicles per day. Together these ferries could transport 174 vehicles per day. (These ferries could transport twice as many vehicles per day, or have a shorter workday, if Coeur Alaska's planned Slate Cove dock is available in winter.) Although highway closures will intermittently reduce winter trip frequency, a large part of the projected winter daily demand (180 ADT initially, 310 in 30 years) could still be met.

Reduced Travel Time: Travel time between Lynn Canal communities under Alternative 2B would be the shortest of all the reasonable alternatives considered for the project including the No Action Alternative. Prior to introduction of the M/V *Fairweather* in 2004, trip times in Lynn Canal were quite long: about seven hours to Haines and nine hours to Skagway. The M/V *Fairweather* reduced travel times to 3.5 hours to Haines and 3.8 hours to Skagway, including the minimum required check-in time. The M/V *Fairweather* does not run in Lynn Canal every day; in summer slower mainline vessels provide approximately one half of total capacity. In winter mainline vessels provide two thirds of the total capacity. Under Alternative 2B it will take about 2.5 hours to travel from Auke Bay to Haines and 3 hours to travel from Auke Bay to Skagway, based on highway travel time and loading, transit, and unloading time on a shuttle ferry. Travel time will be longer if a traveler has to wait for the next ferry, but will still be shorter than the average No Action Alternative travel time.

Reduced User Cost: Reducing user cost is a major goal of this project. The current transportation system in Lynn Canal, although part of the National Highway System (NHS), is essentially a very expensive toll highway. As explained above under Improved Capacity, user costs are important in terms of meeting demand and utilizing capacity provided. The current user costs in Lynn Canal are much higher than most Alaskans incur for surface travel over similar distances. Alternative 2B will result in the lowest cost to the traveler of any project alternative, a substantial reduction compared to the No Action Alternative. Total cost of travel (including vehicle ownership and maintenance) for a family of four in a 19-foot vehicle between Juneau and Haines or Skagway will be about $60 and $77, respectively, or about 33 percent of the cost of travel on a mainline ferry under the No Action Alternative. For many travelers, the out-of-pocket costs of a trip are more important than costs that include long-term vehicle ownership costs. Out-of-pocket costs for a family of four will be about $34 to Haines and $51 to Skagway, approximately 80 percent less than out-of-pocket costs under the No Action Alternative. These cost differences are even greater when compared to travel on an FVF, which costs about 10 percent more than travel on a conventional ferry.

Reduced State Cost: State costs in Lynn Canal are very high compared to the volume of traffic accommodated, and account for the high user fees charged. Currently the AMHS transports an average of 29,500 vehicles a year in the corridor, at an operating cost of $11.7 million in 2004. The net annual operating cost, which includes revenues but no capital costs, was $5.7 million. Under Alternative 2B the total operation and maintenance cost will be reduced to $9.0 million per year (in 2004 dollars); the net cost after projected revenue will be $4.5 million. The No Action Alternative, a lower level of service than currently provided, would have a total annual operational cost of $10.2 million. Net cost after revenue would be $3.3 million. Essentially, the No Action Alternative would reduce state cost and level of service, while maintaining the high user costs. Alternative 2B will reduce net state costs, while improving service, including increased capacity, greater trip frequency, and greatly reduced user costs.

Another way to evaluate state cost in the corridor is to look at all state costs, including capital costs, for a 35-year analysis period (5 years of construction and 30 years of operation) in relation to the number of vehicles transported. Based on the current funding proposal, Alternative 2B would have a net state cost over 35 years of $122 million, approximately double that of the No Action Alternative. (The higher net cost of Alternative 2B is due primarily to the state match required for federal construction funds, and the State's decision to use $57.5 million in state funds to supplement federal funds rather than using the maximum possible federal assistance. Had the State opted to fund the project with federal funds to the maximum extent, state net costs would have been $88 million as report in the Final EIS.) Alternative 2B would be used by almost five times as many vehicles as the No Action Alternative. Because of this higher traffic volume, Alternative 2B would have a net state cost per vehicle trip of $21, much lower than the No Action Alternative cost of $45 per vehicle trip.

Economic Efficiency: FHWA has based its decision primarily on the ability of Alternative 2B to meet the purpose and need elements as described above. Although lower emphasis was placed on the User Benefit Analysis and Life Cycle Cost Analysis, FHWA did consider that these analyses add further support to the selection of Alternative 2B.

User Benefit Analysis: One economic measure of an alternative is its net present value, which is the total of the user benefits minus the net costs of an alternative over and above the net cost of the No Action Alternative for a given period of time. Based on total user costs, travel time cost, and the projected travel in the Lynn Canal corridor during the 35-year analysis period, Alternative 2B will provide $226 million in benefits to travelers relative to the No Action Alternative. After subtracting the net incremental 35-year project costs of $156 million, the net present value of Alternative 2B is approximately $70 million. Other reasonable alternatives considered for the project have a net present value less than half that of Alternative 2B. Three of the marine alternatives (Alternatives 4A through 4C described in Section II of the ROD) would have higher total project costs than the user benefits they would provide, resulting in a negative net present value.

Life Cycle Cost: The analysis of costs used to evaluate purpose and need elements focuses on state costs and users costs. The net present value analysis evaluates user benefits, which involves placing a value on travelers' time, both during travel and while waiting to travel. The life cycle cost analysis prepared for the project is based on all costs regardless of who pays, and only evaluates costs; it does not address benefits. The No Action Alternative has an estimated life cycle (35 years) cost of $267 million (discounted to 2004 dollars), and would transport approximately 1.4 million vehicles during the analysis period at a cost of about $191 per vehicle. Alternative 2B has an estimated life cycle (5 years of construction and 30 years of operation) cost of $352 million (discounted to 2004 dollars), and will transport approximately 5.9 million vehicles at a cost of about $60 per vehicle. As with the state cost per vehicle, Alternative 2B has the lowest total cost per vehicle of any of the reasonable alternatives.

III. Alternatives Considered

The Juneau Access Improvements Project EIS evaluated ways to improve surface transportation to and from Juneau within Lynn Canal. Currently, access to Juneau is only possible by air and water.

Consistent with NEPA, a full range of reasonable alternatives to address the purpose of and need for the Juneau Access Improvements Project was identified and evaluated. Based on reconnaissance engineering studies, including alignment studies and a user benefit analysis, the 1997 Draft EIS evaluated six reasonable alternatives: a No Build alternative, one highway alternative, and four marine alternatives.

Nineteen alternatives were screened to determine the range of reasonable alternatives for the Supplemental Draft EIS. These alternatives were screened using four criteria: cost/technical feasibility and common sense, appropriateness and unnecessary variations, purpose and need, and environmental impacts. Alternatives that did not meet these criteria were eliminated from further consideration (see Sections 2.1 and 2.2 of the Final EIS for more information on screening and alternatives that were eliminated from further consideration). Based on this screening, ten reasonable alternatives were evaluated in the Supplemental Draft EIS: a No Action alternative, five primarily highway alternatives, and four primarily marine alternatives.

The Final EIS included seven reasonable alternatives. Three alternatives that included a highway into Skagway (Alternatives 2, 2A, and 2C) were dropped from consideration in the Final EIS after FHWA determined they would require Section 4(f) protected lands within the Skagway and White Pass District National Historic Landmark. The seven reasonable alternatives are summarized below. All of the build alternatives include one or more ferry links and all but two include one or more new sections of highway. For more information on the alternatives presented here and those dropped from further consideration, please refer to Chapter 2 of the Final EIS.

A. No Action Alternative

The No Action Alternative includes a continuation of mainline AMHS service in Lynn Canal as well as the operation of the fast vehicle ferry (FVF) M/V *Fairweather* between Auke Bay and Haines and Auke Bay and Skagway, albeit at a lower level of mainline service than is currently provided. The M/V *Aurora* would provide shuttle service between Haines and Skagway, beginning as early as 2007.

The No Action Alternative would result in no additional environmental impacts; however, it does not accomplish any of the elements of the project purpose and need. The No Action Alternative is expected to provide a maximum capacity of 167 vehicles per day in the Lynn Canal corridor. Forecast demand for the No Action Alternative is 130 annual ADT in 2038. Unconstrained travel demand in the Lynn Canal corridor is currently estimated to be approximately 500 annual ADT and is forecast to be 930 annual ADT by 2038. Therefore, the No Action Alternative would only accommodate about 14 percent of the forecast unconstrained demand in the corridor by 2038.

The No Action Alternative does not change the restrictions on travel opportunity and flexibility in the Lynn Canal corridor. In the summer, there would be seven to eight roundtrips per week between Auke Bay and Haines or Skagway. The opportunity to travel would decrease to five roundtrips per week between Auke Bay and Haines or Skagway in the winter.

Travel times between communities in Lynn Canal would remain unchanged from current conditions under the No Action Alternative. With a mainline ferry, travel times between Auke Bay and Haines or Skagway, including required check-in, would be 7.1 and 9.1 hours, respectively. Travel times between Auke Bay and Haines or Skagway on the M/V Fairweather would be 3.5 and 3.8 hours, respectively.

The life cycle cost of the No Action Alternative is estimated to be $267 million, and the net cost to the state over the 35-year study period is estimated to be about $61 million. Annual maintenance and operating costs are about $10.2 million. Because so few vehicles are projected to use the No Action Alternative, it has one of the highest state costs per vehicle ($45) of any of the project alternatives.

The low net cost to the state of the No Action Alternative would be the direct result of a low level of service and high out-of-pocket costs for travelers. The out-of-pocket costs for a family of four in a 19-foot vehicle would be approximately $237 (in 2004 dollars) between Juneau and Skagway and $180 between Juneau and Haines under the No Action Alternative traveling on a mainline vessel and about 10 percent more for travel on an FVF.

The No Action Alternative does not address the purpose and need for the project (other than reducing state costs by reducing overall service relative to current service) and was therefore not selected.

B. Alternative 2B (Selected Alternative): East Lynn Canal Highway to Katzehin with Shuttles to Haines and Skagway

This alternative will consist of a 50.8-mile long highway from the end of Glacier Highway at Echo Cove to a point north of the Katzehin River delta. A new ferry terminal will be constructed at the end of the new highway, with shuttle ferry service to both Skagway and Haines from the new terminal. The highway will have a 30-foot pavement width, with two 11-foot-wide vehicle lanes and 4-foot shoulders. The minimum design speed will be 40 miles per hour. The design will meet American Association of State Highway and Transportation Officials (AASHTO) standards for a rural arterial except for the 4-foot shoulder width, which will be an exception to the 6-foot AASHTO recommended width.

Under Alternative 2B, summer Haines to Skagway shuttle service will be provided, two new shuttle ferries will be constructed, and the M/V *Aurora* will be part of the three-vessel shuttle system. Upon completion of project construction, mainline ferry service will end at Auke Bay in Juneau and the M/V *Fairweather* will be redeployed.

Of the reasonable alternatives considered in the Final EIS, Alternative 2B best meets the purpose of and need for the project. Summer capacity will be increased to 1,180 vehicles per day initially, and 1,276 vehicles per day by 2038. In 2038 Alternative 2B will generate and accommodate a forecast demand of 670 annual ADT, which would be about 72 percent of the forecast unconstrained demand in the corridor for that year.

Travel opportunity and flexibility will be increased substantially, with Alternative 2B providing almost as many shuttle ferry roundtrips per day in the summer and winter as the number of roundtrips per week under the No Action Alternative. Travel time with Alternative 2B would be the shortest of all the build alternatives, making a typical trip between Juneau and Haines or Skagway about three times faster than on a mainline ferry and about an hour faster than on an FVF.

Over the 35-year construction and operating period, Alternative 2B would have a low net state cost per vehicle trip, approximately $21. At $9 million, Alternative 2B also would have the lowest total annual maintenance and operating costs of all the project alternatives. Based on estimated fares, Alternative 2B would have the lowest total cost to private vehicle travelers of any project alternative, about 33 percent of the cost of travel on a mainline ferry under the No Action Alternative and about 30 percent of the cost of travel on an FVF. (Total costs include fuel, ferry fares, and vehicle ownership costs.) The reduction in out-of pocket-costs (fuel and ferry fares) would be even greater. Out-of-pocket costs on Alternative 2B will be 17 to 22 percent of the No Action Alternative costs. The substantial user benefits of Alternative 2B compared to costs are demonstrated by the net present value of $70 million for this alternative. This is the highest net present value of any of the build alternatives.

Alternative 2B will result in the loss of approximately 70 acres of wetlands. All but about one acre of the wetlands impacted would be forested wetlands. This type of wetland is common in the Lynn Canal region. The largest area of wetland loss, 48 acres, will occur between Slate Creek and Sherman Point north of Berners Bay. Approximately 20 acres of forested wetlands and 1 acre of palustrine scrub-shrub wetlands will be filled in Berners Bay watersheds.

A total of approximately 36 acres of intertidal and subtidal marine habitat will be filled or dredged for construction of Alternative 2B. None of these impacts to Essential Fish Habitat (EFH) will be large enough to measurably affect fish and invertebrate populations in Lynn Canal.

Alternative 2B will result in the loss of approximately 428 acres of terrestrial habitat including 286 acres of old-growth forest, 128 acres of other forest, and 13 acres of open shrub and meadow. The loss from each vegetation type represents less than 1 percent of that type in the project study area. This loss will not adversely affect any rare or unique community types or any listed threatened or endangered or U.S. Forest Service (USFS) sensitive species.

The direct loss of wetland and terrestrial habitat associated with Alternative 2B will have a small effect on wildlife. However, habitat fragmentation caused by the presence of a highway, mortality from vehicle collisions, and the indirect impact of improved access for hunters and trappers resulting from Alternative 2B will have a larger impact on wildlife, particularly brown bear, moose, marten, and mountain goat.

The highway for Alternative 2B will be located within 0.5 mile of 92 bald eagle nests and within 330 feet of 49 of these nests. No nest trees will be removed, and disturbance of active nests during construction will be avoided. Use of the highway will create a persistent source of noise that may affect individual eagle pairs. This is not likely to adversely affect the overall population, as bald eagles are known to habituate to noise. In addition, food availability, the key factor influencing breeding success, will not be affected.

C. Alternative 3: West Lynn Canal Highway

Alternative 3 would extend Glacier Highway with a two-lane highway 5.2 miles from Echo Cove to Sawmill Cove. Ferry terminals would be constructed at Sawmill Cove and William Henry Bay, and shuttle ferries would operate between the two terminals. A 38.9-mile two-lane highway would be constructed from William Henry Bay to Haines with a bridge across the Chilkat Inlet connecting to Mud Bay Road. The highway would have a 30-foot pavement width, two 11-foot wide lanes and two 4-foot shoulders, and would have a minimum design speed of 40 miles per hour. The design would meet AASHTO standards for a rural arterial except for the 4-foot shoulder width, which would be an exception to the 6-foot AASHTO recommended width. The M/V *Aurora* would operate as a shuttle between Haines and Skagway. Mainline ferry service would end at Auke Bay, and the M/V *Fairweather* would no longer operate in Lynn Canal.

Alternative 3 would meet many of the elements of purpose and need for the project but to a lesser extent than Alternative 2B. Alternative 3 would increase summer capacity through the Lynn Canal corridor to 1,008 vehicles per day. In 2038 Alternative 3 would generate and accommodate a forecast demand of 530 annual ADT, which would be about 57 percent of the forecast unconstrained demand in the corridor for that year.

Flexibility and opportunity for travel with Alternative 3 would be limited by the ferry link between Sawmill Cove and William Henry Bay as well as the ferry link between Haines and Skagway. Opportunity for travel would be increased substantially over the No Action Alternative, with an average of 12 roundtrips per day between Sawmill Cove and William Henry Bay and 6 roundtrips per day between Haines and Skagway in the summer.

Travel time would be longer than for Alternative 2B and would be longer to Skagway than travel on an FVF. Travel times would be a substantial improvement over travel times on mainline ferries under the No Action Alternative. Under Alternative 3 it would take about 2.9 hours to travel from Auke Bay to Haines and 4.2 hours to travel from Auke Bay to Skagway.

Alternative 3 would have a net state cost over 35 years of $86 million, approximately $25 million more than the No Action Alternative and $2 million less than Alternative 2B. Because of the higher volume of traffic forecast to use this alternative, it would have a much lower cost per vehicle to the state ($18 based on conventional funding) than the No Action Alternative ($45). At $9.2 million, it would have a lower annual maintenance and operating cost than the No Action Alternative.

Total user costs would be higher for Alternative 3 than Alternative 2B because of the longer ferry links. Total user costs would be about 39 percent of the cost of travel on a mainline ferry between Juneau and Haines under the No Action Alternative, and 47 percent of the No Action Alternative cost to travel between Juneau and Skagway. The out-of-pocket costs would be 25 to 36 percent of the mainline out-of pocket costs under the No Action Alternative. The cost of Alternative 3 to the traveler would be even less when compared to travel on an FVF. Based on estimated user benefits of $205 million, the net present value of Alternative 3 for the 35-year analysis period would be $32 million. This is roughly half the estimated net present value of Alternative 2B.

Alternative 3 would result in the loss of approximately 26 acres of wetlands. Approximately 83 percent of the wetlands that would be impacted for the highway alignment would be forested wetlands. This is the most common type of wetland in the project area.

Alternative 3 would result in impacts to approximately 12 acres of intertidal and subtidal habitat, primarily from construction of ferry terminals at Sawmill Cove and William Henry Bay. Construction of the Sawmill Cove Terminal would result in the direct loss of Pacific herring spawning habitat. In addition to habitat lost due to construction, short-term turbidity increases and propeller scour caused by ferry maneuvers could displace some Pacific herring eggs and larvae in the immediate vicinity of the terminal. The National Marine Fisheries Service (NMFS), the U. S. Environmental Protection Agency (EPA), and the Alaska Department of Natural Resources Office of Habitat Management and Permitting (OHMP) have expressed concern that a ferry terminal in Sawmill Cove and the resulting increased ferry traffic in Berners Bay could have adverse impacts on the depressed Lynn Canal herring stock. Special measures such as no operation of the terminal during spawning season might be necessary to avoid impacts.

Maintenance and operations of the Sawmill Cove Ferry Terminal could cause temporary disturbance to Steller sea lions and humpback whales in Berners Bay. NMFS has expressed concern that a ferry terminal at Sawmill Cove would have potential adverse direct and indirect effects on these two threatened and endangered species, and indicated that selection of Alternative 3 would necessitate formal consultation with NMFS under Section 7 of the Endangered Species Act.

Alternative 3 would result in the loss of approximately 395 acres of terrestrial habitat including 286 acres of old-growth forest, 95 acres of other forest, and 14 acres of open shrub and meadow. The loss from each vegetation type represents less than 1 percent of that type in the project study area. The loss of this vegetation would not adversely affect any rare or unique community types or any listed threatened or endangered species, or USFS sensitive species.

The direct loss of wetland and terrestrial habitat associated with Alternative 3 would have a small effect on wildlife. However, habitat fragmentation caused by the presence of a highway,

mortality from vehicle collisions, and the indirect impact of improved access for hunters and trappers resulting from Alternative 3 would have a larger impact on wildlife, particularly brown bear, moose, marten, and mountain goat.

The highway for Alternative 3 would be located within 0.5 mile of 50 bald eagle nests and within 330 feet of 24 of these nests. No nest trees would be removed, and disturbance of active nests during construction would be avoided. The highway would create a persistent source of noise that may affect individual eagle pairs. This is not likely to adversely affect the overall population as bald eagles are known to habituate to noise, and food availability, the key factor influencing breeding success, would not be affected.

Alternative 3 was not selected because it does not sufficiently meet purpose and need. It would not generate and accommodate as much traffic as Alternative 2B, nor would it reduce user costs as much. It would cost more to construct and operate. Travel times would not be as much reduced as by Alternative 2B. Alternative 3 would have impacts to fish spawning habitat that are of particular concern to resource agencies.

D. Alternatives 4A and 4C: Shuttle Ferry Service from Auke Bay to Haines and Skagway

Each of these alternatives would provide daily summer shuttle service from Auke Bay to Haines and Skagway with two new ferries. Alternative 4A would use FVFs while Alternative 4C would use conventional ferries that operate at approximately the same speed as mainline vessels. In the winter, one of the ferries would provide daily (Alternative 4A) or every other day (Alternative 4C) service to Haines and Skagway. Mainline AMHS service from Auke Bay to Haines/Skagway would continue, with two weekly trips estimated for both summer and winter service. A Haines/Skagway shuttle service would continue but the M/V *Fairweather* would no longer operate in Lynn Canal.

Alternatives 4A and 4C would make small improvements in terms of meeting the purpose and need for the project. These alternatives would increase capacity relative to the No Action Alternative; however, forecast demand for them would remain about the same as for the No Action Alternative in 2038, at 220 annual ADT for Alternative 4A and 150 annual ADT for Alternative 4C. This represents only 24 and 16 percent, respectively, of the forecast unconstrained demand in the Lynn Canal corridor in 2038. Alternative 4A would provide more than twice the FVF capacity of the No Action Alternative, allowing more travelers to use the faster, more direct shuttles.

Alternative 4A would essentially double the number of summer roundtrips/week between Auke Bay and Haines or Skagway (16/week) relative to the No Action Alternative. While this would improve travel opportunity and flexibility, it would still limit travel in the Lynn Canal corridor. In addition, travel times under Alternative 4A would remain the same as the No Action Alternative for mainline ferries and slightly worse than the No Action Alternative for FVF travel (3.8 hours for the trip between Auke Bay and Haines and 4.1 hours for the trip between Auke Bay and Skagway), although much more FVF travel opportunity would be provided.

Alternative 4C would provide essentially no improvement in travel opportunity and flexibility in the Lynn Canal corridor. The number of summer roundtrips per week between Auke Bay and Haines would increase by one and between Auke Bay and Skagway by two. Travel times on mainline ferries would remain the same as the No Action Alternative, but because this alternative would use conventional shuttle ferries, travel times on the shuttles between Auke Bay and Haines or Skagway would be almost twice as long as on the No Action Alternative FVF.

Alternatives 4A and 4C would have higher capital and operating costs for the state than the No Action Alternative, and would not reduce traveler costs. State costs per vehicle would increase. These alternatives would provide little to no improvement in capacity, travel opportunity and flexibility, or travel time but increase transportation costs in the Lynn Canal corridor. This is evident in their negative net present value of -$56 and -$57 million, respectively, over the 35-year analysis period.

Alternatives 4A and 4C would require minor modification of the existing Auke Bay Ferry Terminal, resulting in disturbance of less than an acre of subtidal habitat around that terminal. This would have a minor impact on EFH.

E. Alternatives 4B and 4D: Shuttle Ferry Service from Berners Bay to Haines and Skagway

These alternatives would extend Glacier Highway 5.2 miles from Echo Cove to Sawmill Cove in Berners Bay where a new ferry terminal would be constructed. Daily summer shuttle service would be provided from this new terminal to Haines and Skagway with two new ferries. In the winter, service to Haines and Skagway would be provided from the existing Auke Bay Terminal. Mainline AMHS service from Auke Bay to Haines/Skagway would continue, with two weekly trips estimated for both summer and winter service. Haines/Skagway shuttle service would continue but the M/V *Fairweather* would no longer operate in Lynn Canal. The difference between the two alternatives is that Alternative 4B would use two new fast catamaran ferries while Alternative 4D would use two new conventional ferries that operate at approximately the same speed as mainline vessels.

Alternatives 4B and 4D would make small improvements in terms of the purpose and need elements of the project. These improvements would be greater than those of Alternatives 4A and 4C, but substantially less than those of Alternatives 2B and 3. At 270 annual ADT, the forecasted demand for Alternative 4B in 2038 would only be 29 percent of the estimated unconstrained demand. Alternative 4B would provide substantially more FVF capacity. The forecasted demand for Alternative 4D is lower at 200 annual ADT, 22 percent of estimated total demand.

Travel opportunity and flexibility with Alternatives 4B and 4D would be an improvement relative to the No Action Alternative. In summer Alternative 4B would provide 30 trips per week to and from Haines and 16 trips per week to and from Skagway. Alternative 4D would provide 16 trips per week to and from both Haines and Skagway in summer.

Travel times would not improve with Alternatives 4B and 4D relative to the No Action Alternative. Travel times for each type of service (FVF shuttle and mainliner) under Alternative 4B would be essentially the same as the No Action Alternative, although under Alternative 4B travelers would have more opportunity to travel on the fast ferries. Travel by shuttle ferry under Alternative 4D would take longer than FVF travel under the No Action Alternative.

Alternatives 4B and 4D would have higher capital and operating costs for the state than the No Action Alternative, but would reduce the state cost per vehicle due to the larger number of vehicles transported and the shorter summer ferry routes involved. Alternative 4B would have a life cycle cost of $482 million, $130 million more than the selected alternative.

Summer total user costs would be reduced by both alternatives. In summer Alternative 4B total user costs would be 69 to 73 percent of the costs under the No Action Alternative. Alternative 4D total user costs would be 63 to 68 percent of No Action Alternative costs. Summer out-of-

pocket costs for travelers under these alternatives would range from 57 to 69 percent of the No Action Alternative costs.

Alternatives 4B and 4D would provide relatively small improvements to capacity, travel flexibility and opportunity, and user costs. These alternatives would not improve travel time in the corridor. The 35-year net present value of Alternative 4B is -$23 million, indicating that the amount of travel benefits does not outweigh the cost. Alternative 4D has a small positive net present value of $3 million indicating that it has economic merit relative to the No Action Alternative.

Alternatives 4B and 4D would result in the loss of approximately two acres of wetlands of which about two-thirds are forested wetlands and the remainder being scrub-shrub wetlands. About 25 acres of old-growth forest and 2 acres of open meadow and shrub would also be lost from the extension of Glacier Highway proposed for these alternatives. None of this habitat loss would adversely affect any rare or unique community types or any listed threatened or endangered species, or USFS sensitive species.

Alternatives 4B and 4D would result in impacts to approximately 3 acres of intertidal and subtidal habitat from construction of the Sawmill Cove Ferry Terminal. In addition to the direct loss of Pacific herring spawning habitat from terminal construction, short-term turbidity increases and propeller/jet scour caused by ferry maneuvers could displace some Pacific herring eggs and larvae in the immediate vicinity of the terminal. The NMFS, EPA, and OHMP have expressed concern that a ferry terminal in Sawmill Cove and the resulting increased ferry traffic in Berners Bay could have adverse impacts on the Lynn Canal herring stock. Special measures such as no operation of the terminal during spawning season may be necessary to avoid impacts.

Maintenance and operations of the Sawmill Cove Ferry Terminal could cause temporary disturbance to Steller sea lions and humpback whales in Berners Bay. NMFS has expressed concern that a ferry terminal at Sawmill Cove would have potential adverse direct and indirect effects on these two threatened and endangered species, and indicated that selection of Alternative 4B or 4D would necessitate formal consultation with NMFS under Section 7 of the Endangered Species Act.

As outlined above, Alternatives 4B and 4D would make relatively small improvements with regard to the project purpose and need, and therefore neither alternative was selected.

F. Environmentally Preferred Alternative

Alternative 4C is the Environmentally Preferred Alternative. While both Alternative 4A and Alternative 4C would have few increases in potential environmental impacts relative to the No Action Alternative, Alternative 4C would have the least. Because it would use conventional shuttle ferries, it would use less diesel fuel than Alternative 4A and therefore would produce less carbon dioxide and soot, both overall and on a per-vehicle-transported basis. Due to its lower speed vessels, Alternative 4C would also have a lower potential for impacts to marine mammals and birds.

Alternative 4C would have no terrestrial impacts and no marine fill or dredge impacts in Lynn Canal. No wetlands would be filled or excavated, no streams would be crossed, and no fish or wildlife habitat would be lost or fragmented. No potential would be created for increased access related problems in currently undeveloped areas.

The Environmentally Preferred Alternative was not selected because it would not sufficiently meet the project purpose and need. While Alternative 4C would make small improvements in terms of capacity and travel opportunity, it would not reduce user costs or travel times, and would increase state and life cycle costs per vehicle relative to both the No Action Alternative and Alternative 2B, the selected alternative.

IV. Section 4(f)

The proposed action will not result in the direct or constructive use of land from any public park, recreation area, wildlife or waterfowl refuge, or significant historic site protected by Section 4(f) of the United States Department of Transportation Act of 1966, as amended.

V. Measures to Minimize Harm

The following are DOT&PF's and FHWA's commitments to mitigate impacts that will result from construction of Alternative 2B. All practicable measures to minimize environmental harm have been incorporated into the project. Some mitigation measures will be implemented during final design of Alternative 2B. In many cases, the construction contractor will implement mitigation measures. Ultimately, DOT&PF and FHWA are responsible to ensure implementation of the mitigation measures described below and more completely in Chapter 5 of the Final EIS.

A. Water Quality: Water quality protection features and best management practices (BMPs) will be incorporated into the design and construction of the highway, including measures to prevent erosion and, where appropriate, to minimize the fill footprint. Storm water treatment will be included in the project design. Specific water quality mitigation measures include:

- An erosion and sediment control plan will be prepared to describe the BMPs to be used in avoiding water quality impacts to wetlands and other water bodies. This plan will be made available to resource agencies for review and comment before being included in project plans.
- Only clean fill material (excavated rock or mineral soil) will be used for the roadway and ferry terminal embankments.
- Stakes will be installed at the planned outside limits of disturbance prior to construction to ensure that impacts are limited to that area.
- In wetland areas, the roadway will be constructed using the minimum-width fill footprint necessary to provide a stable road base.
- In wetland and other sensitive areas, to the extent feasible the roadway will be constructed with a low-profile embankment to limit the fill footprint.
- Rock will be used to stabilize the toes of slopes at ponds and stream crossings.
- Only soil or rock excavated from the construction limits or immediately adjacent to the highway will be used for highway and ferry terminal embankments.
- Grass seed will be placed on any road slope containing soil. To protect the integrity of the natural plant communities, plant species indigenous to the area will be used to vegetate road slopes, except that non-native annual grasses may be used to provide initial soil cover.
- No grubbing will be done outside of the fill footprint and only the minimum clearing required for safety would be done beyond the toe of slope.
- Silt fences will be used as appropriate to reduce erosion during construction.
- Sediment basins will be used, as necessary, during construction.

- Culverts and roadside swales will be used in appropriate locations to maintain natural flow patterns for surface water.

B. Wetlands: Wetlands were avoided to the extent practicable during preliminary design and environmental review. During final engineering design, DOT&PF will investigate additional measures to reduce potential impacts, including further small alignment changes, and changes in the footprint of the roadway, and ways to reduce the amount of material sidecast into subtidal areas. The design features and management practices outlined under Water Quality (above) also protect wetlands. Other wetland mitigation measures include:

- Embankment heights and side slopes will be minimized during design to reduce wetland footprints.
- During construction, slope limits in wetlands areas will be separately identified to ensure that workers are aware of wetlands and the need to avoid impacts beyond the slope and clearing limits.
- Any construction camps, staging sites, borrow pits, and waste areas necessary will be located in upland areas and stabilized during and after use to avoid water quality impacts to wetlands and water bodies.

DOT&PF and the FHWA propose to compensate for unavoidable adverse impacts to wetlands with a combination of an onsite, out-of-kind mitigation feature and a $780,000 in-lieu fee. A wildlife underpass estimated to cost $440,000 (one of two included in the project) would be constructed at an identified brown bear travel corridor near the Lace River as compensation for impacts to scrub/shrub and forested palustrine wetlands. The $780,000 fee in lieu payment for habitat protection and/or enhancement projects will be used as compensation for impacts to intertidal and subtidal habitat, including a small estuarine emergent wetland.

The fee in lieu amount is based on $24,000 per acre for unvegetated intertidal and shallow subtidal habitats and $60,000 per acre for estuarine emergent wetlands. The in-lieu fee payment for impacts to intertidal and shallow subtidal habitats and estuarine emergent wetlands will be used to purchase land parcels containing high value wetlands and intertidal habitat in the project vicinity threatened by development and/or to fund habitat restoration/enhancement projects. Potential parcels and projects are being investigated and evaluated in consultation with resource agencies. If no parcels or projects are determined and agreed to prior to construction, the money will be deposited with a non-government land trust with stipulations that the funds be used as described.

C. Terrestrial Habitat: The following mitigation measures will be implemented for terrestrial habitat impacts:

- Only certified seed mixtures will be used to seed exposed soils. Soil from outside the project boundaries will not be imported to the project site. Any soil within the project boundaries identified as containing invasive species will not be transported to other areas of the project.
- Construction equipment will be steam cleaned prior to use on the project.
- To the extent practicable, shot rock slopes will be covered with overburden and seeded.

D. Intertidal and Subtidal Areas: During design, DOT&PF will investigate ways to further reduce intertidal fills, including alignment shifts and steepened slopes. DOT&PF will also investigate ways to reduce the amount of sidecast material into subtidal areas. As discussed above under Wetlands, DOT&PF and FHWA have proposed compensatory mitigation for

unavoidable impacts to unvegetated intertidal and shallow subtidal areas that will be filled by construction of Alternative 2B. Other mitigation for impacts to intertidal and subtidal habitat include:

- To the extent practicable, beach access points will be chosen to take advantage of existing landings, previously disturbed sites, or locations of planned fill. Additional necessary access points identified during construction will be sited to minimize impacts to habitat and will be restored to pre-existing condition after project completion.
- In-water work at the Katzehin ferry terminal would not occur between March 15 and June 15 to protect out-migrating salmonids.
- Breakwaters at the Katzehin ferry terminal will be constructed with gaps or large culverts to allow passage of juvenile fish near shore.
- Shuttle ferries will have wastewater holding tanks or wastewater will be treated on board to avoid discharge of waste while moored at the terminal sites.

E. Anadromous and Resident Fish Streams: Impacts to anadromous and resident fish streams have been avoided to the extent practicable through design. Additional mitigation will include:

- Bridges will cross all anadromous fish streams; anadromous fish streams that can be crossed with 130-foot or shorter bridges will not have any structure or fill in the stream channel. Anadromous fish streams that require pier supports will have the minimum possible piers using 130-foot spacing, placed to reduce impact to the streams.
- The northern channel of the Antler River identified as a eulachon spawning area will be clear-spanned to avoid impacts to fish habitat.
- In-water work at the Antler, Lace, and Katzehin rivers will not occur between March 15 and June 15 to protect out-migrating salmonids and spawning eulachon.

F. Bald Eagles: Construction activities in the vicinity of bald eagle nests will be coordinated with the U S Fish and Wildlife Service (USFWS) to determine the need for alignment changes (for newly discovered nests), blasting plan changes, or other measures to avoid impacts to eagles. Measures to further mitigate impacts to bald eagles are:

- On-the-ground nest surveys will be conducted before clearing takes place to confirm the location of trees with eagle nests.
- No construction will occur within 330 feet of an eagle nest, and no blasting will occur within 0.5 mile of an eagle nest, during the March 1 to May 31 nest selection period unless agreed to by the USFWS. If a nest is active, no construction or blasting will occur within these distances until after August 31, unless the USFWS approves a plan to avoid impacts while operations continue.
- In areas where clearing occurs within 100 feet of a nest tree, DOT&PF and USFWS will jointly assess the potential for windthrow and DOT&PF will stabilize the tree or adjacent trees, if determined necessary.
- During construction DOT&PF and USFWS will assess the sufficiency of natural screening between the highway and any eagle nests below the elevation of the road within the 330-foot zone. Additional screening will be developed if necessary.

G. Migratory Birds: In appropriate habitats, nesting surveys for trumpeter swan and Queen Charlotte goshawk will be conducted prior to construction. Clearing will be avoided in the vicinity of active nests to the extent practicable.

H. Wildlife: DOT&PF will use BMPs and implement engineering design measures to reduce impacts to wildlife. Mitigation measures include:

- Planning for any camps necessary during construction of the project will include BMPs for handling food, trash, and other potential wildlife attractants to reduce impacts.
- Bridges across streams will be designed to function as wildlife underpasses where practicable. Bridges over the Lace and Antler rivers will be extended 50 feet beyond the bank to provide wildlife passage. The north end of the Katzehin River bridge will extend 100 feet beyond the bank.
- Two wildlife underpasses will be constructed at identified brown bear travel corridors on the peninsula between the Lace and Antler rivers.
- Preconstruction wolf den surveys will be conducted in consultation with the USFWS. Identified active dens will be avoided during clearing to the extent practicable.
- To facilitate ADF&G game management after project construction, DOT&PF will fund brown bear, wolverine, and moose population studies for three years. A goat population study will be conducted for four years.
- No construction will occur in April or May within one mile of identified harbor seal haulouts.
- A preconstruction survey will be completed to document the extent to which the highway alignment avoids amphibian ponds.

I. Threatened and Endangered Species: DOT&PF and FHWA will provide to NMFS for review and approval a detailed construction plan for work within 3,000 feet of Gran Point and Met Point Steller sea lion haulouts. The following mitigation measures will be implemented and included in construction plans:

- Trained observers will monitor for the presence of marine mammals during construction of the Katzehin Ferry Terminal. Pile driving will be halted if any marine mammals come within 660 feet (200 meters) of the activity.
- Pile driving at the Katzehin terminal and the Antler, Lace, and Katzehin rivers will be done with vibratory hammers to the extent possible. If other method of pile driving is used, DOT&PF will notify NMFS prior to its use.
- Construction within 1,000 feet of the Met Point haulout or 3,000 feet of the Gran Point haulout will occur during periods when sea lions are absent, unless authorized by the NMFS.
- Any construction within 3,000 feet of Gran Point or Met Point will include through-cuts and walls to avoid lines of sight between the haulouts and the highway and to discourage human disturbance of sea lions. Prior to beginning construction, NMFS will review and approve final detailed construction plans in these zones, including planned vegetation removal and blasting requirements. This review would include an on-site tour of the area by NMFS.
- Monitoring will occur during any construction within 3,000 feet of the Gran Point and Met Point haulouts.
- Construction within 3,000 feet of Gran Point will not occur until after NMFS reviews the results of construction and monitoring at Met Point.
- No temporary barge landings will be constructed within 3,000 feet of the Gran Point and Met Point haulouts.

- Any blasting within 3,000 feet of the Gran Point and Met Point haulouts, if occupied, will be monitored to document that ground vibrations at the haulout are no greater than 0.05 inch per second (ips) and noise levels are not greater than 45 dBA.
- During construction, helicopters will not operate within 3,000 feet of the Gran Point and Met Point haulouts if occupied.
- As large of a buffer as possible of undisturbed vegetation will be retained between the highway and the Gran Point and Met Point haulouts.
- Helicopter operations during avalanche control will be minimized to the extent practicable within a 3,000-foot radius around the Gran Point and Met Point haulouts. Helicopter avalanche control will not be conducted within 1,000 feet of the haulouts when occupied.
- To minimize recreational boating activity in the vicinity of the two haulouts, no boat launches or other boat access points will be included in the project. No tideland permits for boat launches or other boat access will be granted to landowners adjacent to the highway from Echo Cove to the Katzehin Terminal unless NMFS concurs that the activities are not likely to adversely affect sea lions.

J. Cultural Resources: Known archaeological and historical resources in the vicinity of the project will be identified in the construction plans to ensure that the contractor is aware of the need to avoid impacts to these resources. The two historic properties crossed by the highway will be flagged in the field to ensure that equipment operators do not inadvertently damage these resources. In the event that a previously unknown cultural resource is discovered during construction, work in the area will cease and DOT&PF will contact the FHWA and State Historic Preservation Officer (SHPO) and develop an approved plan before proceeding. Mitigation measures include:

- The Jualin Mine Tram and the Comet/Bear/Kensington Railroad will be bridged to avoid impacts to these historic properties.
- Before and after photographs will be provided to the SHPO for the crossings of the tram and railroad.

K. Recreation and Visitor Facilities: In agreement with USFS, DOT&PF will provide pullouts at designated locations identified by the USFS. Additional mitigation to reduce impacts to recreation and highway users includes:

- Restrooms at the Katzehin Ferry Terminal will be available to highway users as well as ferry customers.
- A DOT&PF maintained visitor facility with restrooms will be included in the maintenance facility at Comet.
- DOT&PF will maintain constructed pullouts including collection of refuse from containers supplied at these pullouts.
- The highway will be located as far from the USFS cabin in Berners Bay as the topography allows, but no less than 100 feet from mapped use areas. A handicap-accessible trail will be constructed from the highway parking area to the cabin.
- DOT&PF will construct a new remote access cabin in Berners Bay to be maintained by USFS at a location determined in consultation with USFS to mitigate impacts to remote recreation in Berners Bay.

VI. Mitigation Monitoring Measures

The following are DOT&PF's and FHWA's commitments to monitor mitigation measures following construction of the project.

- DOT&PF will continue to fund USFWS aerial surveys for a period of five years from the beginning of construction to assess the impact, if any, of the project on the Lynn Canal bald eagle population.
- Video monitoring at the Gran Point haulout and aerial and ground monitoring by trained personnel at the Met Point haulout will continue during construction and for five years after construction in these areas to determine the extent of human disturbance of sea lions. Annual reports will be provided to NMFS that describe construction activities (during the construction phase of the project), monitoring activities, and impacts or responses of Steller sea lions to these activities. At the end of the monitoring period, a final report will be provided to NMFS summarizing the project, the impacts, and the likely effects on Steller sea lions or their critical habitat.
- DOT&PF will fund a long term monitoring study to determine the effectiveness of wildlife underpasses. This study will be developed based on information gathered during the three-year brown bear study as described under Wildlife.

VII. Comments on the Final EIS

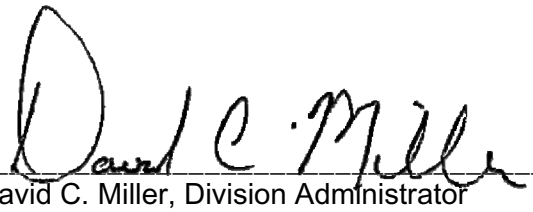
The Appendix contains substantive public, agency, and interest group comments on the Final EIS and responses to those comments as well as a summary of other comments received.

VIII. Conclusion

The Juneau Access Improvements Final EIS is in conformance with applicable provisions of 23 CFR 771 and 40 CFR 1502.2, and satisfactorily addresses the anticipated environmental impacts that will result from construction of Alternative 2B. All correspondence received on the Final EIS prior to this ROD has been reviewed (see Appendix for substantive comments on the Final EIS and responses to those comments). Based on this review, we find that there were no substantive issues or impacts not addressed.

Based on the analysis and evaluation contained in this project's Final EIS and after careful consideration of all social, economic, and environmental factors and input from the public, tribal entities, and agencies, it is my decision to select Alternative 2B as the proposed action for this project.

Apr. 3, 2006
Date



David C. Miller, Division Administrator
Federal Highway Administration

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APPENDIX

COMMENT SUMMARY APPENDIX

On February 10, 2006, a Notice of Availability for the Final Environmental Impact Statement (EIS) for the Juneau Access Improvements Project was published in the *Federal Register*. At the same time, copies of the Final EIS were made available at the Juneau, Haines, and Skagway public libraries. Printed copies of the document were also distributed to the cooperating agencies and other interested agencies. Compact disk (CD) copies were distributed to organizations and individuals who submitted comments or received a copy of the Supplemental Draft EIS during the public comment period in February and March 2005.

This appendix to the Record of Decision (ROD) contains copies of comments from Cooperating Agencies and summarizes the comments received from the public in regard to the Final EIS. Part A contains comments from the United States Environmental Protection Agency (USEPA) and the United States Army Corps of Engineers (USACE) and responses to those comments. The USACE comments addressed the Draft Section 404/10 Permit Application and the Draft Section 404(b)(1) Analysis in Appendix X of the Final EIS. These comments were addressed in the March 3, 2006 Department of Transportation and Public Facilities letter that accompanied a Department of the Army application. That letter is included in Part A. Responses to USEPA comments are provided following their letter in paragraphs corresponding to bracketed and labeled sections.

Part B of this appendix contains summaries of substantive comments received from the public, with Federal Highway Administration's response following each comment. Part C of this appendix is a summary of nonsubstantive comments.

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PART A: COMMENTS FROM COOPERATING AGENCIES

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
JUNEAU REGULATORY FIELD OFFICE
8800 GLACIER HIGHWAY, SUITE 106
JUNEAU, ALASKA 99801-8079

REPLY TO ATTENTION OF:

February 21, 2006

Regulatory Branch
East Section
POA-1994-242-9

Mr. Reuben Yost
Alaska Department of Transportation
and Public Facilities
6860 Glacier Highway
Juneau, Alaska 99801-7999

Dear Mr. Yost:

This is in further response to the Alaska Department of Transportation and Public Facilities (ADOT/PF) Juneau Access Improvement project. We have received the January 2006, Final Environmental Impact Statement and have reviewed Appendix X containing a draft Department of Army (DA) permit application and draft Section 404(b)(1) analysis. As explained in our previous letters of September 14, 2004, March 25, 2005, and December 5, 2005, the United States (U.S.) Army Corps of Engineers (Corps) has authority over this project pursuant to Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbors Act.

We have determined that more information is essential before your application can be considered complete. The following application questions need to be completed or further clarified:

a. Questions 8/9: We presume you are acting as agent on behalf of the ADOT/PF for this project, but this should be stated in the record by completing this section.

b. Question 18: All aspects of the project need to be described in this section so all work at the proposed ferry terminal (i.e. dredging, breakwaters, etc.) needs to be referenced in this section.

c. Question 21: Please specify the volumes of "clean shot rock" and "mineral soil" that would be placed in waters of the U.S. for the highway. Also, please specify the soil type of any fine material (i.e. mineral soil, dredged material) and the size (or range) of any rock to be used for fill.

d. Question 22: Please describe how the other 20.6 acres of wetlands would be impacted if they are not to be filled. We note sheet 71 of 79 shows 20.63 acres of wetlands to be excavated, but this must be clarified in the application. All regulated activities must be accounted for in the impacts. Regulated activities include mechanized landclearing, excavation with temporary or permanent sidecasting, and any sidecast disposal areas. Please note that using a bulldozer or other grading equipment is considered a discharge of dredged material. Additional impact areas not involving a discharge, such as excavation (with a backhoe or excavator) with upland disposal, should also be provided so the Corps has an accurate estimate of total wetland impacts caused by the project.

It does not appear that the 32 acres of marine fill includes the excess rock disposal. We suggest you provide total figures of all fill being placed below the high tide line (HTL) and then break that estimate down with the three components (i.e. highway fill, ferry terminal fill, and excess rock disposal). The excess rock disposal fill must further be broken down between fill that would raise areas that are at or below the HTL to above the HTL from fill areas whose elevation would remain below the HTL.

The drawings also need changing. First, please do not use uncommon acronyms (i.e. BOP, EOP) since such terms could confuse the reviewing public. The following specific corrections are also noted:

Sheet 2 of 79: Please show where the authorized Cascade Point Road ends on this drawing.

Sheet 10 of 79: Shows proposed rock riprap below the typical bridge crossing. If such riprap is placed below the ordinary high water (OHW) line or HTL then this must be included as fill in the summary tables. However, if all rock riprap would be placed above the OHW or HTL then this needs to be noted on the drawing.

Sheets 13 and 14 of 79: Label the vertical and horizontal axis to include the units of measurement that were used and make the incremental measurements more legible.

Sheet 26 of 79: Please differentiate the proposed 2.6 acres of wetland fill from the 2.16 acres of wetland excavation and add a short note about what the excavation is for. Also, please do this for the other drawings where more than one acre of wetland excavation would occur.

Sheets 49 to 51 and 57 of 79: These drawings must show the entire fill area, including the channelward end of the "deepwater sidecast area." The summary boxes must be revised to include the total amount of "deepwater sidecast area" and how much area would be converted from being at or below the HTL to above the HTL. The "area of impact" should also be changed to a more descriptive label, such as "area of highway fill impact", since the Corps considers the "deepwater sidecast area" to be an impact area too (see below).

Sheet 66 of 79: The fill for the road needs to be clearly differentiated from the fill for the ferry terminal fill.

Sheet 71 of 79: Add a column showing the length of each wetland crossing (in feet) and another column stating what sheet each wetland is on (do the same for sheet 72 of 79). Also note whether any of these wetlands are isolated and enlarge the table for legibility.

We also remain very concerned that the Section 404(B)(1) analysis has not fully addressed all avoidance and minimization efforts for the preferred alternative. For example, we need a clear explanation on the feasibility of constructing the proposed ferry terminal completely on the upland, which may require blasting, and/or constructing it on pilings. Likewise, we require an explanation on why the "deepwater sidecast area" can not be avoided, such as by placing all (or some) of the excess rock on the upland and/or the feasibility of barging the rock to very deepwater for disposal to avoid converting waters of the U.S. to uplands. If neither method is practicable then we suggest spreading this material out further, preferably below the mean

high water (MHW) line, to avoid converting waters of the U.S. to uplands. We will need to know how much, if any, area at or below the MHW is converted to areas above the MHW and we need to know who would own this new intertidal land and what the plans would be for it. The 404(B)(1) analysis also needs to be further clarified so a written response is provided to each section where a "yes" box is checked.

We appreciate the opportunity to comment on the draft DA application and draft analysis, and remain available for continued coordination. Please contact me at the letterhead address, by telephone at (907) 790-4490, or by FAX at (907) 790-4499.

Sincerely,

Jeff Koschak
Project Manager

Copies Furnished:

Mr. Chris Meade
Environmental Protection Agency
Post Office Box 20370
Juneau Alaska 99802-0370

Mr. Bruce Halstead, Field Supervisor
U.S. Fish and Wildlife Service
Ecological Service/Juneau
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Juneau, Alaska 99801-7100

Mr. James Balsiger, Chief
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Mr. Joe Donohue
Alaska Department of Natural Resources
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Ms. Judith Bittner
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Statewide Services
Alaska Department of Fish & Game
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Anchorage, Alaska 99518-1599

Ms. Teri Camery
City and Borough of Juneau
Community Development Department
155 South Seward Street
Juneau, Alaska 99801-1397

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

FRANK H. MURKOWSKI, GOVERNOR

6860 GLACIER HIGHWAY
P.O. Box 112506
JUNEAU, ALASKA 99811-2506
PHONE (907) 465-1774
FAX: (907) 465-2016

STATEWIDE DESIGN & ENGINEERING SERVICES
SOUTHEAST REGION PRECONSTRUCTION – SPECIAL PROJECTS

March 3, 2006

Re: Juneau Access Improvements Project
State Project No. 71100
Federal Project No. STP-000S(131)

SUBJECT: Permit Application
ACE file No. POA-1994-242-2

Glen Justis, Section Chief
Department of the Army
U.S. Army Engineer District, Alaska
P.O. Box 6898 CEPOA-CO-R-E
Elmendorf AFB, AK 99506-0898

Dear Mr. Justis:

The Alaska Department of Transportation and Public Facilities (DOT&PF), in cooperation with the Federal Highway Administration (FHWA), is proposing to construct a 50.8-mile highway from the end of Glacier Highway at Echo Cove along the east side of Lynn Canal to a ferry terminal north of the Katzehin River delta. A multiple-vessel shuttle system will be provided from Katzehin to both Haines and Skagway. This proposal was selected after consideration of other alternatives, as it best meets the purpose and need for the project. The project would reduce state cost and improve the level of service, including increased capacity, greater trip frequency, and greatly reduced user costs.

We are enclosing an application for an Army Corps of Engineers (ACE) Sections 10 and 404 authorization with two sets of drawings relevant to ACE jurisdiction. The first set includes 33 general project information sheets containing location and vicinity maps, legend of detailed plans, typical drawings, Katzehin Ferry Terminal layout, summaries of wetlands, tidelands, and culvert impacts, and proposed mitigation locations. The second set includes 72 detailed plan sheets. Also, per 11 AAC 110.410, we are providing an Alaska Coastal Management Program (ACMP) Coastal Project Questionnaire (CPQ) that contains a Consistency Certification.

The preliminary Final Environmental Impact Statement (EIS) sent to cooperating agencies for review in October 2005 included a draft permit application and Preliminary 404(b)(1) Analysis dated October 2005. Based on ACE comments on these documents, on January 11, 2006 we made revisions and provided more information. Subsequently, we distributed the Final EIS including a revised draft application and Draft 404(b)(1) Analysis as Appendix X. This letter is

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to transmit the permit application, and to provide further information regarding changes since the Final EIS.

Project Description

A detailed project description is provided in the ACE application. The January 2006 Juneau Access Improvements Project Final Environmental Impact Statement (EIS) also discusses the project description in detail in Chapter 2, as well as the impacts in Chapter 4. The highway will have a 30-foot pavement width with two 11-foot-wide vehicle lanes and four-foot shoulders. It will follow the same alignment as the Cascade Point Road as far as Cascade Creek. From there, the highway will generally follow the shoreline to north of the Katzehin River, except at a few locations where topography would allow the highway to be located inland from the shore. The ferry terminal site provides southern wave protection and access to deep water. The terminal will be on a fill pad in the intertidal zone, and it will consist of two breakwaters, a stern berth, and a dredged mooring basin. Dredged material will be incorporated into the fill for terminal parking.

This project will place fill in approximately 55 acres of wetlands (628,500 cubic yards (cy)) and excavate approximately 15 acres of wetlands, with a total impact to approximately 70 acres of wetlands. Fill will be placed in approximately 32 acres of intertidal and subtidal waters of the U.S. for the ferry terminal, breakwaters, and highway (911,100 cy). Also, 4.4 acres of subtidal and intertidal area will be impacted by dredging for the ferry terminal basin. Up to 1.4 million cubic yards of excess rock will be sidecast over approximately 150 acres of subtidal area.

Wetlands: All but approximately one acre of the wetlands that would be impacted are palustrine forested. Approximately 0.7 acre of palustrine scrub-shrub immediately north of Sawmill Cove, and 0.2 acre of isolated estuarine emergent wetland at the Katzehin Ferry Terminal site would be impacted. The wetland functions and values that would be affected by the highway include a reduction in groundwater recharge and discharge, lateral flow, surface hydrologic control, wildlife habitat functions, and riparian support. Effects would be minimized through mitigation measures.

Marine areas: The project will result in the loss of approximately 32 acres of unvegetated marine waters filled for highway and ferry terminal construction (29.2 acres for highway and Katzehin Ferry Terminal, and 2.7 acres for the breakwaters). An additional 4.4 acres of subtidal and intertidal habitat will be impacted by dredging at the ferry terminal site. The ferry terminal site is a steep, primarily unvegetated marine area. The loss of the 32 acres of intertidal and subtidal habitat as a result of filling of highway and ferry terminal construction, 4.4 acres of intertidal and subtidal habitat from dredging, and modification to subtidal marine areas from sidecasting shotrock, would not substantially affect any fish and invertebrate populations in Lynn Canal.

Rivers and streams: The highway will cross 45 Class I, II and III streams, in addition to many smaller unclassified drainages, that are subject to Section 404 jurisdiction. Two crossings over the mouths of anadromous water bodies require fill below the high tide line and are subject to ACE jurisdiction, one at Independence Creek and another at the Katzehin River. An unnamed non-anadromous stream about one mile south of Katzehin River also requires fill in an unvegetated marine area.

The project will be constructed in phases. The first phase, scheduled for construction in 2006, consists of two segments: from Echo Cove to the south shore of the Antler River (Segment 1), and from the northwest bank of Lace River to north of Independence Creek (Segment 5). The enclosed permit application is based on a 75 percent complete design as of February 2006 for Segments 1 and 5, and on preliminary design for all of the other segments. This letter outlines the changes resulting from the more complete design for Segments 1 and 5. Other phases will be constructed over the next four to five years as designs are finalized and funding becomes available. More detailed drawings will be submitted to the ACE for Segments 3, 6, 7, and 8 as they are developed.

Purpose and Need

The purpose of and the need for the project are discussed in detail in the permit application and the EIS; the main points are summarized here. DOT&PF has identified a need to improve surface transportation to and from Juneau within the Lynn Canal corridor that will:

- Provide the capacity to meet transportation demand in the corridor
- Provide flexibility and improve opportunity for travel
- Reduce travel times between Lynn Canal communities
- Reduce state costs for transportation in the corridor
- Reduce user costs for transportation in the corridor

The project will increase summer capacity in Lynn Canal to 1,276 vehicles per day in 2038, and will generate and accommodate an estimated 670 annual Average Daily Traffic (ADT) in 2038. This would be approximately 72 percent of the forecast unconstrained 2038 demand in the corridor (930 annual ADT).

Travel flexibility and opportunity will be substantially improved. Currently there are approximately 10 trips per week to both Haines and Skagway in the summer; this project will provide eight ferry roundtrips per day to Haines and six roundtrips per day to Skagway. In winter, the shuttle ferry service will provide six roundtrips per day to Haines and four roundtrips per day to Skagway.

As the corridor is part of the National Highway System, DOT&PF has a responsibility to provide a surface transportation facility with as reasonable a cost to users as practicable. The current system is essentially a very expensive toll highway. This project would have the lowest cost to the traveler of any project alternative, and it is a substantial reduction compared to the current system. Out-of-pocket costs, not including long-term vehicle costs, for a family of four in a 19-foot vehicle between Juneau and Haines or Skagway will be approximately 80 percent less than the current cost.

State costs in Lynn Canal are very high; the project would reduce total state operation and maintenance cost from the current $11.7 million to $9.0 million per year (in 2004 dollars). Over a 35-year period, the project would cost the state less than a No Action alternative on a per-vehicle basis (state cost of $45 per vehicle for no action alternative compared to $15 per vehicle for the project).

EFH

The Federal Highway Administration (FHWA) is the lead federal agency for the purpose of Essential Fish Habitat (EFH). As required by the Magnuson-Stevens Conservation and Management Act, an EFH Assessment was prepared, and was included in the Supplemental Draft EIS in Appendix N, EFH Assessment, dated December 2004. Additional information on anadromous streams (freshwater EFH) was included in Appendix P, Anadromous and Resident Fish Streams Technical Report, that describes the freshwater streams within the project area used by anadromous and resident fish species and potential effects to those species. Appendix W dated October 2005 contains addenda to the EFH Assessment and the stream report. Based on the scope and nature of impacts, minimization of impacts and conservation measures, the DOT&PF, on behalf of the FHWA, has determined that no substantial adverse individual or cumulative effects on EFH in the project area would occur. After providing an EFH Assessment to the National Marine Fisheries Service (NMFS), DOT&PF has addressed the conservation measures recommended by NMFS and incorporated them into the project.

Application Changes

The enclosed application has changed since the October 2005 preliminary draft and January 2006 draft applications due to more detailed (75 percent complete) design for Segments 1 and 5 as of February 2006. As reflected in the Wetlands and Tidelands Fill Summaries in this application, the following small changes have been made:

- the highway was repositioned to incorporate the existing alignment of the Cascade Point Road from station number 64+20 to 206+00 (Echo Cove to just south of Cascade Creek);
- a small realignment was made to avoid a privately owned mining claim north of Sawmill Cove near Station 395+00; and
- the alignment west of the Lace River crossing was adjusted to overlay a longer part of the Jualin Road in order to reduce overall impacts and to avoid impacting an area containing unstable soil.

These changes did not substantially alter wetland impacts. The total impact to wetlands is now 55.2 acres of fill (628,500 cy), and 14.7 acres of excavation, for a total impact of 69.9 acres.

In areas outside of wetlands, approximately 3,260 cy of material consisting of riprap, bedding and concrete will be placed in waters of the U.S for culvert installation. Fill material associated with placement of culverts in wetlands is included in stated wetland fill amounts.

Avoidance and Mitigation Measures

The Final EIS and the draft 404(b)(1) Analysis in Appendix X of the Final EIS demonstrate that the discharges associated with a highway from Echo Cove to a ferry terminal north of Katzehin River delta will not have an unacceptable adverse impact to ecosystems of concern. The draft 404(b)(1) Analysis includes identification of alternatives and avoidance measures that are not practicable.
The avoidance, mitigation, and compensatory mitigation measures that DOT&PF has incorporated into the project are discussed in the Final EIS and Appendix X. Mitigation

measures are comprehensively listed in an attachment to this letter, *"Mitigation Commitments Relevant to Section 404 of the Clean Water Act."*

Practicable alternatives: DOT&PF has implemented practicable avoidance and minimization alternatives. DOT&PF has adjusted the highway alignment several times to reduce impacts to wetlands. The current alignment, including the Katzehin Ferry Terminal, avoids all palustrine emergent wetlands, all but 0.2 acre of estuarine emergent and 0.7 acre of palustrine scrub-shrub wetlands, and most riparian wetlands.

Impracticable alternatives: The following alternatives are not practicable, and are explained in detail on pages X-117-118 of Appendix X:

- Further avoidance of forested wetlands is not practicable. Steep terrain and the need to avoid eagle trees or beach fringe prevent shifting the alignment further out of wetlands.
- Avoiding fill in wetlands through the use of pile-supported highway structures is not practicable due to cost ($4,400 per linear foot of highway, $2.4 million per acre of wetland).
- Locating the ferry terminal south of the Katzehin River is not practicable because it would result in a terminal located in an exposed area with very little natural protection from southeast weather. It would be subject to freshwater icing, and constant deposition of sediments from the Katzehin River. It also would increase travel time, and increase operating costs.

Response to ACE 2/21/06 comment on avoidance/minimization for the new ferry terminal and sidecast disposal areas

Ferry terminal: Regarding the Katzehin Ferry Terminal, the ACE requested an explanation of the "feasibility of constructing the ferry terminal on the uplands, which may require blasting or constructing it on pilings." The area immediately upland of the proposed terminal intertidal area is a steep cliff with a narrow ravine, and blasting would create a cliff with water and avalanche debris descending over the cliff. Also, an eagle nest tree is located approximately 197 feet from the nearest point of disturbance. DOT&PF has coordinated with U.S. Fish and Wildlife Service to avoid the tree and meet the requirements of the Bald and Golden Eagle Protection Act. The cliff is adjacent to the tree, and moving the terminal into the hillside would further encroach on this nest tree. Moving the ferry terminal immediately northward would not be practicable, because the topography grows even steeper and because the facility would be removed farther from the natural protection available at the current site. Constructing a pile-supported (pile, cap and girder structure) approach and terminal to avoid 5.4 acres of fill would add approximately $13 million to the cost of the terminal. All these factors make the location of the terminal on uplands, on pilings, or at a northward site, infeasible.

Sidecasting: Regarding the sidecasting of excess excavated shot rock material, the ACE requested an explanation of why the deepwater sidecast area cannot be avoided, "such as by placing all (or some) of the rock to very deepwater for disposal to avoid converting waters of the U.S. to uplands." Upland disposal would not be practicable due to the steep terrain above the highway in most of the locations. The majority of uplands are U.S. Forest Service lands. The

Forest Service is opposed to waste sites, as it would increase terrestrial impacts. The proposed sidecast locations were chosen based on their relatively low habitat value, as steep, unvegetated, subtidal slopes. The sidecast material would all be placed below –10 foot elevation; no uplands would be created.

The extent of avoidance and minimization that is practicable for the ferry terminal and sidecasting needs to be considered in light of the resources affected. These marine areas are unvegetated, steep, and have relatively low habitat value. More extensive avoidance measures are not warranted.

Mitigation measures and compensatory mitigation

DOT&PF has incorporated mitigation measures into the design, and has committed to implementing additional mitigation measures as well as compensatory mitigation. The measures relevant to Section 404 of the Clean Water Act, including a discussion of compensatory mitigation, are listed in the attachment described earlier. DOT&PF will compensate for unavoidable adverse impacts to wetlands and marine areas with a combination of on-site out-of-kind mitigation and an in-lieu fee. To mitigate impacts to scrub-shrub and forested palustrine wetlands, DOT&PF will construct a wildlife underpass at an identified bear travel corridor near Lace River (approximate cost of $440,000). A $780,000 in-lieu fee will compensate for impacts to intertidal and subtidal habitat, including a small estuarine emergent wetland. This payment will be used to provide funds for habitat restoration/enhancement projects and to purchase parcels containing high value wetlands and intertidal habitat in the project vicinity threatened by development.

If you have any questions or require additional information, please contact Reuben Yost at (907) 465-1774, or by e-mail at reuben_yost@dot.state.ak.us.

Sincerely,

Bill Ballard

Bill Ballard
Statewide Environmental Coordinator

Enclosures: DA Permit Application; ACMP CPQ/Consistency Certification
cc w/o attachments:
Susan Walker, NMFS, Juneau
Richard Enriquez, USFWS, Juneau
Chris Meade, EPA, Juneau
Jim Powell, ADEC, Juneau
Carl Schrader, OHMP/DNR, Juneau
Brady Scott, DMLW/DNR, Juneau
Reuben Yost, DOT&PF, Juneau
Jeff Koschak, ACE, Juneau
cc w/ACMP attachments:
Joe Donohue, OPMP/DNR, Juneau

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

March 10, 2006

Reply To
Attn Of: ETPA-088

Ref: 92-091-FHW

Tim A. Haugh, Program Manager
Federal Highway Administration, Alaska Division
P.O. Box 21648
Juneau, Alaska 99802-1648

Reuben Yost, Special Projects Manager
Alaska Department of Transportation & Public Facilities
6860 Glacier Highway
Juneau, Alaska 99801-7999

Dear Mr. Haugh and Mr. Yost:

The U.S. Environmental Protection Agency (EPA), Region 10, has reviewed the Final Environmental Impact Statement (EIS) for the **Juneau Access Improvements Project** (CEQ No. 20060040). These comments are provided in accordance with our responsibilities and authorities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), the Clean Water Act, and as a Cooperating Agency. The Final EIS evaluates the environmental impacts associated with surface transportation improvements to and from Juneau within the Lynn Canal corridor. The Federal Highway Administration (FHWA) and the Alaska Department of Transportation & Public Facilities (ADOT&PF) have identified Alternative 2B (East Lynn Canal Highway ending at the Katzehin Ferry Terminal) as the preferred alternative.

EPA has appreciated the experience of participating as a cooperating agency on this project with FHWA and the ADOT&PF, working through our concerns and developing mitigation options for this project. As stated in our comments on the Supplemental Draft EIS, EPA will support whichever alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA). Although we are pleased that the new preferred alternative has fewer adverse environmental impacts than the one proposed in the Supplemental Draft EIS, it is not clear that this alternative is the LEDPA based upon your 404(b)(1) analysis (see below). In addition, we have concerns regarding mitigation of unavoidable direct and indirect impacts to Old Growth Habitat areas of the Tongass National Forest (TNF).

Clean Water Act Section 404

We commend FHWA and ADOT&PF for including a Draft Section 404(b)(1) Analysis in Appendix X of the Final EIS. Although the lead agencies are not required to prepare a Draft Section 404(b)(1) Analysis, including such an analysis in the Final EIS helps focus and narrow the scope of the issues that need to be resolved in the Record of Decision (ROD) and during the permit phase.

The Clean Water Act Section 404(b)(1) Guidelines ("Guidelines") establish a mitigation sequence as follows: first, avoid aquatic impacts where practicable; second, minimize aquatic impacts that are unavoidable; and third, compensate for unavoidable impacts to the aquatic ecosystem. The following comments address each of these three steps in the mitigation sequence.

Avoidance

The Guidelines require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem." [40 CFR §2230.10(a)] This restriction on discharge is commonly referred to as the Least Environmentally Damaging Practicable Alternative, or LEDPA.

We generally concur with the impact analysis in Appendix X. However, EPA does not concur with the practicability analysis in Appendix X because it analyzes the degree to which the alternatives meet the purpose and need, instead of evaluating whether the alternatives are practicable as defined in the Guidelines.

(A) "The term *practicable* means available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes." [40 CFR §230.3(q)] As stated in the Final EIS, the overall goal is to improve surface transportation to and from Juneau in the Lynn Canal corridor. Although none of the alternatives meet all five elements of the purpose and need statement, all of the action alternatives meet the overall purpose to some degree. Therefore, EPA recommends that the ROD and the final 404(b)(1) evaluation: 1) reanalyze the alternatives in terms of whether they are available and capable of being done, with emphasis on cost, technology and logistics; and 2) provide sufficient information to clearly demonstrate that the selected alternative complies with the Guidelines, including the LEDPA requirement. There is insufficient information at this time to reach a finding of compliance with the Guidelines.

Minimization

The Guidelines also require that "no discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." [40 CFR §230.10(d)] We appreciate the substantial steps that the lead agencies have taken to minimize the effects of Alternative 2B on the aquatic environment. These steps include, but are not limited to, adjusting the road alignment to minimize impacts on wetlands and the fish and wildlife that depend on them; using bridges instead of culverts to cross salmon streams; providing wildlife underpasses at key locations; and designing sight and sound barriers to reduce impacts on sea lions at Gran Point and Met Point.

(B) EPA recommends that the ROD and the 404 permit application also include a commitment to install and maintain continuous guard rails along the entire length of the road segments crossing the Antler, Lace and Katzehin Rivers and adjacent wetlands. This will

B minimize the potential secondary effects of off road vehicles degrading or disturbing sensitive aquatic resources.

Compensation

The Guidelines authorize actions affecting plant and animal populations, including habitat development and restoration techniques "to compensate for destroyed habitat." [40 CFR §230.75(d)] EPA appreciates ADOT&PF's leadership and cooperation in developing compensatory mitigation measures for the Juneau Access Project.

C Appendix X describes the basis for providing fees in lieu of on site, in kind mitigation, including a 2:1 compensation ratio (i.e., in lieu fees to provide two acres of mitigation for each acre of aquatic habitat destroyed). EPA concurs with a 2:1 compensation ratio in this case. However, based on the information in Appendix X, it is not clear that the 2:1 ratio was correctly applied to the base dollar per acre land values for each type of aquatic habitat. Therefore, we recommend that the ROD and the 404 permit application include a commitment to provide a 2:1 compensation ratio and a clear accounting of how the proposed in lieu fee was calculated and how it will be used.

D In addition to the compensatory mitigation described in the Final EIS and Appendix X, EPA recommends that the lead agencies also consider other mitigation opportunities. For example, consider the beneficial use of dredged material from the Katzehin ferry terminal to develop estuarine wetlands and shallow water habitat at the Katzehin River delta. Likewise, consider decommissioning the remote airfield located in the Katzehin River delta (because the road and ferry will negate the need for the airstrip) and restoring the site to its natural condition. When considering the practicability of on site, in kind mitigation projects, the incremental cost of such projects should be viewed in light of the total costs of the selected alternative instead of as an independent project.

Mitigation for Old Growth Habitat Areas

E The Final EIS indicates that Alternative 2B would directly impact approximately 286 acres of Old Growth Habitat Land Use Designations (LUDs) in TNF. Indirect effects associated with Alternative 2B (e.g., road effects and habitat fragmentation) may have impacts to Old Growth LUDs beyond the identified 286 acres. According to the Final EIS (Page 4-58), the U.S. Forest Service (USFS), in consultation with the Alaska Department of Fish and Game (ADFG) and the U.S. Fish and Wildlife Service (USFWS), would adjust the boundaries of the Old Growth Habitat LUDs affected by Alternative 2B in accordance with old growth reserve standards in the Tongass Land Management Plan (TLMP). We recommend that the ROD describe the standards and criteria that would be used to adjust the boundaries of the Old Growth Habitat. The adjusted Old Growth Habitat boundaries should consider areas that may buffer anadromous fish streams and coastal shorelines, and are contiguous to existing Old Growth Habitat areas. The ROD should describe the public participation process for recommending and commenting on the adjustments to the Old Growth Habitat boundaries. In addition, specific commitments to compensate for the direct and indirect impacts to Old Growth Habitat areas should be specified.

We thank you for the opportunity to review and provide comments on the Final EIS for the Juneau Access Improvements Project. EPA has appreciated the continual efforts of FHWA and ADOT&PF to resolve our concerns and to make improvements to this project. If you have any questions regarding our comments, please feel free to contact me at (206) 553-1601.

Sincerely,

for Christine B. Reichgott, Manager
NEPA Review Unit

A. This Record of Decision (ROD) identifies FHWA's selected alternative and the reasons for the selection. Documentation of compliance with Section 404(b)(1) guidelines in the Final 404(b)(1) Evaluation are the responsibility of the US Army Corps of Engineers (USACE). A finding of compliance with the 404(b)(1) guidelines is not part of this ROD. The Draft Section 404/10 Permit Application and Draft Section 404(b)(1) Analysis, included as an appendix of the Final EIS, were provided to give the U.S. Army Corps of Engineers (USACE) and interested parties preliminary information regarding the specific impacts to wetlands and other waters of the U.S., and DOT&PF's preliminary rationale for those impacts, given the 404(b)(1) requirement that the permitted action must be the least environmentally damaging practicable alternative. A draft application and analysis are required to be included in an FHWA EIS based on a 1992 accord between DOT&PF, FHWA, and the USACE to streamline the NEPA and permit review process.

B. DOT&PF will coordinate with the USACE and other Cooperating Agencies regarding the need for any additional environmental commitments pertinent to the Section 404/10 application for the selected alternative. With regard to the use of guardrail to contain off-road vehicles (ORVs), coordination with other agencies to date, particularly the USFS, indicates that active enforcement by the USFS would be more effective at preventing ORVs from entering USFS land beyond the right of way while avoiding additional impacts to wildlife, the traveling public, and National Forest users. Additionally, the USFS intends to retain the right to prohibit the use of ORVs within the right of way when granting the easement for the highway.

C. The Environmental Protection Agency incorrectly interprets the text in Appendix X; the mitigation commitment does not include a two to one compensatory ratio. The Final EIS explains that the fee in lieu per acre amount proposed to compensate for impacts to wetlands and other waters of the U.S. was increased to ensure that the amount would allow for a two to one compensatory ratio when acquiring similar land. Based on coordination with Cooperating Agencies, the proposed compensatory mitigation is a combination of habitat creation, restoration and conservation projects to create, restore and protect higher value habitat. Therefore the Final EIS and this ROD commit to a fee in lieu amount and identifies the likely use of this fee, which is not a two for one compensatory acquisition of similar wetlands.

D. As discussed above, DOT&PF will continue to coordinate with the USACE and other agencies in regard to specific details of its application for a Department of the Army permit. The DOT&PF application submitted to the USACE identifies a beneficial use of the dredged material generated at the Katzehin Ferry Terminal. The current proposal is to incorporate the dredged sand and silt into the terminal pad, encapsulating it in shot rock. No other Cooperating Agency has expressed an interest in creating marine habitat with this material, or expressed that this would better compensate for impacts to waters of the U.S. than the mitigation projects identified and prioritized at several meetings. DOT&PF has begun discussions with the USFS regarding the desirability of decommissioning the airfield at Katzehin as part of this project, but this is primarily a USFS responsibility and would have limited value as compensatory mitigation for impacts to waters of the U.S., as this site is not in wetlands.

E. The Final EIS and this ROD indicate that Alternative 2B would impact approximately 286 acres of old growth forest. As stated in the Final EIS, only approximately 68 acres of land in designated old growth reserves would be directly impacted. The Final EIS also includes an explanation that the USFS, in coordination with ADF&G and USF&WS, will reconfigure the old growth reserve boundaries to compensate for these impacts. The basic requirements of small old growth reserves are provided in the Terrestrial Habitat section of the Affected Environment description in the Final EIS. The specific old growth habitat reserve criteria are provided in USFS Tongass Land and Resource Management Plan. While buffering of anadromous fish

streams and coastal shorelines may be considered by the team that makes the boundary adjustments, this is a USFS process and neither the Final EIS nor this ROD makes specific commitments regarding public participation in the adjustment process or compensation for impacts to old growth reserves. The old growth reserves are a USFS resource management tool and the USFS has not indicated any compensatory actions are required.

PART B: SUBSTANTIVE COMMENTS AND RESPONSES

Part B: Substantive Comments and Responses

Alternatives

Comment: Under Alternative 2B, shuttle operations should be 24 hours a day, seven days per week and include a reservation system.

Response: The shuttle schedules projected for each alternative were based on projected demand and the most economical way of accommodating that demand. For Alternative 2B, summer demand would be met with the shuttles running 15 hours per day, requiring two eight-hour crews. The schedule was also based on the assessment that most travelers would prefer to travel during the day. Continuous service could be provided by two 12-hour crews, but would only be likely to be instituted if there was a clear demand for service through the night. As with all ferry operations, AMHS will base service on many factors including demand and funding.

As explained in the Final EIS, requiring reservations for short distance shuttles making multiple runs per day would unnecessarily increase costs and travel times. Travelers wanting to arrive at a destination at a fixed time would need to plan their departure times based upon the potential for delay and the consequences of that potential delay.

Comment: DOT&PF should have included encouraging a second airline to provide Juneau-Seattle flights as an alternative in the Final EIS.

Response: Encouraging a second airline to provide Juneau-Seattle flights does not address the purpose of and need for improved surface transportation in Lynn Canal.

Comment: The Preliminary Business Plan submitted by the Lynn Canal Transportation Project during the Supplemental Draft EIS public review period, is a reasonable marine alternative and should have been evaluated in the Final EIS.

Response: The business plan referred to was evaluated and determined to not be reasonable, as explained in the response to comment ALT 19 in Appendix Y of the Final EIS. The recent letter makes clear that the plan is not a proposed AMHS plan of operation, but rather a plan for a private ferry service outside of DOT&PF operations. As explained in the Final EIS with regard to a possible Goldbelt, Inc. ferry, a private sector action is not a reasonable alternative, as it could not be compelled by the State in terms of its construction, continuation or level of service. Therefore, the State could not rely on it as a long-term transportation solution on this National Highway System (NHS) route. Also, the Final EIS evaluates a full range of reasonable alternatives without this alternative.

Comment: The Final EIS fails to consider an adequate range of reasonable alternatives. The Final EIS should have included development and evaluation of one or more of these additional marine alternatives:

- Running the Motor Vessel (M*V) Fairweather* along the old AMHS route from Juneau to Haines to Skagway, back through Haines and ending in Juneau.
- Running the M*V Fairweather* from Juneau to Haines to Skagway, back directly to Juneau and alternating Juneau to Skagway to Haines and then directly back to Juneau.
- Develop a specific marine alternative that increases the use of both the M*V Fairweather* and mainline vessels in the AMHS.
- A transportation system management (TSM) alternative; restructuring of the current ferry system to develop a new marine alternative using existing assets.

- Marine alternatives that reduce State costs.

Response: The Final EIS explains the screening process used to determine the range of reasonable alternatives. The Marine Segments Report (Appendix B) provides the operation parameters used to develop marine segments for all alternatives. Running the MV Fairweather on longer routes by including port calls would result in longer travel times to all ports, and could not be done in a 12 hour day. The Final EIS explains that a TSM alternative would require taking vessels from other parts of the system. Reducing service in other parts of the system, or using vessels made available by vessel replacement in other system parts, would merely shift costs, avoiding capital costs in Lynn Canal while increasing operation cost.

The No Action Alternative is a projection of how the State will reduce costs by providing somewhat reduced service. An Action alternative that focuses on reducing State costs while not addressing the other parts of the purpose and need is not reasonable. Also, any additional specific alternative should have been suggested at scoping or in response to the Supplemental Draft EIS. There are innumerable permutations of the No Action Alternative as well as the action alternatives, however the Final EIS addresses a full range of reasonable alternatives.

Comment: Alternative 2B should be modified to include the construction of a new ferry terminal at Portage Cove, instead of using the existing Lutak Ferry Terminal. This would save travel time and capital costs by not reconstructing the Lutak Terminal.

Response: Reconstruction of the Lutak Ferry Terminal is an independent action from the Juneau Access Improvements Project (JAIP) and will be required under the No Action Alternative, in part to address existing problems and in part to accommodate a Haines-Skagway shuttle. Any decision to move the terminal rather than reconstructing at the current location will be made independent of the decision on the JAIP. While a terminal in Portage Cove would shorten the shuttle run between Katzehin and Haines, it is not necessary to meet the purpose and need of the project.

Comment: The Regional Director for DOT&PF has discussed the future construction of a bridge from the Katzehin Ferry Terminal to Battery Point on the west side of Lynn Canal.

Response: Neither construction of a bridge toward Haines nor a road extension to Skagway is part of any reasonable alternative in the Final EIS. The Final EIS includes a discussion of a bridge to Haines in the section titled Alternatives Determined Not Reasonable. This alternative was determined not reasonable based on its high cost.

Comment: The No Action Alternative should have been selected as the preferred alternative because it would include improvements to the current system.

Response: The only improvement (or additional service beyond current service) included in the No Action Alternative is the addition of shuttle service between Haines and Skagway. The No Action Alternative includes a Haines/Skagway shuttle because this connection cannot be provided by the fast ferry M/V Fairweather during a 12 hour operating day. Currently Haines-Skagway service is provided only by mainline vessels. The No Action Alternative has a reduced level of mainline service (three per week year-round rather than the current five to six per week in summer) based on the Southeast Alaska Transportation Plan, which calls for phasing out two of the current mainline vessels.

Anadromous and Essential Fish Habitat (EFH)

Comment: A highway would impact fish stocks in Lynn Canal and Berners Bay. Studies have concluded that road crossings act as barriers to small fish stream movement, and highway traffic correlated to increased pollution in the streams. Road and bridge construction were shown to eliminate fish species and affected the composition and operation of the surrounding ecosystems.

Response: The Final EIS describes potential impacts to fish streams and fish populations. Based on water quality studies in Anchorage, the level of traffic anticipated on the Alternative 2B highway would not adversely affect water quality in fish streams. The highway would bridge across all anadromous fish streams to reduce impacts to these streams.

Comment: The highway would lead to herring die off in Berners Bay similar to what occurred with the Auke Bay herring fishery. This would result in a collapse to the food-web.

Response: The EFH Assessment (Appendix N of the Final EIS) discusses the possible causes of the decline of the Auke Bay herring fishery in relation to the potential for similar impacts in Berners Bay from highway and/or ferry terminal construction and operation. While the cause of the Auke Bay herring decline is unknown, the most likely factors are loss of spawning habitat and overfishing. Alternative 2B would not involve any construction below the high tide line adjacent to herring habitat, and in these locations a vegetated upland buffer will be retained. Also, because most of the land adjacent to Berners Bay herring spawning habitat is under a USFS management plan that does not allow development, the highway is not likely to lead to habitat altering shoreside activities.

Comment: The presence of a highway near the shore of Berners Bay would increase the total volume of runoff, altering the salinity in the near shore environment, which may have an impact on essential fish habitat not evaluated in the Final EIS.

Response: A highway near the shore in Berners Bay will not alter the volume of runoff, but due to the impervious surface of the pavement, the runoff per unit of time would change, as rain falling on the asphalt would flow directly to roadside ditches and then into small drainages. Also, the highway embankment may block some shallow subsurface water flow, channeling this flow into roadside ditches and then into defined drainages. The highway footprint would be approximately 100 feet wide, with numerous cross culverts, on a drainage slope that averages over one mile in length from tidewater to treeline. Most hillside runoff would be unaffected. It is important to note the over the approximately 12 years of development of the EIS, no resource agency has expressed concern about potential effects on nearshore salinity or indirect effects to fish populations.

Construction, Operation and Maintenance Costs

Comment: The Final EIS should be consistent in the estimation of shuttle fares for alternatives:

- Projected shuttle fares for travel from between Haines and Skagway are unsupported in light of current Alaska Marine Highway System (AMHS) fares between Haines and Skagway.
- The fare structure for travel from Juneau to Haines and Skagway should be based on the same methodology used for shuttle fares between Katzehin and Haines or Skagway under Alternative 2B.

Response: The estimated fare for all short distance (approximately 20 miles or less), non-reservation, multiple trip per day, dedicated shuttle routes in reasonable alternatives were based on the same loading fee and cost per mile. This estimated fare structure was based on a review of fares charged on similar existing shuttle routes and an analysis of the percent cost recovery that would be possible. The existing Haines-Skagway fares are not relevant in the estimated fare structure, as the current fare is for travel on a reservation based, mainline service that primarily provides service to much more distant ports.

The fare structure used for short distance, non-reservation shuttles is not appropriate for longer distance, reservation based service. A shuttle system that can only make one to a few trips a day needs to have a higher loading fee to cover the fixed operations costs and reservation/ticketing expenses.

Comment: The Final EIS mischaracterizes net state costs by providing State funding requirements of the AMHS operations, but not State costs for highway maintenance.

Response: The annual net maintenance and operation cost of current service is $5.7 million (2004) as shown in the Final EIS. The projected net annual maintenance and operations cost of Alternative 2B, in 2004 dollars, is $4.5 million ($7.7 million ferry, $1.3 million highway, minus $4.5 million revenue). The No Action Alternative would reduce projected net annual cost to $3.3 million ($10.2 million for ferry operation minus $6.9 million revenue) by reducing the level of mainline service. The only expanded marine highway alternative that would have a lower net annual cost than Alternative 2B is Alternative 4C, ($4.2 million) which would replace the M/V Fairweather with two conventional speed shuttles.

Highway maintenance costs for each alternative with a highway segment were provided in Section 2 of the Final EIS. Section 4 of the Final EIS provided net AMHS cost because impact to AMHS funding was an issue identified during scoping. Total maintenance costs for each alternative are relevant, because along with life cycle costs, they indicate costs regardless of how revenues are projected.

Comment: The Final EIS shows that overall costs for maintaining highway alternatives are higher than costs to maintain, or even improve, the AHMS in Lynn Canal.

Response: The Final EIS does not state that overall costs for maintaining highway alternatives are higher than current or improved marine service. Alternative 2B would cost $9 million a year to maintain, at a net cost to the State of $4.5 million. The current AMHS operation in Lynn Canal costs $11.7 million to maintain in 2004, at a net cost to the State of $5.7 million. Improved service in Lynn Canal, as envisioned in Alternatives 4A-D, would range from $11.3 to 16.6 million a year to maintain.

Comment: Funds to maintain and construct the Preferred Alternative 2B would be at the expense of funding maintenance of existing roadways or of funding new transportation projects around the state. DOT&PF is currently unable to fully fund maintenance of existing roads.

Response: The decision to fund a particular transportation project rather than another is the responsibility of the Governor, DOT&PF and the Legislature, based upon their assessment of transportation priorities. Maintenance funds required for Alternative 2B are projected to be lower than those required for the current operations. A reduction of net state funds needed in Lynn Canal will improve the overall funding situation regarding DOT&PF's effort to maintain existing state roads.

Comment: Can DOT&PF ensure sufficient funding would be available to perform highway maintenance and snow removal on the Lynn Canal highway as well as existing roadways?

Response: Funding for highway maintenance as well as AMHS operations is approved by the State Legislature each year. The Final EIS shows that net state maintenance costs for Alternative 2B will be lower than the cost of the existing AMHS operations. There is no reason to suggest the Legislature would be unwilling to fund maintenance on a highway that costs less than the current system while providing for the movement of more vehicles.

Comment: The Final EIS does not accurately or fairly estimate construction costs for the JAIP alternatives:

- DOT&PF capital cost estimates for Alternative 2B were not revised for inflation in the same manner as the marine alternatives were revised.
- The Final EIS falsely states that construction costs were updated to reflect 2005 prices.
- DOT&PF states that inflationary cost increases would be offset by economies of scale.
- DOT&PF, in updating unit costs for Alternative 2B, chose past projects with lower prices instead of considering all past projects.
- The Final EIS overestimated the cost of the No Action and fast vehicle ferry alternatives. DOT&PF did not include profitability of the fast vehicle ferry in Lynn Canal.

Response: The 2005 construction costs provided in the Summary and Section 2, Project Alternatives, of the Final EIS were prepared to give decision makers and the public a more recent estimate of the actual construction funds that would be required for the selected alternative. As explained in the Final EIS the updated costs were not used in any of the economic analyses, which were prepared in 2003 and 2004 for all alternatives. Shuttle costs for all reasonable alternatives were revised by using percentages to reflect 2005 steel, aluminum, and labor cost increases. Costs for highway segments involve many different types of construction processes and were updated by analyzing each major unit cost item. This provided a more accurate and detailed 2005 cost estimate for highway segments. The different manner of updating vessel costs and highway segments did not affect the comparison between alternatives.

For some highway unit cost items, unit prices from previous projects were used, with potential inflationary increases offset by the unit price decrease that would be likely due to the economy of scale created by very high unit quantities. Although this is clearly not an exact process and requires professional judgment rather than numerical calculations, it was determined to be the best way to estimate realistic 2005 prices for some unit cost items.

The updated costs for highway segments used past projects with similar bid items, similar bid quantities, and where possible, similar construction situations. One of the bid items mentioned in comments of concern is the price of Unclassified Excavation. To be used as a comparison, a past project must have used this classification for soil excavation alone, with Rock Excavation as a separate bid item. Projects that do not separate the two will have much higher bids for Unclassified Excavation. Similarly, projects that had small quantities of this item would not provide an appropriate comparison. Rather than “cherry picking’ for low bids, the analysis attempted to find projects that provided valid comparisons for that particular bid item.

The Final EIS includes four reasonable marine alternatives which are restructured ferry systems. The analysis of these marine alternatives was based on standard existing construction and operating costs. The analysis does not support the premise that ferry service

can be increased in Lynn Canal without increasing capital and operating costs. This analysis was based on the likely costs and revenues, and is supported by review of the operating data for the M/V Fairweather. The response to comment SEC29 in Appendix Y of the Final EIS and the reference cited there provide information that the M/V Fairweather does not make a profit, by any reasonable definition of the term.

Comment: The Final EIS does not accurately or fairly estimate maintenance costs for the Juneau Access Improvements Project (JAIP) alternatives. Maintenance and operation costs for Alternative 2B are low and should have been based on maintenance and operation costs for the Klondike Highway and/or other similar highways.

Response: Annual maintenance costs (for routine maintenance) for Alternative 2B were estimated by the DOT&PF Southeast Region Maintenance and Operations Chief based upon consideration of similar existing highways in Southeast Alaska. The rationale for the estimate is provided in Appendix D of the Final EIS. Maintenance costs per mile on the Klondike Highway are high due to the elevation of the pass (approximately 3000 feet) to which the highway climbs. The Klondike Highway is subject to blowing snow and deep drifts. The alignment for the Alternative 2B highway is located at a much lower elevation, varying from 30 to 250 feet above sea level. Snow removal costs and other costs associated with avalanches were estimated separately by the avalanche control consultant team, and then added to the cost for non-avalanche related maintenance.

Comment: The Final EIS does not reflect the additional costs for shipping goods on the AMHS from locations south of Lynn Canal to Haines or Skagway under the Preferred Alternative 2B.

Response: The Final EIS indicates that most shipping in Lynn Canal is by barge, and that Alternative 2B would not result in substantial changes to the amount of shipping by barge, or barge schedules. The Final EIS acknowledges that freight is also transported by the AMHS, and freight that currently moves between Juneau and Haines or Skagway on the AMHS would likely be trucked at a lower cost. Although the Final EIS did not specifically address freight currently shipped in vans on the AMHS that originates south of Juneau, these vans could still be shipped on the AMHS, offloaded in Juneau, and hauled by truck from Juneau to their destination.

Comment: The Final EIS dramatically underestimated the cost of Alternative 2B:

- Engineering firms indicate Alternative 2B could cost $20 million more than is estimated in the Final EIS.
- The $16 million projected for the ferry terminal is low. The terminal would most likely be constructed in shallow unstable soils, requiring additional engineering.
- A larger dock and breakwater would be necessary to reach deep water.
- The Final EIS does not include costs for storage of wastewater on shuttles and cost to pump to wastewater treatment system.
- The Final EIS does not include cost estimates for construction monitoring by trained observers or physical screening of eagle nest trees. Costs for stabilizing eagle nest trees were also not included.
- Alternative 2B unit price cost estimates should not be based on the assumption that no public access conflicts would result in lower costs; the Final EIS did not include calculation to substantiate this claim. The costs resulting from environmental timing constraints would more than offset savings from a lack of public access conflicts.

- DOT&PF's cost estimate of $3.6 million per road mile are low based on the United States Government Accounting Office (USGAO) ranges of $1 million to $8 million per lane mile.

Response: The Final EIS does not dramatically underestimate the cost of Alternative 2B. The engineering review submitted by commentors stated that items such as mobilization and construction contingency cost estimates may be low, and the effect of economy of scale for bridge costs may be overestimated. Each of these issues are a matter of professional judgment, as similar recent projects in Southeast Alaska do not exist. Even if the evaluation suggesting the estimate may be $20 million low is correct, this does not represent a dramatic underestimation. The Final EIS construction cost estimate for Alternative 2B is $258 million, $189 million of which is for highway construction. The disputed cost is less than 8 percent of the total cost estimate, and under 11 percent of the highway cost estimate.

The $16 million cost estimate for the ferry terminal at Katzehin is based on similar ferry terminal costs at a variety of terminal locations. No special engineering methods are anticipated at this site. The engineering requirements for mooring structures, breakwaters, and a terminal fill pad as less demanding than those for bridges. Although no geotechnical investigation at this specific site will occur until design begins, geotechnical investigations at the nearby Katzehin River have indicated that conventional bridge construction can be supported. Thus, it is reasonable to expect that standard construction will be possible at the Katzehin Ferry Terminal site.

The layout for the Katzehin Ferry Terminal is based on a survey of the depths at the site. The site was chosen for its combination of proximity to deep water and partial protection from prevailing weather. The breakwaters shown are based on the actual location, as is the dock structure, dredged basin, and terminal pad.

The Final EIS explains that shuttle ferries would either treat waste water on board or pump to approved treatment facilities. The decision whether to treat on board or pump out would be made during design, based on the logistics at each potential home port. The Marine Segments Report, Appendix B of the Final EIS, estimated vessel construction costs based on a range of recently constructed public transportation vessels; these costs included facilities such as waste water handling. Similarly, crew costs were estimated based on operation time and evening maintenance needs, which would provide for dealing with waste water along with other day-to-day maintenance needs.

The cost of trained observers would be incidental to the bid items for which they are required. Trained observers for any work within 330 feet of an eagle nest would be the responsibility of the contractor if he chose to work under this condition rather than wait until the end of the nesting period. Cost of stabilizing individual eagle nest trees and eagle nest tree screening structures, if determined necessary, would be paid out of the contingency.

Road construction without traffic constraints or equipment size constraints allows a contractor to operate much more efficiently than possible for a typical highway reconstruction job. Construction on an existing highway must maintain traffic flow, or in some cases, traffic may be closed for short periods (usually four hours or less) during low traffic periods. This means blasting, rock excavation, and earth moving must be done in small, well planned and coordinated stages. Also, on existing highways contractors must use trucks licensed for highway use; these trucks generally can carry 10 yards. Off-highway equipment can handle twice or greater the amount of material at a time. There have been no recent new two lane highway projects in Southeast Alaska, however DOT&PF's experience with the Klondike

Highway in 1978, the South Thorne Bay Road in 1996, and the Cascade Point Road in 2005 all support the premise that lack of public conflicts and highway restrictions will result in lower bids. The extent of this effect is a matter of professional judgment.

Most of DOT&PF's projects in Southeast Alaska have a combination of environmental timing constraints in addition to standard traffic and highway equipment constraints, and no pay item is included for this. The contractor considers these constraints in his bid, and DOT&PF allows for multi-year construction to facilitate the timing windows. The recent Glacier Highway and Trailhead project is 6.4 miles long, with 10 fish stream culverts and 20 eagle nests within 0.5 mile, 7 of which are within 330 feet of the highway. Not only will the lack of traffic and equipment constraints not offset environmental timing constraints, this lack will reduce the effects of the timing constraints, because work in a given area will proceed more quickly.

The highway construction costs provided in the Final EIS for Alternative 2B are $189 million, which equates to $3.72 million per mile ($1.86 million per lane mile). This is within the cited USGAO range of $1 to $8 million per lane mile. Commentors suggest that obstacles posed by steep terrain and wildlife constraints should put the highway for Alternative 2B at the far end of the cited USGAO range. The Alternative 2B estimate is based on an item-by-item quantity estimate and bid item estimate. Most aspects of the Alternative 2B highway involve standard construction. There is no way to compare it to the national average for highway construction, which includes construction in diverse locations and circumstances.

Comment: The Final EIS does not include the costs of environmental impacts; though difficult to quantify in dollar amounts, DOT&PF should have incorporated such costs into the benefit analysis for each alternative that included highway construction.

Response: The user benefit analysis in the Final EIS only evaluates transportation benefits and costs; other benefits or costs are included in the other analyses. Even assignment of monetary values to travel time and opportunity are contentious, therefore the Final EIS also includes a life cycle cost analysis for each alternative; this analysis only includes dollars costs of construction, refurbishment, maintenance, and operation. The purpose of an EIS is to evaluate and disclose impacts. It is not necessary or possible to assign a dollar value to many beneficial or harmful impacts.

Comment: Based on the funding plan included in the Final EIS, the State will spend $67.2 million in general funds. This number is greater than State funds included in the State costs analysis in the Final EIS. These funds would be more effectively spent on other needs in the state.

Response: The Final EIS indicates that the current construction funding plan would use $9.8 million of State funds to match federal funds, and would use an additional $57.5 million of State general funds separate from the matching funds. The analysis of the present value (2004) of net State funds for capital and operating costs of all alternatives was based on the use of federal funds for all capital costs, with a nine percent state match. This was the best information available at the time of the analysis (2004). Based on the original analysis method, State funds for initial capital costs would have been $23.2 million. The decision by the current administration to use less federal aid than possible could have been applied to any alternative, including the No Action Alternative, which has ongoing capital costs for vessel refurbishment and terminal reconstruction. The analysis remains valid because all alternatives were treated equally.

Based on the current funding plan, net state cost for the 35-year operating period would be approximately $122 million rather than the $88 million in the FEIS analysis. This would raise the

net state cost per vehicle trip from $15 to $21. Assuming the State contribution to the No Action Alternative's capital cost would not change from the original assumption, the No Action net state cost per vehicle trip would be $45. The administration's decision to spend a higher proportion of State funds on the project (freeing federal aid for other eligible transportation projects, does not alter the fact that Alternative 2B would reduce total net state cost per vehicle trip.

Comment: Some of the funding sources identified in the Final EIS cannot legally be used for construction of Alternative 2B:

- Section 218 Funds (Shakwak)
- Ferry Boat Funds
- Section 144 Bridge Funds
- National Highway System Funds

Response: FHWA has determined that all of the funding sources proposed in the Final EIS are appropriate for the construction activities identified, based on a careful review of the statutory language governing each funding category.

Comment: The Final EIS funding plan for Alternative 2B does not consider the fact that Congress may not actually fully fund the most recent transportation bill (SAFETEA-LU).

Response: The Final EIS funding plan, and the STIP on which it is based, is predicated on the State receiving approximately 85 percent of the funds identified in the transportation bill. As explained in the STIP, historically, actual federal appropriations have averaged 88 percent of the funds identified in federal transportation bills. In order to be conservative, the State is basing funding plans on an 85 percent appropriation and will amend the STIP and individual project funding plans if the actual funding available is different.

Comment: Travel costs for the 45% of the AMHS users that are walk-on passengers would increase under Alternative 2B as a result of having to pay for private transportation providers to travel between the Katzehin Ferry Terminal and Juneau.

Response: Based on AMHS data, the current walk-on passenger rate in Lynn Canal is 36 percent, not 45 percent. The Final EIS reports this rate, and makes clear that these passengers would need to use some form of private transportation to travel between Katzehin and Juneau under Alternative 2B. The Final EIS also indicates that approximately 90 percent of households in Lynn Canal communities own one or more vehicles. For those passengers currently traveling in Lynn Canal as walk-ons who own or have access to a vehicle, travel costs may decrease under Alternative 2B. The Final EIS makes clear that persons who need or desire to travel without a personal vehicle would have to fly, rent a vehicle, or travel on a private carrier if one or more develops. The Final EIS estimates that private carrier rates are likely to be in the range of current ferry passenger fares. It is true that travelers choosing to fly or rent a vehicle would have higher travel costs than they would have under marine alternatives.

Comment: The Final EIS fails to address the costs of future road improvements and maintenance resulting from acts of nature.

Response: Neither the environmental nor monetary costs of most acts of nature are reasonably predictable. The Final EIS projects the capital and operations costs related to avalanches, as they are a regularly reoccurring activity. The Final EIS discusses past landslide activity in the vicinity of Alternative 2B and the potential for future activity.

Cultural, Historical, and Archaeological Resources

Comment: The Final EIS fails to document compliance with the National Historic Preservation Act (NHPA) because DOT&PF has not consulted with the Auk Kwan.

Response: The NHPA requires federal agencies to consult with federally recognized tribes. The Auk Kwan is not a federally recognized tribe. FHWA, and therefore DOT&PF, has no obligation under the NHPS act to consult with possible leaders of unrecognized tribes.

Editorial and Document Management

Comment: The Final EIS incorrectly states that Juneau is the largest community on the North American continent not connected to the continental highway system.

Response: Juneau is the largest city on the North American continental mainland not connected to the continental highway system. Examples of larger communities mentioned commentors (e.g. Victoria and Campbell River) are larger than Juneau but are located on islands offshore of the continent. The point made in the Final EIS is that Juneau is the largest community not separated by salt water that relies on a ferry running parallel to land.

Comment: The Final EIS incorrectly states the medical clinic in Skagway is operated by the Southeast Alaska Health Consortium (SEARHC); it is owned and operated by the City of Skagway.

Response: The statement in the Final EIS (page 4-37) that the medical clinic in Skagway is operated by SEARHC is incorrect. The correct statement is that the clinic is owned and operated by the City of Skagway, which is a participating community in SEARHC. Improved access to and from Juneau would benefit Skagway residents who qualify for SEARHC health and social services.

Environment

Comment: The Final EIS fails to recognize that habitats in Berners Bay are unique and under represented in remaining wildlands.

Response: The wetlands and other habitat types potentially affected by reasonable alternatives are described in the Final EIS, and the impacts to these habitats are evaluated. Based on field studies, literature searches, and coordination with resource agency staff, no unique wetland habitats would be affected. The highway alignment for Alternative 2B has been adjusted, through consultation with cooperating agencies, to avoid all but 0.2 acre of emergent wetlands, the rarest type of wetlands in the project area.

Geology

Comment: Soils in the Katzehin River area are unsuitable for bridge construction, as no bedrock was found during geotechnical investigations. Bridges and tunnels would be subject to damage from earthquakes.

Response: Recent exploratory drilling and geotechnical profiling at the Katzehin River, as well as the Lace and Antler crossings, conducted to confirm bridge locations for permit applications, indicated that soil conditions at the proposed location are suitable for standard construction techniques. Bedrock was estimated to be quite deep, 200 to 350 feet below ground level, but drilling to depths ranging from 200 to 270 feet indicated soils that could support displacement

piles at depths below earthquake susceptibility. No tunnels are proposed as part of the Alternative 2B highway. Bridges would be designed to meet state standards regarding earthquakes.

Land Use

Comment: Alternative 2B is inconsistent with the Tongass Land and Resource Management Plan (TLMP). The Final EIS fails to adequately disclose impacts from Alternative 2B on old growth reserves. Alternative 2B is not consistent with the Old-Growth Habitat land use designation (LUD) objectives in TLMP.

Response: The Final EIS describes the TLMP LUDs in the project area and also describes the Transportation and Utility System (TUS) LUD that would be created around a highway after construction. The impacts to designated old growth reserves are described in terms of acres destroyed and acres fragmented. The Final EIS includes an explanation that the USFS, in coordination with ADF&G and USF&WS, will reconfigure the old growth reserve boundaries to compensate for these impacts. This is a USFS action independent of this ROD. Alternative 2B is consistent with TLMP; TLMP identifies a future state highway corridor on USFS managed land on the east side of Lynn Canal, with provisions for a TUS LUD to be created if a highway is constructed.

Comment: Additional indirect and cumulative impacts to the roadless nature of Lynn Canal would result from land exchanges and mineral development. These were not analyzed or recognized in the Final EIS. Additional logging roads would be constructed and lead to legal and illegal hunting. The Final EIS examined a limited range of environmental effects of opening up these areas to road access, and no consideration was given to the increased incentive for the USFS to open the area to logging.

Response: The Final EIS evaluates potential cumulative impacts from reasonably foreseeable actions. No land exchange is reasonably foreseeable; an exchange that has been proposed but not enacted as legislation is not reasonably foreseeable. The only reasonably foreseeable mineral development in the vicinity of Alternative 2B is the Kensington Gold Project, which was included in the cumulative impact analysis.

No logging or logging roads in the vicinity of Alternative 2B are reasonably foreseeable. The Final EIS acknowledges that Alternative 2B would improve access to timber stands that at some future date could be made available for harvest. The document also points out that this timber is primarily on US Forest Service managed land, and the management plan designates most of the land crossed by the highway to be maintained as mostly natural. Furthermore, in areas of potential development, the management plan requires that areas of old growth habitat to be designated and reserved.

Mitigation and Monitoring

Comment: How will DOT&PF monitor long term impacts from trapping, hunting, and vehicle collisions on the wildlife population in Lynn Canal?

Response: DOT&PF will not monitor long-range impacts to wildlife due to hunting, trapping, or vehicle collisions. The Final EIS identifies potential long-term impacts, and contains the commitment to provide funding for detailed game population studies to insure ADF&G has the necessary data to begin more active management of game populations. Long term monitoring of population effects, regardless of cause, will be conducted by ADF&G as part of its game management responsibility.

Comment: How will DOT&PF monitor the long-term impacts from sedimentation and/or road maintenance?

Response: DOT&PF has made no commitment to monitor the long-term impacts from sedimentation or highway maintenance. Most sedimentation impacts occur during construction when soils are disturbed. The General Permit for Alaska under the National Pollutant Discharge Elimination System requires monitoring and correction of erosion or sedimentation that occurs during construction. After slopes are stabilized the sedimentation potential is reduced. Use of gravel as part of winter maintenance can be a source of sedimentation if gravel is left on the highway. Routine spring and summer maintenance includes removing gravel and sand from the highway, and periodically cleaning ditches as necessary.

Comment: Environmental mitigation and monitoring commitments in the Final EIS are inadequate in regards to construction timing windows. Windows for construction in the Lace, Antler, and Katzehin Rivers are too short to provide adequate protection to developing eggs and larvae of non-salmonid species, particularly eulachon.

Response: The commitment in the Final EIS regarding the construction window for in-water work is the result of suggestions from resource agencies. These commitments may be expanded when conditions are established on permits required for instream work.

Comment: The time frame for construction windows at the Antler River of April and May for work within one mile of harbor seal haulouts is inadequate. Harbor seals use sand bars in the Antler River in June; the window should be extended from April through June.

Response: The commitment in the Final EIS regarding construction work timing within one mile of harbor seal haulouts was developed in consultation with NMFS and USFS, and is based on avoiding identified locations of seal haulouts during the peak use period. If NMFS identifies additional locations or requests a longer no-work window for a specific location, FHWA will coordinate with NMFS.

Comment: The Final EIS does not mention how studies to determine the impacts of the Preferred Alternative 2B on anadromous and forage fish after construction would be funded.

Response: The Final EIS does not identify the need for any studies to determine impacts to anadromous and forage fish. DOT&PF and FHWA have coordinated closely with Cooperating Agencies and the Alaska Department of Natural Resources Office of Habitat Management and Permitting (OHMP) to minimize impacts to these fish. All anadromous fish streams will be bridged, all but the Lace, Katzehin, and southeast channel of the Antler rivers will be clear spanned. No resource agency has suggested the need for monitoring of impacts to fish species.

Comment: The Final EIS does not provide information on costs to or funding for, other agencies for upkeep of avoidance measures and enforcement by Alaska State Troopers, ADF&G, and the USFS regarding impacts to wildlife.

Response: Most avoidance and minimization measures have little or no maintenance costs. Alignment changes to avoid high value areas, and wildlife population studies, once complete need no ongoing support. Bridges, through-cut construction, concrete and wood barriers, and screening walls all would be maintained as part of highway maintenance. Enforcement by ADF&G and USFS would be funded by the ongoing operational budgets of these agencies. Both agencies currently have management and enforcement responsibilities in the area where

the highway will be constructed. While improved access will lead to increased use and the need for increased oversight, improved access will reduce the cost of individual oversight activities.

Comment: Wildlife studies included in mitigation commitments in the Final EIS are all short-term; long-term studies would be better suited for determining impacts from the Preferred Alternative 2B.

Response: Population studies for brown bear, moose, mountain goat, and wolverine are included in the mitigation commitments to provide management level information for game managers, not to determine the impacts of Alternative 2B. Increased hunting pressure combined with potential habitat fragmentation and other indirect impacts were identified as the greatest wildlife impact. Wildlife underpasses will be constructed to address potential habitat fragmentation. Increased hunting pressure can be mitigated by aggressive game management if population characteristics are well understood. Based on this need, DOT&PF has committed to providing funds for these studies. Coordination with resource agencies has identified the need for a long-range study to determine the effectiveness of wildlife underpasses for brown bears. A long-range underpass study will be designed after the brown bear population study is completed.

National Environmental Policy Act

Comment: The Final EIS violates the National Environmental Policy Act (NEPA) because the Transportation System Management Alternative considered in the Draft EIS in 1997 was dropped from consideration in the Supplemental Draft EIS.

Response: The Final EIS explains that the No Build Alternative in the 1997 Draft EIS was titled Alternative 1, No Build/Transportation System Management, and the reason for that title. The 1997 Draft EIS explained that "DOT&PF would continue to adjust ferry service to best accommodate all Southeast Region". It also stated that "one option to improve service in Lynn Canal when the M/V Kennicott comes on line would be to convert the M/V Malaspina into a day boat … [to] provide additional daily service …". Although this option was discussed, it was not included in the analysis of Alternative 1, nor was it evaluated as a separate alternative. The Final EIS explains that TSM was dropped from the Alternative 1 title because it was not appropriate, given how the term is generally used. The Final EIS explains that AMHS makes operational changes from season to season at its discretion, and these changes are not subject to NEPA. The Final EIS also explains that under the No Action Alternative AMHS may make changes in Lynn Canal, including schedule changes and deploying additional vessels, either existing vessels or new vessels built for the system as a whole. However, in order to evaluate the No Action Alternative, it was necessary to predict the most likely operations in Lynn Canal. This prediction of likely service and vessels was based on the most recent AMHS plans as expressed in the 2004 Southeast Alaska Transportation Plan.

Some comments suggest a TSM alternative should have been created separate from the No Action Alternative, based on using the M/V Fairweather exclusively in Lynn Canal, and/or using older mainline vessels made available by replacement vessels planned for other corridors. The Final EIS explained that providing increased service in Lynn Canal by reassigning vessels from other routes is not really a TSM alternative. In the case of increasing use of the M/V Fairweather, Sitka would lose its twice per week fast ferry service. Planning to use older mainline vessels made available by purchasing one or more new vessels for other routes would avoid initial capital cost in Lynn Canal, but would be at the expense of retaining older more expensive vessels that the new vessel(s) was intended to replace. The Final EIS examines a full range of reasonable alternatives, including five marine alternatives (including the No Action) with various capacities, travel times, trip frequencies, and costs.

Comment: The Final EIS does not analyze mitigation measures and therefore violates NEPA.

Response: Section 5 of the Final EIS lists mitigation commitments applicable to the reasonable alternatives as well as a comprehensive set of mitigation commitments for Alternative 2B. These mitigation measures are a compilation of measures discussed in the impact analysis sections of the Final EIS and related technical reports included as appendices. The mitigation plan proposed for Alternative 2B is the result of ongoing coordination and analysis with Cooperating Agencies and is evident in comment letters and responses from scoping, review of the preliminary Supplemental Draft EIS, the Supplemental Draft EIS, the preliminary Final EIS, the Final EIS, and related appendices. All of this coordination is documented in the Supplemental Draft EIS and Final EIS.

Comment: The Final EIS fails to comply with NEPA regulations concerning Cooperating Agencies because the Federal Highway Administration (FHWA) did not request the Department of Homeland Security to be a Cooperating Agency.

- The Final EIS identified a preferred alternative with construction of new ferry terminal that would be unmanned and use of existing unmanned ferry terminals at Skagway and Haines with no identified security plan.
- The preferred alternative (Alternative 2) in the Supplemental Draft EIS did not include the construction of a new ferry terminal. This is a new development in the Final EIS.
- Security measures for a new ferry terminal will increase project costs.

Response: The United States Coast Guard (USCG) Marine Safety Office is responsible for ferry and ferry terminal security. The USCG, a Department of Homeland Security entity, is a Cooperating Agency on the JAIP. No one in the USCG has indicated that DOT&PF or FHWA should consult with the Marine Safety Office during the preparation of the Final EIS, nor has the Department of Homeland Security indicated to FHWA that it should be invited to be a Cooperating Agency on projects involving new or existing ferry terminals. Recent coordination with the Marine Safety Office confirmed that this office reviews and approves proposed security plans when construction is complete, and will provide preliminary comments on security during the final design and construction phase if requested. The Marine Safety Office does not get involved at the initial planning or environmental document preparation phases of a proposal.

The preferred alternative in the Supplemental Draft EIS included construction of a new terminal (at Katzehin); all alternatives other than the No Action, 4A, and 4C had one or more new terminals. The Marine Segments Report (Appendix B) stated that terminals would be unmanned, based on not needing shoreside vessel support. Security was not addressed, as this was not identified as an issue for the marine segments analysis. Operational cost analyses in an EIS are primarily estimated to provide a comparison between alternatives. All reasonable alternatives were treated equally; no security costs were included for any vessel operation plan. While DOT&PF may ultimately decide to provide security with personnel at the terminal, current USCG security regulations allow unmanned terminals, with security provided by the vessel crews.

Comment: The Final EIS does not document compliance with requirement that full funding be reasonably anticipated within the project completion period. The State General Funds indicated in the Final EIS, have not yet been approved by the current Alaska State Legislature. A new State administration not supporting the JAIP could be elected within the next year.

Response: The Final EIS identifies the anticipated funding sources for construction of Alternative 2B. Of the estimated $258 million necessary to construct the project, $135.5 million,

or 53 percent, is shown in the current, approved three year STIP. The STIP funds identified for highway construction total $130.5 million, 69 percent of the estimated cost of highway construction. Highway construction is anticipated to take five years to complete. The funding shown in the STIP for highway construction over three years provides more than three-fifths of the required funding. The funding identified in the current STIP, together with the lower level of funding projected for the later years, indicates that funding is reasonably anticipated, and is in fact a higher level of initial funding than is often committed to large construction projects.

It is true that the Alaska Legislature may choose to make changes to the State administration proposed budget. They may choose to use State General Funds on other projects and provide greater authorization for the use of federal funds. It is also true that a new administration may have a different level of support for JAIP and/or Alternative 2B. This situation is the same for any federal aid project. Development of a Final EIS and commencement of final design and right of way acquisition are major commitments by the State. The fact that future actions may make changes to funding does not mean funding is not reasonably anticipated.

Comment: Alaska Statute (AS) 44.42.050 requires DOT&PF to assess the cost effectiveness of transportation projects. The Final EIS acknowledges that the Preferred Alternative 2B is not cost effective. Also, the examination of cost effectiveness does not account for the diminished benefit to the people who do not travel with automobiles.

Response: The Final EIS does not acknowledge that Alternative 2B is not cost effective. As explained in the ROD, Alternative 2B will have life cycle costs, based on 5 years of construction and 30 years of operation, of approximately $352 million. Based on the approximately 5.9 million vehicle trips that are projected to occur during the 35-year period, this is a cost of about $60 per vehicle trip. This is the lowest cost per vehicle trip of any reasonable alternative. The No Action Alternative would have a life cycle cost of 267 million for the same period. Based on the projected 1.4 million vehicle trips that would be provided, this would equal about $191 per vehicle trip.

The life cycle cost per vehicle trip explained above is based on vehicles, not passengers without vehicles. As explained in the Final EIS, the Lynn Canal corridor is part of the NHS. The state's primary responsibility on this and other NHS routes in the state is to provide a facility, not passenger transportation. The Final EIS discloses impacts to passengers wishing to travel without a vehicle.

Comment: The Final EIS improperly segments the Juneau Access project, because it does not address terminal modifications planned for the Haines and Skagway terminals. These modifications are part of, or have cumulative impacts to, the Juneau Access project.

Response: The Final EIS indicated that a Haines-Skagway shuttle would be implemented under the No Action Alternative. Current proposed terminal modifications to the Haines and Skagway terminals are to accommodate existing operations and/or the No Action Haines-Skagway shuttle. These actions are independent of Juneau Access action alternatives. Past experience with terminal modifications has shown that these projects have limited impacts, generally consisting of localized water quality and marine habitat effects. None of the action alternatives involve construction in the vicinity of the Haines or Skagway terminals; therefore these projects were not an issue when considering potential cumulative impacts of reasonable alternatives.

Public Process

Comment: The Final EIS does not accurately portray public opposition to the highway (Alternative 2B) in Haines, Juneau, and Skagway.

Response: The Final EIS detailed the results of referenda in Juneau and Skagway, and resolutions passed by the Haines, Juneau, and Skagway assemblies as well as both houses of the Alaska State Legislature. The Final EIS also refers to the results of telephone surveys conducted in 2003 and the comments submitted in during the comment period for the Supplemental Draft EIS. The Final EIS statement that "providing highway access to Juneau is a contentious issue in Northern Southeast Alaska" is accurate. The reader can draw further conclusions if desired.

Comment: Is it appropriate for DOT&PF to be conducting geotechnical investigations, to determine placement of bridge pilings at river crossings, when a final decision on the Preferred Alternative has not been made?

Response: FHWA has approved the use of federal funds to conduct geotechnical studies to confirm the locations of stream and wetland crossings in support of permit applications. It is common, acceptable practice to submit permit applications prior to a Record of Decision. Geotechnical studies at locations requiring Department of the Army and other resource permits insures that permit reviews do not have to be repeated if geotechnical studies determine that alignment changes must be made.

Comment: DOT&PF should have allowed the public to comment on Alternative 2B as the Preferred Alternative in an additional Supplemental Draft EIS. DOT&PF should have lengthened the review period and provided additional opportunities for public input, such as new public meetings and a website for email comments.

Response: Alternative 2B was identified as a reasonable alternative and evaluated in the Supplemental Draft EIS. The Supplemental Draft EIS stated that all reasonable alternatives are under consideration and a final preferred alternative would not be identified until after the results of the public hearings and written comments were evaluated. The new preferred alternative identified in the Final EIS was announced in August of 2005, over five months before the Final EIS was released, providing interested parties adequate time to reexamine it. Neither an additional Supplemental Draft EIS nor additional public hearings were required. Mailed, hand delivered, or faxed comments provided sufficient opportunity to comment on the Final EIS, and insured that comments were signed.

Comment: The selection of the Preferred Alternative should reflect the will of the majority of the residents in Southeast Alaska who are opposed to a Lynn Canal highway. A majority of residents in Haines, Skagway, and Juneau have opposed increased access via a Lynn Canal highway for years. Public funds should not be used for a project that does not have a clear majority of public support.

Response: As explained in Appendix Y in the response to comment PUB03, decision makers take the results of referendums and municipal resolutions into consideration, but these actions are not binding on them.

Comment: The decision to construct the highway was made prior to the Final EIS and will not be altered by public input. This is reflected in a comment by Regional Director Malcolm Menzies quoted in the Haines newspaper as saying the highway was a 'done deal'.

Response: DOT&PF indicated its preferred alternative for the Final EIS in August, 2005; a preferred alternative must be identified in a Final EIS. It is not inappropriate for the Director of the Southeast Region of DOT&PF to speak in support of the preferred alternative. (Also, the Chilkat Valley News did not quote MR. Menzies as saying the highway is a "done deal", but rather stated that he "characterized the road plan as a done deal". This was a reporter's interpretation of his remarks.) Regardless of comments by DOT&PF officials, the decision to select Alternative 2B was not made by FHWA until comments submitted in response to the Final EIS were carefully considered.

Comment: The family of John MacKinnon, DOT&PF Deputy Commissioner for Highways, owns mineral rights on the east side of Lynn Canal near the Alternative 2B highway alignment, which may be a conflict of interest for this public official.

Response: In April 2004 Deputy Commissioner MacKinnon asked for and received a legal analysis from the State of Alaska Department of Law regarding whether he has a conflict of interest under the State Ethics Act with regard to the JAIP and his financial interests. Based on the advice of the Department of Law, Deputy Commissioner MacKinnon removed himself from any decision making on this project. Therefore the chain of authority established for the project has been from Commissioner Barton directly to Southeast Region Director Menzies.

Comment: The greater detail provided for the highway alternatives versus what was provided for the marine alternatives indicates a biased preference for highway construction.

Response: All reasonable alternatives were evaluated to a comparable level of detail. For certain aspects of alternatives, this may mean a very similar level of detail. For instance, the marine segments of each alternative were developed to the same level of detail; capital and operational expenses, vessel sizing, potential operating schedules were provide for each alternative. For other aspects a comparable level of analysis may require a greater level of detail. Many more potential impacts of highway alternatives were identified during scoping than for marine alternatives. Analysis to a comparable level required that all substantive issues raised during scoping be addressed. Failure to provide the level of detail needed to address concerns would have resulted in a faulty analysis.

Purpose and Need

Comment: The State's purpose and need is contrary to the purpose of the DOT&PF. The JAIP is biased toward a highway alternative because the purpose and need is skewed toward automobile transportation.

Response: The elements of the purpose and need statement are not contrary to the purposes of a department of transportation. The DOT&PF, like other state transportation departments throughout the nation, has as one of its responsibilities providing highways. Highways, by definition, are a facility for the movement of vehicles. The AMHS in Lynn Canal is part of the National Highway System. The purpose of and need for the JAIP was developed to address surface transportation inadequacies in Lynn Canal, not to predetermine a modal solution.

Comment: The DOT&PF fails in the Final EIS to accurately interpret its mission statement to provide for the movement of people and goods and the delivery of State services.

Response: It is true that DOT&PF's mission is "to provide for the movement of people and goods and the delivery of State services. The statement in the Final EIS that the State's primary responsibility on inter-city surface routes is to provide a transportation facility, not the transportation itself, is not inconsistent with the mission statement. Highways, used by private

vehicles, provide for the movement of people and goods. Nothing in the mission statement requires DOT&PF to move people wishing to travel without a vehicle. As stated in Question 4a of the Council on Environmental Quality's Forty Most Asked Questions, published in Volume 46, No. 55 of the Federal Register, "The 'agency's preferred alternative' is the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical and other factors." The Final EIS states the reasons why DOT&PF prefers Alternative 2B; the ROD explains why FHWA believes Alternative 2B best meets the purpose of and need for the project, which is consistent with the missions of both DOT&PF and FHWA.

Comment: Identification of inappropriate funding, underestimation of costs, and statements of elected officials indicate that the State does not intend to complete Alternative 2B as proposed. Instead, construction will stop at the Kensington Mine.

Response: As addressed in response to comments above regarding costs, all funding sources identified in the Final EIS are appropriate for use in construction of Alternative 2B, and construction costs have not been underestimated, intentionally or otherwise. Elected officials, state and federal representatives in particular have made statements expressing their highest priority. That is not an indication that they do not want the project completed, but rather what they would like completed the soonest. Nevertheless, these elected officials are not the state and federal decision makers for the JAIP. All aspects of the project, from initial studies, scoping, alternative development and analysis through to selection of Alternative 2B have been based on the purpose of and need for the project, not access to the Kensington mine.

Safety

Comment: Drivers on the highway would not be able to make decisions regarding the stability of the snow pack 3,000 feet above the roadway to determine if travel on the highway would be safe.

Response: The avalanche control program is based on assessment of weather and snow conditions by avalanche professionals. Highway closures, projected to average 34 days per year, would be instituted based on conservative estimates of snow stability. Individual drivers would not have the option of assessing risk and proceeding when the highway is closed.

Comment: In addition to fatal accidents predicted and included in the Final EIS, the Final EIS should have stated the likely number of non-fatal accidents. Also, what type of accident scenarios were used to estimate road mortality? Were multi-passenger vehicles (e.g. school buses) included in the analysis?

Response: Fatal accident projections for highway alternatives were provided in the Final EIS because Supplemental Draft EIS comments specifically requested information about potential fatalities. The fatal accident rate projected was based on fatal accidents per vehicle mile on highway segments in northern Southeast Alaska with similar design characteristics and traffic volumes. Non-fatal accident projections can be made using the same accident database that was used to project fatalities. Based on the accident data from the Klondike, Haines, and Glacier highways from 1994 to 2003, the Alternative 2B highway from Echo Cove to the Katzehin terminal would have approximately 15 non-fatal accidents per year. No fatal accidents involving buses have occurred on the highways used in the analysis; therefore no fatal bus accidents were included in the projection of fatalities for Alternative 2B. As the Final EIS points out, all fatalities in the analysis period were attributed to speeding.

Section 404 Draft Permit Application

Comment: The Draft Section 404 Permit Application fails to demonstrate compliance with Executive Order (EO) 11990 Protection of Wetlands.

Response: The Draft Section 404/10 Permit Application and Draft Section 404(b)(1) Analysis, included as an appendix of the Final EIS, were provided to give the U.S. Army Corps of Engineers (USACE) and interested parties preliminary information regarding the specific impacts to wetlands and other waters of the US, and DOT&PF preliminary rationale for those impacts, given the 404(b)(1) requirement that the permitted action must be the least environmentally damaging practicable alternative. A draft application and analysis are required to be included in an FHWA EIS based on a 1992 accord between DOT&PF, FHWA, and the USACE to streamline the NEPA and permit review process. EO 11990 is a directive from the federal Executive to federal agencies requiring that new construction undertaken by the agency include all practicable measures to minimize harm to wetlands. It also states that the federal agency may take into account economic, environmental and other factors when making a finding to this effect. The Wetlands Finding, provided as Part C of Final EIS Appendix X, is a separate document from the draft application and analysis provided per the 1992 accord.

Comment: The USACE cannot rely on the Final EIS to grant a Section 404 Permit. The Final EIS does not provide sufficient basis for the USACE to determine that granting a Section 404 Permit is in the public interest.

Response: The Final EIS contains an abundance of information to support the conclusion that granting a Department of the Army (DA) permit under Section 404 is in the public interest. The USACE is a Cooperating Agency for the JAIP EIS, and has reviewed and commented on the document and appendices as they were developed. DOT&PF has responded to all Cooperating Agencies comments and has added information to the Final EIS to meet their concerns. Nevertheless, issuance of a DA permit is a decision of the USACE, separate from the FHWA analysis and decision process. DOT&PF submitted an application to the USACE on March 3, 2006, along with supporting information requested by the USACE. The Draft 404(b)(1) is exactly that, a draft. The final 404(b)(1) Evaluation, with conclusions regarding public use, practicability, and impacts of alternatives will be completed by the USACE, with any additional information it deems necessary supplied by DOT&PF. Similarly, a decision on issuance of a DA permit will be made by the USACE, after their Public Notice period for the Section 404/10 permit ends.

Section 4(f)

Comment: The Section 4(f) Analysis in the Final EIS regarding the Berners Bay public use cabin is arbitrary.

Response: The Final EIS discusses in detail the applicability of Section 4(f) of the Department of Transportation Act with regard to the USFS cabin in Berners Bay. The discussion explains that the USFS believes that the cabin itself is the recreation facility and is moveable based on where they think it best serves their purposes. At the request of FHWA the USFS agreed to set a land boundary based on the areas of discernable use and the fact that the cabin is located close to the water, and is oriented to the water in terms of views and activities. The highway footprint will not be constructed within this boundary. The USFS has requested that a trail be constructed from the new highway to the cabin, and has indicated that a road accessible cabin would be a desirable addition to its range of public facilities.

No constructive use of the cabin will occur. No construction equipment will enter the Section 4(f) boundary of the cabin except temporarily to construct the requested trail. Major construction activity in the vicinity of the cabin will be limited to part of one season for excavation and embankment, with minor road work and paving following in part of another season. The Final EIS acknowledges that the experience at the cabin would change, but this change would not be so severe as to create a substantial impairment of protected features.

Independent of the requirements of Section 4(f), DOT&PF has agreed to provide a remote, water access public use cabin for USFS management to mitigate for impacts to current users of Berners Bay desiring a more remote cabin experience.

Comment: The LUD II in Berners Bay should be considered a recreation area protected under Section 4(f).

Response: The Final EIS explains that the area in Berners Bay designated in perpetuity as Land Use Designation (LUD) II (established in the Tongass Timber Reform Act of 1990) is multiple use land. The Final EIS also explains that in areas designated for multiple uses, areas of dispersed recreation are not protected by Section 4(f). Officials with the USFS have concurred that the only specific (non-dispersed) significant recreation area in the Berners Bay LUD II is the Berners Bay cabin.

Socioeconomic

Comment: Highway alternatives, specifically Alternative 2B, are discriminatory towards people who are elderly, have disabilities, and have low incomes. The State should provide low-cost public bus service between Juneau and the Katzehin Ferry Terminal.

Response: Highway alternatives do not intrinsically discriminate against the disabled, elderly, or those with low incomes. Highway transportation in private vehicles can be a low cost travel option. Also, throughout the state, bus service on state highways is provided by private companies responding to demand, not the state. DOT&PF would not make provisions to transport foot passengers wishing to travel on the Alternative 2B highway, as that is not a state responsibility.

Comment: The Final EIS provides an estimate of economic benefits to affected communities, but fails to quantify the cost burden to the communities in terms of public safety duties, emergency service, and less reliable access to health care.

Response: The Final EIS only quantified economic benefits that would result from improved access in Lynn Canal, i.e. increased spending and the corresponding new jobs due to new visitors. These economic gains could be easily quantified in broad terms (hundreds of thousands of dollars) for revenue created and sales tax generated, because data is available on the amount of money spent by different types of visitors. Many other potential benefits were identified qualitatively because assignment of dollar values would be much more difficult and somewhat speculative. Some of these benefits included higher prices for fishermen and processors resulting from better access to fresh fish markets, reduced operational costs for the Kensington Gold Project, potential increased ferry service in the rest of Southeast due to freeing up existing vessels, and increased property values and taxes along segments of the new highway and adjoining segments.

Similarly, the Final EIS provided information about economic losses or costs to the communities affected, quantified where possible, stated qualitatively otherwise. The Final EIS provided anticipated dollar value of leakage (business lost in one community due to shopping occurring in

another community). For instance, Alternative 2B was projected to create a $700,000 loss to the Haines economy in the first year the alternative is operational. Declines in air taxi operations were provided in terms of percent business potentially lost. This percent decline (40% for Alternative 2B) was also explained in terms of the potential lost revenue ($1million), lost payroll ($700,000), and lost jobs (22). Increased demand for public safety and emergency services were noted but were not quantified because in most cases the personnel interviewed indicated that the need for services would not result in increased staff but rather a change in deployment of personnel and/or equipment. This could result in delayed response times to current service areas. If public officials did decide to increase staff levels for police or emergency services, the level of traffic increase would not warrant increases that would reach the estimation threshold used for other economic effects (hundreds of thousands of dollars).

As explained in the Final EIS, Alternative 2B is not anticipated to create less reliable access to health care, although access will be changed in that, except for days when the highway is closed for avalanche safety, there will be no direct ferry connection between Juneau and Haines or Skagway. No cost for the effect of this change can be quantified.

Comment: The Final EIS fails to indicate the proposed marine alternatives would better serve the health care needs of Haines and Skagway residents than would highway alternatives, based on the comments of Haines health care professionals.

Response: DOT&PF received an unsigned letter (stamped with the name of one of the physicians and an unlisted individual) and listing several physicians and nurses. The letter stated a preference for marine alternatives, based on an assessment of the medical needs of Haines residence. The letter cited as reason for this preference the lack of access for patients that would be created by highway closures. These statements did not reflect the fact that under Alternative 2B a shuttle would be homeported in Haines and would make daily or more frequent trips in Lynn Canal during highway closures of one day or more. A letter from one physician, purportedly on behalf of other health care professionals and apparently based on a misunderstanding of some alternatives, does not constitute a conclusive determination that represents the health care providers in Lynn Canal.

Comment: The Final EIS fails to evaluate impacts Alternative 2B would have on other economies in the state as a result of independent travelers being diverted south from the Alaska Highway from areas such as Anchorage or the Mat-Su Valley.

Response: The Final EIS states the number of new travelers that are likely to visit the three communities in Lynn Canal. The Final EIS indicates that for Haines and Skagway under Alternative 2B, most new visitors would be Juneau residents traveling more often to these communities. Under Alternative 2B, Juneau is estimated to receive 52,000 additional visitors the first year the project is completed, creating approximately 110 new jobs. The Final EIS does contain the statement that improved access to Juneau is not expected to result in new major economic development in the state, rather independent visitors to Alaska could shift their travel patterns, perhaps spending more time in Juneau. This is not to say that all visitor growth in Juneau would be at the expense of the rest of the state, or that it is possible to predict exactly where the reduced spending would occur.

The Socioeconomic Effects Technical Report, Appendix H of the Final EIS, provides further detail on this topic. This report estimates that approximately 20,000 of the new yearly visitors to Juneau would be Whitehorse residents. These are not necessarily travelers diverted from other Alaska travel. Another 20,000 new yearly visitors would be travelers on the AMHS that would now spend time in Juneau rather than pass through on a ferry continuing in Lynn Canal. These

are “diverted” travelers, but there is no way to know if the estimated day they would spend in Juneau would shorten their total time in Alaska, and if so, where that dropped day would have been spent. The report also estimates that approximately 4,000 Alcan Highway travelers would include a trip to Juneau in their itinerary. These travelers would probably shorten their stay in Interior Alaska, but which community they would choose not to visit is not predictable.

Based on the detailed information in the report, about half of the estimated 52,000 new yearly visitors to Juneau would be diverted from other Alaska travel. Thus about half of the new 110 jobs that would be expected in Juneau would be at the expense of the rest of the state. No new major economic development would occur; neither would the redistribution be major. Furthermore, exactly which communities beyond Lynn Canal would be affected and how much is not predictable.

Transportation

Comment: The latent demand presented in the Final EIS is based on assumptions that are arbitrary and that overestimate traffic demand for the highway (Alternative 2B). The traffic demand forecast overstated the demand for highway alternatives and understated the demand for ferry alternatives by using arbitrary or incorrect frequency delay times and ferry travel times in the traffic demand model.

Response: The traffic demand model used in the Traffic Forecast (Appendix C of the Final EIS) was not arbitrary, nor was the use of frequency delay. The rationale for the model was explained and the principles established were consistently applied. As explained in the forecast, frequency delay is a measure of how often a passenger can travel in Lynn Canal. Frequency delay represents much more than waiting time; it also provides a measure of the travel convenience that an alternative provides. This is particularly important when there is no other vehicle travel option available.

The Traffic Forecast explains that ferry travel time was assigned the same opportunity cost as all other travel, and provides the rationale for this action. The forecast also explains non-work travel time, regardless of mode, was valued at one half of work time. Arguments that most travelers enjoy ferry travel and therefore time spent on a ferry should be counted as a benefit rather than a cost ignore the fact that travelers may value other travel time as much as ferry travel. It also does not account for the fact that time spent traveling is time not spent doing something that may be more valuable to the traveler. The fast ferry M/V Fairweather has been popular with many travelers, presumably in part because it is faster, but at the very least in spite of the fact that it reduced ferry travel time, even though this time may have been considered enjoyable.

The traffic model was calibrated by comparing the results of the least restrictive alternative with the estimated latent demand for travel in the corridor. The latent travel demand estimate is a realistic appraisal of the travel that would occur if there were no restrictions to surface travel in Lynn Canal. The latent demand estimate used information from several data sources in addition to the household surveys. Also, information from responses to travel questions in the survey regarding past travel, as well as future travel, was interpreted in light of all other information. For instance, past travel on the AMHS has been at a passenger to vehicle ratio of 3.6 to 1; future highway travel is likely to be closer to the 2.3 to 1 ratio currently occurring on other highways in the region. Another example is that ferry travel in Lynn Canal in the past involved the triangle vessel routing of Juneau-Haines-Skagway-Haines-Juneau. This meant that travel to Haines and Skagway and possibly Whitehorse (driving from Haines to Skagway via Whitehorse) would result in only one trip in Lynn Canal.

The estimated unrestricted demand of approximately 500 vehicles a day was based on a logical interpretation of the data available. Furthermore, suggestions that this estimate is grossly overstated are not credible given that Juneau is a community with a population of over 30,000 people, is the capital of Alaska, has two communities with a combined population of 3,200 approximately a hundred miles away, and a sister city with a population of 23,000 approximately 200 miles away.

Comment: The FEIS does not acknowledge that the growth rate for Lynn Canal communities between 1998 and 2002 has decreased in the later years to less than one-half of the 2 percent used in the traffic demand calculations and cited in the document.

Response: The 1998 to 2002 average growth rate in Lynn Canal communities stated in Section 1 of the Final EIS was provided to illustrate overall growth in the region's population and traffic in comparison to the absence of traffic growth on the AMHS. The Traffic Forecast acknowledges that growth rates were lower in the last five years of the data, and that a slower rate of 1 to 1.5 percent should be used for the long term growth rate. Traffic growth is not dependent only on population growth. The Traffic Forecast also points out that basing estimated traffic growth solely on population growth would underestimate likely traffic levels because induced traffic would not be represented. Alternatives were assigned a growth rate based on user costs, which affect induced traffic. A long-term traffic growth rate of 1.9 percent was used for Alternative 2B traffic growth.

Comment: The Final EIS does not adequately evaluate travel times for each alternative:

- The Final EIS should have compared travel times for the alternatives with either no wait time or with the maximum estimated wait time for each. If wait times are excluded, travel times under Alternative 2B are the same or worse than those for the *MV Fairweather* under the No Action Alternative.
- The travel times estimated for Alternative 2B do not include winter closures of the highway.
- The Alternative 2B travel times do not include delays caused by poor road conditions resulting in driving speeds less than 45 miles per hour (mph); this would cause more frequent delays than occur on the current ferry system.
- The travel times do not account for docking delays at the Katzehin Ferry Terminal as a result of inclement weather. The Final EIS should either increase travel times or include the additional costs ($35 million) for construction of a breakwater.
- The Final EIS assumes the shuttle ferry can receive fares and load passengers in 10 minutes, yet it takes 35 prepaid travelers on the *MV Fairweather* one to two hours for fee collection, processing, and loading.
- Calculations of travel time for Alternative 2B do not include wait time, which is unrealistic. Rarely will vehicles arrive at the ferry terminal and be able to drive directly onto a waiting shuttle and be underway within 10 minutes. A 45-minute wait time should be added to the estimated travel time for the highway.

Response: The travel times provided in the Final EIS are based on the times required to check-in and load vehicles. Minimum vehicle check-in time for M/V Fairweather is one hour, due to the need to determine how many no-shows there are, how many stand-by vehicles can be accommodated, and subsequently determine how to load a weight sensitive vessel. This minimum check-in time cannot be ignored. It is important to note that under the No Action Alternative the M/V Fairweather does not run every day in Lynn Canal, and provides only half of

the capacity. Therefore, approximately one half of travelers must travel on mainline vessels, which have substantially longer travel times.

Under Alternative 2B, no check-in will be required at the Haines, Katzehin, and Skagway terminals, because no reservations will be taken. Vehicles will load in the order they arrive at the terminal. Any vehicle arriving during the loading period (estimated to be 10 minutes) would be able to board if there were space available. Fares would be collected onboard during the sailing (28 minutes between Haines and Katzehin, 54 minutes between Skagway and Katzehin).

The Final EIS acknowledges that under Alternative 2B many travelers would choose to plan their trip in order to arrive at the shuttle terminal before the scheduled departure. The same is true for travelers under marine alternatives. Many travelers would plan to arrive before the minimum check-in time required to be assured of not loosing a reserved vehicle space.

Delays due to severe winter weather are possible with all alternatives, but were not factored into the travel time estimates provided in the Final EIS. The Final EIS provides the basis for the travel times reported, including average highway driving speed, ferry travel time, loading and unloading time, and check-in time if required. Driving speeds on the highway will be reduced at times during winter; weather delays could also occur on ferries and at terminals. Under the No Action Alternative the M/V Fairweather is projected to run twice a week in the winter, with mainline service three times a week. The M/V Fairweather does not operate in seas greater than 10 feet, or winds speeds greater than 40 knots. Fast ferries for Alternatives 4A and 4B would be scheduled daily but would likely be subject to similar weather restrictions. (Alternatives 4C and 4D would provide winter shuttle service to Haines and Skagway with conventional monohull ferries not subject to the same restrictions as fast ferries, but this service would be provided every other day to each community.)

As mentioned above, winter delays due to severe weather could occur at ferry terminals; this potential is not limited to the proposed Katzehin terminal. The Marine Terminal Concepts report appended to the Technical Alignment Report (Appendix D of the Final EIS) explains that the chosen layout would be protected from the north and the south, but exposed to the west. This exposure is similar to the exposure of the Auke Bay terminal, and missed landings would be infrequent. The Skagway terminal is subject to northerly winds, and landings there have been missed or delayed when northerly winds reach 40 knots. The exposures at these existing terminals as well as the proposed Katzehin terminal do not warrant greater protection, which would be extremely costly to construct.

Comment: The Final EIS predicted travel demand based on an unreliable household survey; the survey did not account for the Preferred Alternative (2B), which requires a ferry trip for all users.

Response: The Final EIS does not predict travel demand for alternatives based solely on the household surveys. The household surveys asked respondents to report their current travel frequency and estimate their likely travel frequency if travel in Lynn Canal was unrestricted. This information from the household surveys was used to estimate latent traffic demand, which in turn was used to calibrate the traffic model. Traffic predicted for each alternative was generated in a stepwise process from the alternative with the highest user costs (and corresponding lowest potential traffic) to the alternative with the lowest user cost (and highest traffic potential). It was not necessary for participants of the household surveys to answer potential travel frequency questions about each specific alternative.

Comment: Alternative 2B would result in the dismantling of a mass transit system. Based on the current 45 percent AMHS walk-on rate, the State has a responsibility to move travelers without vehicles.

Response: The Final EIS contains an estimate that 36 percent of ferry passengers in Lynn Canal travel without a vehicle. This is based on 2002 AMHS traffic data. The Final EIS acknowledges that under Alternative 2B travelers without access to a vehicle would be forced to rent a vehicle, take a commuter flight, or travel on a private carrier if one or more chooses to operate on this highway. The Final EIS provided an estimate that 90 percent of the households in Lynn Canal have one or more vehicle, based on 2000 census data. The Final EIS estimates the potential demand for private bus service, and the possible cost and level of service that may be provided. The Final EIS does not commit to providing passenger service, and makes clear the DOT&PF does not believe it has a responsibility to provide transportation for travelers without vehicles on this NHS route.

Comment: FHWA lacks authority to approve federal actions for JAIP because the State of Alaska does not have a legally sufficient long-range transportation plan. Vision 20/20 and the Area Plans do not fulfill the statutory requirements for a statewide long-range transportation plan. Currently, the Area Plans (i.e. Interior Region) are not complete, and therefore the statewide plan is not valid.

Response: Federal regulations require that states complete a long-range statewide plan. These plans can be policy plans and are not required to address specific projects. The State of Alaska has elected to prepare Area Plans and include them as components of the Statewide Transportation Policy Plan (Vision 20/20) as they are completed, but it is not required to do so by federal regulations. The fact that a particular Area Plan is not complete, or that not all areas of the state are covered by the Area Plans, does not render the statewide plan invalid. FHWA has determined that Vision 20/20 is a valid plan as required by federal regulations.

Comment: Alternative 2B is not consistent with the statewide transportation plan. FHWA lacks the authorization to approve a Final EIS or further approvals for the JAIP because the project**,** and specifically Alternative 2B, is not consistent with Vision 20/20, the statewide long-range transportation plan.

Response: FHWA determined that the JAIP is consistent with the statewide transportation plan at the time of approval of each Statewide Transportation Improvement Program (STIP), including the 2006-2008 STIP approved February 17, 2006. The response to comment TRN29 in Appendix Y addressed statements regarding consistency of Alternative 2B with specific goals and policies stated in Vision 20/20. One identified policy considered by FHWA, not addressed in the response to TRN29, is Vision 20/20 policy 4d. This policy states" "integrate ferry service with additions to the highway network in order to reduce ferry distance between non-contiguous highway segments. Alternative 2B is consistent with this specific policy statement.

Comment: The Final EIS does not provide information on closures of the Klondike Highway due to ice, blowing snow, and poor visibility. The Final EIS should use the number of these closures to predict the number that would occur under Alternative 2B, which would have equally severe or worse weather conditions.

Response: The Final EIS predicted the frequency of highway closures for Alternative 2B based on avalanche activity because DOT&PF anticipates closing the highway when avalanche potential warrants a closure. DOT&PF does not anticipate that the Alternative 2B highway will be closed on a regular basis due to ice, blowing snow or poor visibility. The maintenance staffing level planned would be able to maintain the highway except during heavy snow storms

and avalanche debris removal; these closures are included in the avalanche closure estimate. Klondike Highway closures are usually due to avalanche activity. The Klondike Highway is generally not closed due to ice, blowing snow, or poor visibility; these conditions are noted to travelers in travel advisories. As discussed in a previous response, weather conditions on the Klondike Highway are severe due to its higher elevation; it is also 14 miles inland from tidewater which involves a different climate regime.

Comment: The Final EIS does not account for vehicles that would be stranded at the Katzehin Ferry Terminal due to no available space on the last scheduled ferry. The State should operate a support ferry service to transport stranded travelers.

Response: Travelers that arrive at the Katzehin Ferry Terminal too late to board would have to choose between waiting for the next ferry in the morning or returning to Juneau. Travelers with vehicles that arrive at the Katzehin Ferry Terminal after the capacity of the last vessel of the day has been filled would have the additional option of leaving their vehicle at Katzehin and boarding the ferry as a passenger if passenger space was available. DOT&PF would not be likely to make an additional shuttle run to accommodate stranded travelers except in the instance where a highway closure for avalanche safety or control is scheduled after the last sailing.

Water Quality

Comment: The City of Skagway has expressed that the current sewer system in Skagway is not sufficient to accommodate sewage discharge from the Katzehin to Skagway shuttle ferries without system improvements.

Response: The AMHS is investigating the feasibility of connecting existing ferry terminals to municipal sewer systems, to accommodate the terminal, existing vessels, and potential future vessels. The evaluation of a potential connection in Skagway is not tied specifically to the JAIP, or a specific shuttle ferry. The Final EIS contains the commitment that new shuttle ferries would have holding tanks and discharge to a treatment facility onshore or treat sewage on board such that discharge would meet applicable standards. If the City of Skagway system is not able to accommodate sewage from the Katzehin-Skagway shuttle identified in the Final EIS under Alternative 2B, the vessel will be designed to treat sewage onboard before discharge.

Wildlife

Comment: Alternative 2B will violate the Bald Eagle Protection Act and will not be completed in the time frame projected because of insufficient work windows.

Response: DOT&PF has coordinated closely with the United States Fish and Wildlife Service (USF&WS) to develop an alignment and construction measures that will avoid violations of the Bald and Golden Eagle Protection Act. The USF&WS is a Cooperating Agency for the Final EIS; they have not indicated that information in the Final EIS supports the conclusion that Alternative 2B will violate any laws or regulations. The Final EIS indicates that individual eagle nests are not used every year. The average active nest rate on the east side of Lynn Canal is 41 percent. Construction would be staged over multiple years, with large sized construction projects to allow the contractor to work in multiple locations based on the active nests that are to be avoided. Furthermore, DOT&PF has considerable experience with managing construction projects with multiple work windows for different species, and has worked with the USF&WS to construct in the vicinity of active eagle nests using monitors and reduced construction activity when necessary.

Comment: The Final EIS does not evaluate impacts on waterfowl populations in Berners Bay and the region, due to increased hunting as a result of improved access to Berners Bay provided by the Preferred Alternative 2B.

Response: The Final EIS addresses potential impacts to five waterfowl species identified as species of concern by resource agencies during scoping: great blue herons, harlequin ducks, trumpeter swans, marbled murrelets, and Kittlitz's murrelets. The Final EIS also identifies increased hunting effort as a likely indirect impact of improved access, and the need that would be created for additional game management by the Alaska Department of Fish and Game (ADF&G) and USF&WS. Analysis of potential impacts to waterfowl in Berners Bay focused on the large numbers of birds that come to the area to feed and nest in the spring, rather than hunting pressure on migrating birds in the fall, based on the concerns raised by resource agencies during scoping.

Comment: DOT&PF has not provided sufficient information to National Marine Fisheries Service (NMFS) to conclude there would be no adverse effects to Steller sea lions. Further, data collected at Gran Point by DOT&PF show lower counts than unpublished data from ADF&G and the National Oceanic and Atmospheric Administration (NOAA) data. Without accurate baseline data, it will not be possible to determine if impacts to Steller sea lions from construction have occurred.

Response: DOT&PF submitted a revised biological assessment to the NMFS in July, 2005. The Final EIS explained that the NMFS concurred with the determination submitted on behalf of FHWA that Alternatives 2, 2B and 2C would not be likely to adversely affect listed species (including sea lions) or adversely modify designated critical habitat. Both the biological assessment and the response letter to NMFS's comments on the Supplemental Draft EIS made clear that the purpose of video monitoring at Gran Point was to determine times of sea lion use at the haulout, not detailed numbers of sea lions at the haulout on specific days. Counts supplied by DOT&PF at NMFS's request are an indication of relative abundance; they are the numbers of sea lions countable by one or more of the cameras at a given time of the day. Neither DOT&PF nor NMFS have proposed using sea lion counts to determine if impacts from construction have occurred. Sea lion counts at the haulout can and will vary due to many factors other than possible disturbance from highway construction or use. Disturbance will be determined based on observation of sea lion behavior at the haulout regardless of the number of animals present.

Comment: The Final EIS fails to consider impacts to mountain goats when they are at the lowest elevation of their range during the spring.

Response: The Final EIS provides information about goat use of the area crossed by the highway, to the extent that it is known. Game managers have expressed greater concern regarding increased access related management problems than potential habitat impacts. Based on these concerns DOT&PF has funded a goat tagging and tracking study to provide the necessary population management information for this legally harvested species.

Comment: Under the Endangered Species Act (ESA), DOT&PF is required to initiate formal Section 7 consultation with NMFS.

Response: Under Section 7 of the ESA, formal consultation is not required if the federal agency determines that its action is not likely to adversely affect listed species or critical habitat. DOT&PF, on behalf of FHWA, has consulted informally with the NMFS and submitted a biological assessment that included a determination of not likely to adversely affect. The NMFS concurred with FHWA's determination, therefore formal consultation is not required.

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PART C: NON-SUBSTANTIVE COMMENTS

Part C. Non-Substantive Comment Summary

Air Quality

Operation of ferries would lead to increased levels of CO_2, more than from highway traffic.

Alternatives

The No Action or marine-based alternatives (4A through 4D) should be the main mode of transportation to improve access for upper Lynn Canal communities.

The Preferred Alternative 2B, or any Lynn Canal highway alternative, should not be built as a part of the JAIP.

The existing ferry service should be improved. Funds for the JAIP should be used to establish a "permanent fund" that could generate operating money and lower passenger fares on the AMHS.

The Preferred Alternative 2B should be constructed for travel in Lynn Canal.

An East Lynn Canal Highway should be constructed all the way to Skagway or to the continental highway system.

If the Preferred Alternative 2B is constructed to Katzehin, DOT&PF should continue to work towards connecting the highway through to Skagway.

If the Lynn Canal highway cannot be constructed through to the continental highway system, it is a 'dead end road' and it should not be built. Ferry service should continue from Auke Bay.

Avalanches

The large number of avalanche zones along the Preferred Alternative 2B alignment makes the highway dangerous, unreliable, and undesirable to drive. More deaths or accidents would occur on the highway from avalanches and poor road conditions than estimated in the Final EIS.

Construction, Operation and Maintenance Costs

The cost of constructing and maintaining a highway would be too high.

The DOT&PF states that the Preferred Alternative 2B has no economic benefit to the State.

The estimated cost given in the Final EIS to construct the Preferred Alternative 2B is low, given that costs of other highway projects, such as the Klondike Highway, Whittier Tunnel, and the Glacier Highway were significantly underestimated by DOT&PF.

DOT&PF is unable to fund maintenance, including snow removal, on existing roads and therefore would not be able to maintain a new highway.

The funds for this project would be better directed at repairing existing roads, other highway projects, or maintaining and improving the existing public mass transit/ferry system.

The road is too expensive and unnecessary considering a lot of existing roads in Alaska have little traffic and are badly in need repair.

The ferry system would cost less to maintain and improve than a highway alternative.

The Preferred Alternative 2B would be less expensive to maintain than the existing ferry system. Construction of the highway would save the money earmarked for maintenance and operation of the AMHS.

The fast ferry concept is not economical and eventually would need to be subsidized.

The state has had the funds to build this highway for years, and it should be a priority project.

The Preferred Alternative is the most financially feasible to the State.

The Final EIS underestimates the true cost to drive the highway system.

The current ferry system is not affordable. The Preferred Alternative 2B would have a positive impact on economic development in the region. The highway would reduce shipping costs and user cost in upper Lynn Canal.

Energy

A highway would require an increase use of vehicles, which would increase our reliability on non-renewable resources. The focus should be on improved mass transportation and energy conservation.

Environment

The analysis of environmental impacts resulting from the Preferred Alternative 2B in the Final EIS is inadequate and erroneous. The Final EIS indicates that the Preferred Alternative 2B would be the most damaging to the environment and the most damaging to federally protected wildlife species. Impacts from the highway would be irreversible. The AMHS is less environmentally damaging.

A highway would have unacceptable impacts to the environment and to natural resources of Lynn Canal, specifically Berners Bay, Echo Cove, and the Katzehin River area.

A highway would compromise the quality of habitat in Berners Bay and the Katzehin River area, and these are some of the few remaining large intact estuaries near Juneau and in Lynn Canal. A highway would increase trash and contamination from highway users in these areas.

As more wilderness is lost to development, there is increased importance to focus on conservation. Consideration should be given to preserving the eastern length of Lynn Canal because of its biological significance.

The loss of habitat resulting from construction of a highway cannot be measured through mitigation.

Potential significant environmental impacts from the highway can be mitigated.

Alternative 2B is not a reasonable alternative because the associated environmental impacts are too great to consider it a reasonable alternative.

Land Use

Increased access to the Katzehin River area would lead to increased competition for limited resources available for hunting and fishing. The highway would lead to the destruction of habitat and subsequently, increase competition for hunting and fishing, and wildlife viewing, as well as reduce the number of peaceful recreational opportunities.

The public use cabin in Berners Bay would be impacted and displaced by the highway.

The City of Skagway created a special management area at Dewey Lakes, not a park.

National Environmental Policy Act

The Final EIS fails to comply with NEPA:

- It does not provide an "apples to apples" comparison of all the alternatives;
- Broad effects of establishing permanent infrastructure in this largely undeveloped area are not estimated; and
- Substantive comments were not addressed and/or were not addressed adequately in the Final EIS.

Public Process

Legal challenges could delay construction and completion of the Preferred Alternative 2B.

The project mission is biased toward a highway alternative because the project area is within lands managed by the USFS, which has a management plan that already includes a highway transportation corridor.

Socioeconomic

The highway would have negative impacts to human safety; especially noting the estimated loss of 6 lives on the highway after 30 years of use.

The Final EIS underestimates the number of fatal and non-fatal accidents on the highway.

The AMHS has an excellent safety record.

The current ferry system is more equitable to all residents than the Preferred Alternative 2B.

The ferry system is affordable and would be less expensive to users than a highway; it is a proven transportation system.

Construction of a highway would negatively impact local economies.

- Fishing and tourism industries rely on Lynn Canal as a pristine wilderness area, and the highway would reduce tourism and deplete fishing.
- The highway would provide only short-term employment for a few, resulting in negative impacts to the economies of one or all communities within Lynn Canal.

Construction of a Highway would negatively impact the quality of life in Lynn Canal communities.

- Increased tourism that would likely result from construction of the highway would overburden the infrastructure of the communities, and decrease the quality of life of the residents.
- The reason residents of Lynn Canal enjoy living in this area is for the quality of life offered by a lack of interconnectedness to the continental road system.
- A highway would ruin the pristine and unique nature of Lynn Canal.
- A highway in Lynn Canal would ruin the "million dollar ambiance" of the Lynn Canal with the plethora of recreational vehicles (RVs) that could travel the road and crowd the remote view.
- Ferry travel in Lynn Canal is what makes the area unique and special; a highway would ruin this appeal and lead to a reduction of tourist interest in the area.

The AMHS improves the quality of life in Lynn Canal.

- The AMHS adds to the quality of life to residents in Lynn Canal.
- The ferry system holds local traffic and sprawl in check.

A highway would lead to negative impacts to infrastructure in Juneau due to increased RV land use and traffic.

There are no ways to measure the decreased recreation experience that would result from construction of a highway.

The cost of private transportation, if available between Juneau and the Katzehin Ferry Terminal, would be cost prohibitive. This would negatively impact those who do not have a car, or do not wish to use their car in the commute.

The highway would create cost/safety impacts to travelers without personal vehicles if there were highway closures due to avalanche, weather, and bad road conditions.

The highway would cause travelers to drive longer distances in poor weather.

The State cannot adequately support education and its rural communities with fair revenue sharing; therefore, it should not be spending money on an unnecessary project that will cost more than estimated.

- The funds should be invested in the community for education, schools, and healthcare.
- Funds should be spent on children who are impacted by the war in Iraq.
- The funds should go towards rebuilding New Orleans.

Juneau would have to shoulder funding for emergency services along the highway such as police, fire, and ambulance. Emergency services would not meet the increased needs from the influx of tourists in communities and at the end of the highway.

The environmental safeguards proposed for the highway are unrealistic and prohibitively expensive. For the highway to remain within its budget, DOT&PF would have no choice but to eliminate the mitigation measures.

Construction of a highway would have positive impacts to Lynn Canal communities.

- Construction of a highway would create potential for the state to improve ferry service in others parts of Southeast Alaska, without significant capital investment.
- Cost for construction and maintenance of a highway alternative would have a greater ability to be federally reimbursed/funded than do ferry alternatives, resulting in lower costs to Alaskan taxpayers.
- State legislators would be able to drive to the Capital, saving taxpayers the cost of air transportation.
- The highway would have positive impacts for access to healthcare and emergency services. The highway would provide evacuation routes from Juneau in case of a natural disaster or acts of terrorism.

Subsistence

The highway would result in a loss of subsistence opportunities.

Transportation

Improved access in Lynn Canal would be met best by a marine-based transportation system, and enhanced ferry service would improve reliability, flexibility, and convenience for Lynn Canal users.

- If ferry service remained the main mode of transportation in Lynn Canal, the AMHS could coordinate with local communities and facilitate intra-city public transportation.
- The ferries to Skagway and Haines are more convenient and reliable for those who are disabled, elderly, or who have low incomes, and those who do not have or need a vehicle.

The marine highway should be funded as the main transportation in the region.

- No other highway in the state is expected to pay for itself; highways are a service the State provides its citizens.
- Because there is limited federal funding for non-automobile types of transportation, marine-based systems are at a disadvantage.

A highway would not enhance reliability, flexibility, convenience, or access for Lynn Canal travelers.

- Regardless of the completion of the highway to Katzehin, a traveler would still be required to take a ferry and drive for 10 or more hours to be connected with the rest of Alaska.
- The highway would hinder travel to Skagway or Haines from Juneau.
- Poor weather would result in highway closures that would also ground air travel, eliminating all travel opportunities.
- Construction of the Preferred Alternative 2B would eliminate the connection from Bellingham, Washington, to the Alaska Highway System along the AMHS, negatively impacting the access of tourists or those unable to travel through Canada.
- The predicted annual closure of 34 days does not constitute a reasonable reliable public highway. The Final EIS underestimates the number of closure days annually, which would affect residents' ability to travel when needed.

The estimated number of daily trips from the Katzehin Ferry Terminal to Skagway or Haines is overestimated in the Final EIS.

The Preferred Alternative 2B would improve access, meet traffic demand and provide residents and tourists reliable, convenient, transportation.

- A highway would improve access to the State Capital in Juneau
- A highway would improve travel between Lynn Canal communities and Canada

The fast vehicle ferries are not reliable and should be replaced with dependable main line ferries.

Visual

Construction of a highway in Lynn Canal would scar the landscape and ruin the commonly held image of Alaska as being wild, remote, scenic, and unspoiled. Scenic impacts may be negligible to cruise ship passengers at night; however, the highway would impact views to people boating in Lynn Canal by day.

Wetlands

Constructing the Katzehin Ferry Terminal and breakwater on the north shore of the Katzehin River in wetlands and shallow waters directly impacts wetlands and would bisect wetland habitat.

Wildlife

The highway would impact terrestrial wildlife, habitat, and the ecology. The Final EIS underestimates the impacts to wildlife, including marine mammals.

The highway would result in increased human/wildlife interaction and incidental takes (vehicle collisions).

The Katzehin Ferry Terminal and bridge over the Katzehin River would negatively impact terrestrial mammals, displace birds, and deplete habitat around the mouth of the Katzehin River, estuaries near the mouth of the river, and the Katzehin River flats.

Unclassified

The current state government has done a poor job of operating the AMHS. The administration has mismanaged the system to sway support for the highway.

The highway is the Governor's pet project. Members of the current administration have blatantly disregarded constituents' concerns against the highway.

The decision of whether or not to construct a Lynn Canal Highway should be deferred to future generations to determine its need.

Economics are clearly in favor of maximizing the use of highway links to the extent possible.

The Preferred Alternative is the most responsible way to fulfill the government's role of providing transportation infrastructure. It will be necessary to carry momentum for this project once the

first segment is constructed and 2006/2008 Statewide Transportation Improvement Program (STIP) funds are depleted.

A highway connecting Juneau will ease the enormous logistical problem of moving the state capital, by making the capital move more feasible.