INTERSTATE 405 Corridor Program
Congestion Relief & Bus Rapid Transit Projects

APPENDIX E3

I-405 Corridor Program Record of Decision (October 2002)

I-405, SR520 to SR522 Stage 1 (Kirkland Stage 1)

Request For Proposal
July 15, 2005

Washington State Department of Transportation

I-405 Corridor Program

Record of Decision

October 2002

U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

U.S. Department of Transportation

Record of Decision

for

Interstate 405 Corridor Program

Decision

This decision reflects the established roles and responsibilities of the National Environmental Policy Act [NEPA] federal co-lead agencies, the Federal Highway Administration [FHWA] and the Federal Transit Administration [FTA] in administering their respective transportation programs.[1] The FHWA, in coordination with the Washington State Department of Transportation (WSDOT), King County Department of Transportation (KCDOT), and the Central Puget Sound Regional Transit Authority (Sound Transit), decides on the Preferred Alternative as the Selected Alternative, the alternative which best meets the purpose and need for improvements within the Interstate 405 (I-405) corridor.

The FTA, in coordination with FHWA, WSDOT, KCDOT and Sound Transit, concurs that the Selected Alternative meets the Purpose and Need of the I-405 Corridor Program, finds that the Draft and Final Environmental Impact Statement (EIS) represent detailed statements required by NEPA and by 42 U.S.C. Section 4332 on: the environmental impacts of the proposed action; the adverse environmental effects which can not be avoided should the proposed action be implemented; alternatives to the proposed action; and mitigation measures required to minimize the harm of irreversible and irretrievable impacts on the environment should the proposed action be implemented, and finds that, on a corridor level, the requirements of NEPA and of 49 U.S.C. Section 5324(b) have been satisfied or met.

This decision is based on an evaluation of information presented in the Final EIS, the transportation needs of the program study area, and the extensive interagency coordination achieved through implementing the Reinventing NEPA Process. This Record of Decision (ROD) incorporates comments and responses received on the program during the 30-day comment period after the Notice of Availability of the Final EIS appeared in the Federal Register.

Additional basis for this decision is contained in the balance of this Record of Decision document.

10/09/02	Daniel M. Mathis	Richard F. Krochalis
Date of Approval	Daniel M. Mathis Division Administrator Washington Division Federal Highway Administration	Richard F. Krochalis Regional Administrator Region 10 Federal Transit Administration

[1] Pursuant to FTA policy, the FTA decision documented in the ROD applies to the locally preferred alternative [Selected Alternative]. FTA does not officially state a preference for a particular alternative until all applicable grant requirements have been satisfied and a grant or a full funding grant agreement is signed. Further, FTA does not identify an environmentally preferred alternative because, for transit projects, there is a wide disparity of views on the balance of direct and indirect benefits and adverse impacts of alternatives.

Record of Decision

Interstate 405 Corridor Program

Process

Pursuant to 23 CFR Section 771.111(g), corridor-level[2] Draft and Final Environmental Impact Statements (EIS) for major transportation actions were prepared for improvements to the Interstate 405 corridor. The corridor generally covers an area extending between the interchanges with Interstate 5 at Tukwila and Lynnwood in King and Snohomish counties, Washington. This corridor-level EIS focuses on broad corridor-wide issues related to mode choice, general location of improvements, and how combinations of improvements may function together as a system to solve corridor wide transportation problems.

This EIS has evaluated the cumulative impacts, growth inducing impacts, and effects on the environment of subsequent specific I-405 corridor projects to the greatest extent feasible. Through the preparation of the corridor-level EIS and this Record of Decision (ROD), it is the intent of the FHWA and FTA that the process time for environmental review of subsequent projects be substantially reduced to the extent that program impacts have been reviewed and appropriate mitigation measures are set forth in the EIS and this ROD.

[2] The references to "corridor-level" and "project-specific level" in this ROD are used with respect to "tiered" environmental reviews as noted in FHWA's and FTA's joint environmental regulations found at 23 CFR section 771.111 (g) and CEQ regulations found at 40 CFR section 1502.20. In addition, the use of corridor-level, project-specific level or tiered environmental reviews is not meant to imply that subsequent or project-specific second tier environmental reviews require any particular level of review. Project-specific level or second tier environmental reviews can take the form of re-evaluations, categorical exclusions, environmental assessments or environmental impact statements and will depend on the project-specific improvements being proposed and their potential environmental impacts.

Subsequent environmental reviews and documentation under the NEPA and the State Environmental Policy Act (SEPA) will occur before decisions are made on specific design details or project footprints when specific project proposals are advanced. It is envisioned that this project-specific level environmental review will be used where the specific and detailed project is included in the corridor-level proposal evaluated in the EIS and described in this ROD. The focused project-specific environmental impact review shall incorporate, by reference, the corridor-level EIS and shall analyze only the subsequent project's additional effects on the environment not considered in the corridor-level EIS and any substantial new or additional project changes, information, effects, mitigation measures, or alternatives that were not identified and analyzed by the corridor-level EIS. It is anticipated that the project-specific level environmental review need not examine the corridor-level alternatives; impacts and mitigation measures evaluated in the corridor-level EIS, and the decisions made in this ROD. Any finding or decision document made based on the project-specific level environmental review shall incorporate this ROD and the findings, decisions, and mitigation measures made herein.

Program Purpose and Need

The need identified for the I-405 Corridor Program is to improve personal and freight mobility and reduce foreseeable traffic congestion in the corridor in a manner that is safe, reliable, and cost-effective. The purpose of the proposed action is to provide an efficient, integrated, and multimodal system of transportation solutions within the I-405 corridor that meet the program need in a manner that:

- Provides for maintenance or enhancement of livability for communities within the corridor;
- Provides for maintenance or improvement of air quality, protection or enhancement of

fish-bearing streams, and regional environmental values such as continued integrity of the natural environment;

- Supports a vigorous state and regional economy by responding to existing and future travel needs; and
- Accommodates planned regional growth.

Environmental Review and Issuance of the Final Environmental Impact Statement

The proposed improvements are described in the FEIS, FHWA-WA-EIS-01-01-F, approved on June 10, 2002 and issued on June 28, 2002. The Notice of Availability appeared in the Federal Register on June 28, 2002. The FEIS and all findings therein are incorporated in this ROD by reference.

The I-405 Corridor program implemented the "Transportation Decision Making Process Improvement" (typically referred to as "Reinventing NEPA"). Through the Reinventing NEPA process, the I-405 Corridor Program obtained early and regular participation from 31 affected regulatory agencies and jurisdictions throughout the corridor. Participation of the agencies and jurisdictions was assured by a series of coordination meetings and consensus points at key milestones throughout the environmental analysis, documentation, and review process. For example, one of the many key steps in the Reinventing NEPA process included receiving concurrence on the Preferred Alternative, which is now the Selected Alternative, from agencies with jurisdiction.

The I-405 Corridor Program EIS examined the broad corridor-wide issues related to mode choice, general location of improvements, and how combinations of improvements may function together as a system to solve corridor wide transportation problems, rather than focusing on specific design details or project footprints.

The project sponsors will initiate subsequent NEPA and SEPA environmental analysis, documentation, and review for improvements contained within the Selected Alternative.

Selected Alternative

The Selected Alternative as described in this ROD was designated as Preferred Alternative in the FEIS (Section 2.2.6) and becomes the Selected Alternative in this ROD. All references in this ROD to the Selected Alternative shall hereafter refer to the FEIS Preferred Alternative.

The Selected Alternative is a modification of Alternative 3 - Mixed Mode Emphasis, identified in the DEIS and FEIS - and is described below with all of the alternatives considered in the FEIS. It was identified after the issuance of the Draft EIS by co-lead agencies upon recommendation by the I-405 Corridor Program Citizen, Steering, and Executive committees because it best meets the identified purpose and need for the I-405 Corridor Program. Through a consensus building exercise as part of the Reinventing NEPA process, these committees were asked to identify which alternative, or elements of the alternatives, was preferred. Committee consensus was achieved over the selection of elements comprising Alternative 3 with the exception that transit expansion would be limited to 75 percent based on demand and with the inclusion of expanded capacity on north-south arterials (with jurisdictional approval) and accommodation of future planning for expanded managed lanes in the corridor.

The Selected Alternative does not restrict meaningful consideration of other reasonably foreseeable improvements with independent utility and logical termini. The proposed I-405 freeway design includes a buffer separating the general purpose lanes and the high-occupancy vehicle (HOV) lane to provide safer and more reliable HOV and transit operations within the corridor. This design allows for future consideration of expanded managed lanes operations on I-405, which could include managing up to two lanes in each direction. Expansion of managed lane operations beyond the single HOV lane proposed in the FEIS would be subject to further environmental analysis beyond the scope of the I-405 Corridor Program FEIS.

Alternatives Considered in the Final EIS

The alternatives evaluated in the FEIS include a wide range of improvements, each of which serves one or more of the following corridor solutions:

- Implement an enhanced transportation demand management (TDM) program (see the FEIS Section 5, Glossary, for definition of TDM and other terms used within this ROD);
- Expand the capacity of the existing local bus transit system;
- Implement new bus rapid transit (BRT) within the corridor;
- Implement new fixed-guideway high-capacity transit within the corridor;
- Expand the capacity of the existing I-405 freeway; and
- Expand the capacity and improve the continuity of the adjacent arterial network.

These improvements are intended to reduce traffic congestion and improve mobility, reliability, and safety in the corridor as compared to the No Action alternative. The major elements of the alternatives are described in detail in Chapter 2, as well as in Appendices A and B of the FEIS.

The FEIS examined the following alternatives:

- No Action Alternative
- Alternative 1 - High-Capacity Transit/TDM Emphasis
- Alternative 2 - Mixed Mode with High-Capacity Transit/Transit Emphasis
- Alternative 3 - Mixed Mode Emphasis
- Alternative 4 - General Capacity Emphasis
- Preferred Alternative (the Selected Alternative)

These alternatives were designed to provide decision makers with the widest range of potential reasonable solutions. The improvements were packaged into alternatives in varying levels of intensity (such as the number of new freeway lanes or increases in transit service) and choice of technology (such as the type of high capacity

transit). Each action alternative is a combination of multi-modal transportation improvements and other mobility solutions packaged to work together as a system, and demonstrates a unique emphasis in response to the purpose and need for the I-405 Corridor Program. Solutions range from a focus on minimizing new impervious surface from general purpose transportation improvements by relying on fixed-guideway, high capacity transit in existing railroad right-of-way (Alternative 1) to a focus on relieving traffic congestion by increasing general purpose and HOV roadway capacity (Alternative 4).

The following discussion describes each alternative, including (1) the alternative's major objective or focus, (2) its package of improvements and unique features, and (3) the reasons it was or was not chosen as the Selected Alternative. A more detailed discussion of the tradeoffs between the alternatives is contained in the Summary of the FEIS, as well as Chapter 2 and Appendices A and B of the FEIS.

Description of the Alternatives and Basis for Selection of the Preferred Alternative

No Action Alternative

Under the No Action Alternative, no new major construction activities described in the program proposed action would occur. The No Action Alternative includes the committed and funded highway and transit capital improvement projects in the study area belonging to the cities, counties, Sound Transit, and WSDOT (see Figure 2.2-1, Appendix A, and Appendix B in the FEIS). These projects are already in the pipeline for implementation within the next six years, and are assumed to occur regardless of the outcome of the I-405 Corridor Program.

Limited expansion of state highways is expected, while several arterial improvements will be implemented by local agencies. In addition, short-term minor construction necessary for

continued operation of the existing roadway facility would be accomplished, and minor safety improvements would be constructed as required. Phase I of Sound Transit's Sound Move plan is included, and a 20 percent increase in transit service hours is assumed by 2020 above the increases contemplated in the current King County, Sound Transit, and Community Transit six-year plans. All improvements contained in the No Action Alternative are also included in the action alternatives.

Environmentally Preferred Alternative

The No Action Alternative is determined to be the environmentally preferred alternative because it would result in the least overall adverse impacts on the natural and built environment and would not require the displacement of any additional residents or businesses. This determination was made by comparing each alternative in terms of the relative number of adverse impacts in each of the 23 areas of the affected environment. The No Action alternative had the lowest number of adverse impacts in 20 of 23 areas of the affected environment. Areas of the affected environment for which the No Action is not the most beneficial alternative include air quality, transportation, and effects on land use and pressure for growth outside the urban growth area.

After careful study and following consideration of public and agency comments received on the Draft EIS (contained in Volume 2 of the FEIS) and the Final EIS, the FHWA and non-Federal co-lead agencies chose not to select the No Action Alternative for reasons listed below.

The No Action Alternative was not selected because:

- It did not meet the program purpose and need because of its inability to provide long-term improvement in general purpose mobility, freight mobility, or reduction in foreseeable traffic congestion.
- It would accommodate the lowest peak-period person travel demand in 2020 of any alternative.

- It would result in substantial degradation of travel times and reliability of travel times for general traffic.
- It would provide no meaningful improvement in overall safety on I-405 or other study area facilities.
- It failed to adequately address social and economic effects consistent with the program purpose.
- It does not provide the necessary transportation improvements to accommodate planned growth, support implementation of adopted regional and local land use plans, or assist local jurisdictions in meeting transportation concurrency requirements under the Growth Management Act. (Transportation concurrency requirements are described in Chapters 3.12 and 3.13 of the FEIS.)

Alternative 1 - High-Capacity Transit/TDM Emphasis

This alternative attempts to minimize addition of new impervious surface from general purpose transportation improvements and to encourage transit use within the study area. To do this, Alternative 1 emphasizes reliance on a new physically separated, fixed-guideway high-capacity transit system using portions of the existing Burlington Northern-Santa Fe (BNSF) Railroad right-of-way to serve major activity centers within the I-405 corridor (see Figure 2.2-2, Appendix A, and Appendix B in the FEIS).

Emphasis also would be placed on non-construction treatments such as transit signal priority and a combination of aggressive TDM strategies. The TDM strategies would be similar to those in the other action alternatives; however, in Alternative 1, regional pricing strategies similar to those considered in current Puget Sound Regional Council (PSRC) studies also are proposed. Local bus transit service levels would be doubled compared to the current King County, Sound Transit, and Community Transit 6-year plans.

As in the other action alternatives, Alternative 1 would include arterial HOV priority for transit, additional park-and-ride capacity, additional

transit center capacity, a new bus maintenance and operations facility, truck freight traffic enhancements, intelligent transportation system (ITS) improvements, and pedestrian and bicycle improvements. There would be basic improvements to I-405 with no additional general purpose lanes. Arterial improvements would include limited arterial HOV/transit treatments to facilitate access to I-405 and the high capacity transit system.

Alternative 1 was not selected because:

- It did not meet the program purpose and need because of its inability to provide meaningful long-term improvement in general purpose mobility, freight mobility, or reduction in foreseeable traffic congestion.
- It would accommodate a minimal amount of the increased peak-period person travel demand in 2020.
- It would have a minimal effect on reliability of travel time for general traffic.
- It would not reduce travel times for either general purpose traffic or 3+ HOVs.
- It would provide no meaningful improvement in overall safety on I-405 or other study area facilities.
- It failed to adequately address economic effects consistent with the program purpose and need.
- It would contribute only marginally to the level of transportation improvements needed to accommodate planned growth, support implementation of adopted regional and local land use plans, or assist local jurisdictions in meeting transportation concurrency requirements under the Growth Management Act.
- It would provide little benefit beyond that resulting from the No Action Alternative, yet it is estimated to cost nearly eight times as much. Thus, Alternative 1 is not considered a cost-effective solution.

Alternative 2 - Mixed Mode with High-Capacity Transit/Transit Emphasis

This alternative attempts to improve mobility options in the study area relative to Alternative 1 by providing a substantial commitment to transit combined with the minimum increase in roadway capacity for HOV and general purpose traffic. To emphasize transit, Alternative 2 would implement the same physically separated, fixed-guideway high capacity transit system as proposed in Alternative 1. To improve general traffic mobility, this alternative would widen I-405 by one lane in each direction, add collector-distributor lanes along I-405 where warranted, expand the I-405/SR 167 interchange to include ramps for all major movements, and widen SR 167 by one lane in each direction south of I-405 to SR 516.

Alternative 2 also would include HOV direct access ramps along I-405, HOV freeway-to-freeway ramps along I-405, capacity improvements on arterials and freeways connecting to I-405, and completion of arterial improvements planned by local jurisdictions (see Figure 2.2-3, Appendix A, and Appendix B in the FEIS).

As in other action alternatives, Alternative 2 would include arterial HOV priority for transit, additional park-and-ride capacity, additional transit center capacity, a new bus maintenance and operations facility, truck freight traffic enhancements, ITS improvements, pedestrian and bicycle improvements, and a set of aggressive TDM strategies. Local bus transit service levels would be doubled above the increases contemplated in the current King County, Sound Transit, and Community Transit six-year plans.

Alternative 2 was not selected because:

- It would result in the highest potential impacts on wetlands, riparian areas, and upland wildlife habitat of any alternative.
- It would result in the highest potential for displacement of residential units of any alternative.

- It would provide substantially less improvement than the Selected Alternative in transportation performance based on the adopted evaluation criteria and transportation performance measures when examined across all travel modes, yet it is estimated to cost nearly 14 percent more than the Selected Alternative. (The evaluation criteria and transportation performance measures are described in the FEIS Chapter 2 and Chapter 3.12, respectively.)
- It is less likely than the Selected Alternative to accommodate planned growth goals, support implementation of adopted regional and local land uses plans, or assist local jurisdictions in meeting transportation concurrency requirements under the Growth Management Act.

Alternative 3 – Mixed Mode Emphasis

This alternative attempts to substantially improve mobility options for all travel modes and to provide a high capacity transit system throughout the study area at a lower cost than the physically separated, fixed-guideway system proposed in Alternatives 1 and 2. To do this, Alternative 3 would widen I-405 by two lanes in each direction in most sections. A bus rapid transit (BRT) system would be implemented throughout the I-405 corridor with appropriate east-west connections to Redmond and Issaquah. Unlike the fixed-guideway high capacity transit proposed in Alternatives 1 and 2, this system would consist of express buses operating in improved access HOV lanes on I-405, I-90, and SR 520. The BRT system would provide superior transit service by use of HOV priority lanes, frequent schedules, and easily accessible stations.

Like Alternative 2, Alternative 3 also would include collector-distributor lanes along I-405 where warranted, expansion of the I-405/SR 167 interchange to include ramps for all major movements, widening of SR 167 by one lane in each direction south of I-405 to SR 516, HOV direct access ramps along I-405, addition of HOV freeway-to-freeway ramps along I-405, capacity

improvements on arterials and freeways connecting to I-405, and completion of arterial improvements planned by local jurisdictions (see Figure 2.2-4, Appendix A, and Appendix B in the FEIS). In addition, selected arterial missing segments would be completed by local jurisdictions.

As in the other action alternatives, Alternative 3 would include arterial HOV priority for transit, additional park-and-ride capacity, additional transit center capacity, a new bus maintenance and operations facility, truck freight traffic enhancements, ITS improvements, pedestrian and bicycle improvements, and a set of aggressive TDM strategies. Local bus transit service levels would be doubled above the increases contemplated in the current King County, Sound Transit, and Community Transit six-year plans.

Alternative 3 was not selected because:

- It has a similar level of overall environmental effects as the Selected Alternative, yet it provides a lower level of transportation performance based on the adopted criteria and performance measures. (The evaluation criteria and transportation performance measures are described in the FEIS Chapter 2 and Chapter 3.12, respectively.)
- It is less likely than the Selected Alternative to accommodate planned growth, support implementation of adopted regional and local land use plans, and assist local jurisdictions in meeting transportation concurrency requirements under the Growth Management Act
- It does not relieve congestion in critical areas as well as the Selected Alternative.

Alternative 4 - General Capacity Emphasis

This alternative places the greatest emphasis on increasing general purpose and HOV roadway capacity, with substantially less reliance on new transit facilities or added local bus transit service than any of the other action alternatives. To do this, Alternative 4 would maximize freeway

capacity by providing three additional lanes in each direction within the I-405 corridor. These lanes would include one additional general purpose lane in each direction on I-405 in most segments, along with a four-lane I-405 express roadway (see Figure 2.2-5, Appendix A, and Appendix B in the FEIS).

Like Alternatives 2 and 3, Alternative 4 would include collector-distributor lanes along I-405 where warranted, expansion of the I-405/SR 167 interchange to include ramps for all major movements, widening of SR 167 by one lane in each direction south of I-405 to SR 516, HOV direct access ramps along I-405, addition of HOV freeway-to-freeway ramps along I-405, capacity improvements on arterials and freeways connecting to I-405, and completion of arterial improvements planned by local jurisdictions. In addition, selected arterial missing segments would be completed and capacity on major north-south arterials would be expanded with jurisdictional approval.

As in the other action alternatives, Alternative 4 would include a new bus maintenance and operations facility, ITS improvements, pedestrian and bicycle improvements, and a set of aggressive TDM strategies. This alternative does not include arterial HOV priority for transit, additional park-and-ride capacity, or additional transit center capacity. Local bus transit service levels would be expanded by 50 percent above the increases contemplated in the current King County, Sound Transit, and Community Transit six-year plans.

Alternative 4 was not selected because:

- It would result in the greatest increase in impervious surface of any alternative, which would have adverse effects on surface water, groundwater, fish, and other aquatic resources.
- The improvement in overall transportation performance based on the adopted evaluation criteria and transportation performance measures is outweighed by the approximately

50 percent higher cost of Alternative 4 compared to the Selected Alternative.

- It could contribute to increased pressure for growth and development at the fringe or outside of the Urban Growth Area in areas that are not currently intended for higher densities under adopted land use plans or the Growth Management Act.

The Selected Alternative

The Selected Alternative is a multi-modal solution to the transportation needs in the I-405 corridor. The Selected Alternative focuses on substantial improvement of mobility options for all travel modes and provision of an effective high capacity transit system throughout the study area at a lower cost than the physically separated, fixed-guideway system proposed in Alternatives 1 and 2.

The Selected Alternative would widen I-405 by up to two lanes in each direction. The freeway design includes a buffer, envisioned as a 4-foot painted barrier in most sections, separating the general purpose lanes and the HOV lane. Access to and from the HOV lane would be limited to the HOV direct access ramps, freeway-to-freeway connections, and clearly identifiable locations along the mainline freeway where the buffer would be open for merging traffic. The buffer design allows for future consideration of expanded managed lane operations along I-405.

The Selected Alternative would implement the same BRT system as proposed in Alternative 3. The BRT system would operate with stops every 2 to 3 miles along I-405 and would use the HOV priority lanes, new HOV direct access ramps, and new in-line transit stations to maximize speed and reliability. BRT service also would operate along connecting facilities such as SR 522, SR 520, I-90, and SR 167 to serve major activity centers within the I-405 corridor. This would include connections east to Redmond and Issaquah and west across Lake Washington to Seattle. A total of 11 BRT stations are

proposed (see Figure 2.2-6, Appendix A, and Appendix B in the FEIS).

The Selected Alternative would include collector-distributor lanes, auxiliary lanes, and truck climbing lanes along I-405 where warranted; expansion of the I-405/SR 167 interchange to include ramps for all major movements; widening of SR 167 by up to two lanes in each direction south from I-405 to South 180th Street; HOV direct access ramps along I-405 at nine locations; addition of HOV freeway-to-freeway ramps along I-405; capacity improvements on arterials and freeways connecting to I-405; completion of arterial missing segments; and the planned arterial improvements of local jurisdictions. In addition, capacity on major north-south arterials would be expanded with jurisdictional approval.

The Selected Alternative would include arterial HOV priority for transit, additional park-and-ride capacity (approximately 5,000 stalls), additional transit center capacity, a new bus maintenance and operations facility, truck freight traffic improvements, ITS improvements, pedestrian and bicycle improvements, and a set of aggressive TDM strategies. Overall transit service within the study area would be increased, based on demand, by up to 75 percent above the increases contemplated in the current King County, Sound Transit, and Community Transit six-year plans.

The Selected Alternative best meets the purpose and need of the I-405 Corridor Program. It is the most desirable solution in terms of balancing transportation performance, functional efficiency, and environmental, social, and economic impacts and:

- It has the lowest impact on wetlands of any action alternative.
- Environmental impacts of the Selected Alternative within the corridor will be avoided or effectively mitigated. Opportunities to enhance existing environmental conditions and key environmental features will be achieved through sound design practices and the

proposed "basin approach" to considering key environmental features. (See Appendix J of the FEIS for a description of the "basin approach".)

- The Selected Alternative provides the highest level of transportation performance of any alternative based on the adopted criteria and performance measures when examined across all travel modes. (The evaluation criteria and transportation performance measures are described in the FEIS Chapter 2 and Chapter 3.12, respectively.)
- The Selected Alternative would provide improved reliability of travel times and greater safety for general purpose, HOV, and transit than Alternative 3.
- The mix of modal investments in the Selected Alternative provides a balanced system of roadway, transit, and TDM solutions that are expected to provide the most reasonable long-term strategy to meet the needs for personal and freight mobility and congestion reduction in the corridor.
- The four-foot buffer on I-405 contained in the Selected Alternative would accommodate expanded managed lane operations in the future or other long-range opportunities for enhancement of the high capacity transit system.
- The Selected Alternative would provide the greatest opportunity of any alternative to accommodate continuous and orderly development through congestion reduction, air quality improvement, improved travel time reliability, and improved urban accessibility.
- The Selected Alternative would contribute the most desirable mix of transportation improvements to support implementation of adopted regional and local land use plans and assist local jurisdictions in meeting transportation concurrency requirements under the Growth Management Act.
- The balance of program benefits to costs for the Selected Alternative is more desirable than for the other alternatives.

Mitigation Measures to Minimize Harm

Mitigation measures and the mitigation approach required of the Selected Alternative under this ROD are as identified in the FEIS and are incorporated herein by reference. Implementation of these mitigation measures and approach are material conditions of this ROD and will be incorporated in any subsequent project-specific level NEPA environmental review, finding, and mitigation plan. Additional mitigation measures will be developed, pursuant to the mitigation commitments identified herein, under the project-specific level NEPA environmental reviews and findings.

Mitigation measures identified herein and in subsequent NEPA environmental reviews and findings shall and must be implemented by the project sponsor(s) if specific projects and corridor improvements proceed with either FHWA or FTA financial assistance. These mitigation measures are now incorporated into the definition of the project and the project sponsor(s) shall implement them, provide funding for their implementation, or ensure that other agencies fund and implement them (although this would not alleviate the project sponsor(s) of overall responsibility for implementation). The project sponsor(s) is (are) prohibited from withdrawing or substantially changing any of the mitigation measures identified in the environmental record for the project without the express written approval by FHWA (for road or highway related projects) and/or FTA (for transit related projects). In addition, any change to the project that may involve new or changed environmental or community impacts not yet considered in the existing environmental record must be reviewed in accordance with FHWA and FTA's environmental procedures (23 CFR Part 771) and approved by FHWA and FTA.

FHWA and FTA find that with the incorporation of these mitigation measures in project-specific

level NEPA environmental reviews and findings and the implementation of these mitigation commitments, the project sponsor(s) will have taken all reasonable, prudent, and feasible means to avoid or minimize impacts from the Selected Alternative.

The following is a summary of the mitigation commitments imposed under this ROD for the Selected Alternative. This summary is provided to facilitate the monitoring of the implementation of the mitigation measures and to give a sense of the nature of the mitigation actions and associated impacts. However, this summary does not supercede or negate any of the commitments for environmental mitigation established in the FEIS. The FEIS identifies the mitigation commitments required of the Selected Alternative. Should there be a conflict between the mitigation commitments summarized hereinafter and those described in detail in the FEIS, the FEIS shall prevail.

Air Quality

1. Mitigation measures will be incorporated into the construction specifications to control Particulate Matter less than 10 microns (PM_{10}), deposition of particulate matter, and emissions of carbon monoxide and nitrogen oxides.
2. Construction of the separate projects will be managed, staged, and/or phased to reduce overall system congestion and delays, which would reduce regional emissions of pollutants, to the greatest extent practicable.

Noise

3. Mitigation measures such as using enclosures or walls to surround noisy equipment, installing mufflers on engines, or other methods will be incorporated into the construction specifications to reduce construction related noise.
4. Operational noise levels will be reduced along I-405 by providing noise barriers in some areas not currently protected by barriers, consistent with the appropriate

noise impact and abatement criteria of FHWA and FTA.

5. Traffic management measures, acquiring land as buffer zones, and/or other non-structural measures to reduce long-term operational noise impacts will be incorporated into facility design where appropriate.

Energy and Natural Resources

6. Contractors will be encouraged to implement measures to reduce energy consumption during construction to the extent practicable.
7. Transportation control measures to reduce traffic volumes and congestion, would also decrease energy consumption. Such measures are listed within the Transportation section, items 52-54 below.

Geology and Soils

8. Design solutions to avoid, minimize, or mitigate disturbance to geologic, seismic, and mine hazard areas will be implemented.
9. Best management practices (BMPs) and other measures will be incorporated into the construction specifications to control or reduce construction related erosion and sedimentation, increase infiltration (where appropriate), reduce seismic and soft ground hazards, improve safety in landslide hazard areas, and address collapsed mine openings or underground rooms.

Water Resources

10. The most current criteria and standards to mitigate stormwater quantity and quality impacts will be used. These standards will be presented in a WSDOT stormwater or highway runoff manual that will be functionally equivalent to Ecology’s stormwater manual. Additional avoidance, minimization, and mitigation of impacts to water resources may be achieved by following the design guidelines in the local sensitive area ordinances and codes, such as for the city of Renton Aquifer Protection Areas.
11. BMPs and design solutions for preventing sediment from entering water bodies,

maximizing treatment of road runoff, and minimizing the number of stream crossings will be implemented, as appropriate.

12. Planning for all major road upgrade projects will consider the practicality of retrofitting existing impervious road surface areas for runoff detention and treatment. Where determined to be practicable, retrofit measures will be incorporated into the road upgrade project.
13. Any new road crossings of streams will be via a bridge spanning the floodway unless a hydraulic analysis demonstrates that infringing abutments and/or bridge piers would not substantially change local high-water depths or velocities. Disturbed riparian areas within road right-of-way will be planted with native vegetation for a minimum width of 100 feet from each stream bank where practicable.
14. Opportunities to increase the "perviousness", infiltration and base flow conditions, of affected stream basins will be explored in cooperation with local agencies.
15. Mitigation for operational impacts to groundwater quality will include measures to prevent hazardous materials from reaching the soil and infiltrating into groundwater.
16. Measures to avoid, minimize, or mitigate the potential decrease in groundwater recharge in Critical Aquifer Recharge Areas and other potential recharge areas during construction will be implemented.
17. Measures to protect Renton's Aquifer Protection Area from infiltration of project runoff will be implemented.
18. Projects constructed within the Lake Sammamish Basin will incorporate special stormwater treatment to reduce phosphorus, as appropriate.
19. Where practicable, infiltration of treated stormwater will be used. This measure is particularly applicable to those basins that may otherwise experience depletion of base flows: Springbrook, South Kelsey, East Lake Washington, Forbes, Juanita, and North Creek.
20. The I-405 Corridor Program will continue to work closely with the U.S. Fish and Wildlife Service (USFWS), NOAA Fisheries, the Washington State Department of Fish and

Wildlife (WDFW), the Washington State Department of Ecology (Ecology), the Tribes, local municipalities, and basin stakeholders to develop a program of support for both local and regional stream and riparian enhancement projects.

21. A Water Resource Inventory Area (WRIA)-wide approach to mitigate program hydrologic impacts and address base flow impacts in an ecologically beneficial and cost-effective manner will be implemented. This could include projects that benefit the hydrology and habitat of streams as compensation for potential reductions in stream base flow resulting from proposed road improvements.
22. Construction disturbance will be limited to the minimum area needed, the shortest duration, and at an appropriate distance away from water bodies as practical. Seasonal work windows will be identified and implemented.
23. Pervious portions of the project area will be treated with soil amendments, mulch, vegetation or other appropriate and available resources to help absorb stormwater. Stormwater management facilities will be located outside of stream, steep slope, and wetland buffer areas, where practicable.
24. Construction mitigation measures will be implemented to reduce the use, transfer, and storage of hazardous materials in sensitive areas where there is potential for groundwater and/or surface water contamination.
25. Measures to mitigate reduction of groundwater supplies due to dewatering, pump testing, or other construction activities will be implemented where practicable.

Wetlands

26. Project-level design, environmental review, and permitting will include avoidance, minimization, restoration, and compensation as part of an appropriate wetland mitigation approach. Mitigation will be implemented prior to wetland impacts where feasible, to reduce temporal losses of wetland functions.
27. BMPs and other measures will be incorporated into the construction specifications to

minimize sedimentation and contamination of wetlands. Stormwater treatment facilities will be designed consistent with the Ecology stormwater manual or functionally equivalent stormwater guidance, such as WSDOT's highway runoff manual.

28. Mitigation locations and concepts will be identified during project-level design, environmental review and permitting, and during possible early-action mitigation activities. WSDOT will continue to meet with federal, state, and local agencies to identify mitigation priorities and options, and to discuss opportunities for on-site mitigation and mitigation banking.
29. Projects lead by WSDOT will follow guidance in WSDOT Environmental Procedures Manual (Volumes 1 and 2) (WSDOT, 2001) that outlines the issues and actions to be addressed prior to authorizing work that could impact wetlands within their right-of-way.

Wildlife, Habitat, and Upland Threatened and Endangered Species

30. Opportunities to avoid and minimize impacts to wildlife, habitat, and upland threatened and endangered species will be identified and implemented during environmental review and project-level design.
31. Construction disturbance will be limited to the minimum area needed, the shortest duration, and at an appropriate distance away from sensitive species as practical. Seasonal work windows will be identified and implemented as appropriate.
32. Right-of-ways and construction zones will be re-vegetated with native species as appropriate to offset loss of habitat.
33. The I-405 Corridor Program will continue to coordinate with the USFWS on changes in the project or in threatened and endangered species status or habitat use, and implement BMPs and/or other measures to minimize impacts to threatened and endangered species.
34. Design and construction specifications will be prepared in coordination with wildlife biologists to reduce impacts on wildlife habitat.

35. The future environmental analyses of federal actions, that are included in the I-405 Corridor Program projects, will evaluate the effects of actions on migratory birds, with emphasis on the species of concern. Mitigating measures in the documents should include focus on avoiding and minimizing adverse impacts to migratory bird resources and restoring and enhancing migratory bird habitat as practicable.

Fish, Aquatic Habitat, Threatened and Endangered Fish Species

36. Project-level design, environmental review, and permitting will identify avoidance, minimization, restoration, and compensation as part of a comprehensive mitigation approach to reduce adverse effects on fish and aquatic habitat. Mitigation will be implemented in advance of project permitting and construction, where practicable, to avoid temporal losses of habitat and functions.
37. Consideration will be given to non-engineering solutions, such as removal of existing impervious surfaces and conversion into naturally vegetated habitat, where practicable and permitable.
38. Compensatory measures will be implemented on-site/in-kind, within the sub-basin or at the watershed level. Such measures will be identified during project-level design, environmental review, and permitting where avoidance and minimization does not sufficiently address impacts to fish and aquatic habitat.
39. Construction disturbance will be limited to the minimum area needed, the shortest duration, and at an appropriate distance away from water bodies and aquatic habitat as practical. Seasonal work windows will be identified and implemented as appropriate.
40. Where practicable, construction and maintenance will be done during low flow and periods that are least likely to harm fish and other aquatic resources.
41. BMPs and other measures will be incorporated into the construction specifications to control or reduce temporary construction

related impacts such as sedimentation and contamination of fish and aquatic habitat.

42. The I-405 Corridor Program will participate in habitat enhancement/protection projects identified by local jurisdictions and watershed groups to gain mitigation credit for project-level impacts while contributing toward overall restoration of sub-basins and watersheds.
43. Maintenance of stream crossing structures will be reduced by selecting materials with longevity and low maintenance requirements and by selecting larger sizes of culverts or bridges with more clearance.
44. The I-405 Corridor Program will continue to coordinate with NOAA Fisheries and USFWS on changes in the project or in threatened and endangered species status or habitat use, and will implement BMPs and/or other appropriate measures to minimize impacts to threatened and endangered species.
45. Design and construction specifications will be prepared in coordination with fisheries biologists to reduce impacts on the natural streambed and habitat.

Farmland

46. Where practicable, considering other social, economic and environmental impacts, the projects will be designed so that any expansion outside the right-of-way avoids or minimizes impacts on farmland. This is particularly applicable to the Willows Road improvement.

Floodplains

47. Floodways will be spanned or bridged so that flows are not impeded.
48. Projects will be designed to limit the amount of fill in the floodplain, reduce impacts to flood flows, and avoid rise in flood levels to the greatest extent practicable.
49. Design and construction specifications will be prepared in coordination with hydrologists, hydraulic specialists, and biologists to reduce impacts on the floodplain.

50. Maintenance of floodplain crossing structures will be reduced by selecting materials with longevity and low maintenance requirements and by selecting larger sizes of culverts or bridges with more clearance.

Shorelines

51. Avoidance, minimization, and mitigation of impacts to shorelines will be identified and incorporated as appropriate and practicable during project-level design, environmental review, and permitting.

Transportation

52. All reasonable and feasible approaches to maintain existing traffic lanes during construction will be implemented.
53. Specific measures to control or reduce construction related traffic impacts and maintain safety will be identified during project-level design and environmental review, and will be incorporated into the construction specifications.
54. TDM measures, transit improvements, and/or other advance measures to provide alternative means and routes for travel through the impacted sections of the corridor will be implemented prior to construction.

Displacements and Right-of-Way Acquisition

55. All reasonable attempts will be made to avoid acquiring properties or displacing residents or businesses. Where avoidance is not reasonable or feasible, WSDOT or local project sponsors will conform to the requirements set forth in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, to ensure just compensation of all acquired properties and minimal impact on the current owners and residents.

Social Impacts

56. Measures will be identified during project-level design and environmental review to avoid and mitigate impacts related to

displacements, traffic, noise, visual quality, and land use. These measures also will reduce overall social and neighborhood impacts.

Economic Impacts

No mitigation is required.

Recreational Resources

57. Avoidance, minimization, and mitigation or replacement of impacted publicly owned parkland, trails, recreational resources, and functions will be identified and incorporated consistent with Section 4(f) of the Department of Transportation Act and Section 6(f) of the Land and Water Conservation Fund Act, as appropriate, during project-level design and environmental review.
58. Auto and pedestrian traffic control measures to lessen impacts to the park access and functions will be implemented.
59. Measures will be identified during project-level design and environmental review to avoid, minimize, and mitigate impacts related to noise, visual quality, and land use. These measures also can reduce overall impacts on recreational resources.

Public Services

60. Construction scheduling and staging plans will be developed to ensure that emergency and school transportation access is maintained.
61. Police, fire, emergency, and school transportation service providers will be contacted and kept informed to address possible temporary disruptions in service during construction. Contingency plans for unforeseen interruptions of access or services will be developed in advance of initiation of construction.

Utilities

62. Utilities may be relocated if conflicts with project improvements cannot be avoided through project design.

Visual Quality

63. Where appropriate and practicable, specific measures will be identified during project-level design and environmental review to mitigate adverse visual impacts of the transportation improvements.

Historic, Cultural, and Archaeological Resources

64. Avoidance, minimization, and mitigation of impacts to significant historic sites will be identified and incorporated consistent with Section 4(f) of the Department of Transportation Act, as appropriate, during project-level design and environmental review.
65. Mitigation measures for archaeological resources may include archaeological monitoring, subsurface testing, and data recovery, as appropriate to site.
66. Mitigation measures for historic resources may include, but are not limited to designing the project to avoid or limit physical alteration, visual, atmospheric, or long-term noise impacts; relocating historic resources to appropriate new sites; and/or modifying construction methods to avoid or limit construction-related impacts. Mitigation will be in accordance with the standards of the Washington SHPO and local consulting parties regarding both requirements and repository, as appropriate.
67. The I-405 Corridor Program will continue to coordinate with the affected tribes. Prior to or during project-level design and environmental review, a cultural resources study will be initiated in consultation with local Indian tribes to determine the presence/absence of tribal cultural resources and appropriate mitigation measures.

Hazardous Materials and Wastes

68. Management of contaminated media such as soil or groundwater, control and management of hazardous wastes, and transport of hazardous substances will be conducted consistent with environmental regulations.

69. Additional site assessment will be conducted, and measures for addressing hazardous materials will be identified and implemented during project-level design, environmental review, and permitting.

Early Action Environmental Impact Mitigation

70. The goals and objectives listed in the Corridor Environmental Program (Appendix J of the FEIS) will guide the future project-level environmental programs and early-actions.
71. The proposed Early Action Environmental Impact Mitigation Decision Making Process, contained in the Corridor Environmental Program (Appendix J of the FEIS), will be conducted in coordination with Federal and state resource agencies. WSDOT will use the process to develop an early-action mitigation proposal to mitigate various unavoidable impacts of the Selected Alternative in advance of project permitting and construction. The process and methods described in Appendix J will evolve and be refined as WSDOT continues to consult with local, state, and Federal agencies on appropriate compensatory mitigation.

Determinations and Findings

The environmental record for the I-405 Corridor Program includes the previously referenced Draft and Final Environmental Impact Statements and Preliminary Draft and Preliminary Final Section 4(f) Evaluations (August, 2001 and June, 2002, respectively). These documents, incorporated here by reference, constitute the detailed statements required by NEPA and 49 U.S.C. Section 5324(b) on:

- The environmental impacts of the proposed program;
- The adverse environmental effects that cannot be avoided should the program be implemented;
- Alternatives to the proposed program; and
- Irreversible and irretrievable impacts on the environment that may be involved in the program should it be implemented.

Having carefully considered the environmental record noted above, the mitigation measures as required herein, the written and oral comments offered by other agencies and the public on this record, and the written responses to comments, the FHWA and FTA have determined in accordance with 49 U.S.C. Section 5324(b) that adequate opportunity was offered for the presentation of views by all parties with a significant economic, social, or environmental interest, and fair consideration has been given to the preservation and enhancement of the environment and to the interest of the communities in which the program is located; and all reasonable steps have been taken to minimize adverse environmental effects of the proposed program; and, where adverse effects remain, there exists no feasible and prudent alternative to avoid or further mitigate such effects.

Section 4(f) Preliminary Determination

Preliminary Section 4(f) evaluations are included in Appendix H of the Final EIS. Consistent with 23 CFR section 771.135(o), the FHWA and FTA have made a preliminary determination that the Selected Alternative incorporates all possible planning to minimize harm to Section 4(f) land and resources to the extent allowable based on the level of detail available at the corridor-level EIS. Furthermore, this preliminary determination finds that there are no feasible and prudent locations or alternatives for the action to avoid the use of Section 4(f) land and resources; and no other feasible and prudent alternative is more effective in minimizing potential harm to Section 4(f) resources. Final determinations of Section 4(f) impacts will be made upon review of specific corridor improvement projects and their scope. Final determinations are not bound by or prejudiced by this preliminary determination as specific project scopes are not known and, therefore, the use of potential Section 4(f) resources cannot be fully or finally evaluated. Thus, opportunities to eliminate or minimize harm at subsequent stages in the development process have not been precluded by decisions made at the corridor-level stage of analysis.

Environmental Justice

An analysis of Environmental Justice is included in Appendix G of the Final EIS. Consistent with Executive Order 12898, "Federal Action to Address Environmental Justice in Minority and Low-Income Populations" (February 11, 1994) and the U.S. Department of Transportation Order 5610.2, the FHWA and FTA have concluded that after the mitigation measures to minimize harm identified under this ROD are implemented, no high and adverse human health or environmental effects are expected to fall disproportionately on minority or low-income populations as a result of implementing the Selected Alternative.

Conformity With Air Quality Plans

An analysis of air quality, conformity with the Federal Clean Air Act (42 U.S.C. 7506(c)), and regional conformity with the State Implementation Plan (SIP) is included in the Final EIS. Analyses discussed in the Final EIS show that the daily emission values for the Selected Alternative would be within the region's SIP budget.

On April 25, 2002, the Puget Sound Regional Council (PSRC) Executive Board approved refinement of the Metropolitan Transportation Plan (MTP) to reflect the project elements of the Selected Alternative. PSRC's revised modeling runs show regional emissions below the emission budgets for all pollutants in 2010, 2020, and 2030 for the MTP including the Selected Alternative. This modeling demonstrates that air quality in the Puget Sound region, including implementation of the Selected Alternative, would conform at the regional level to the regional air quality maintenance plans.

Thus, the Selected Alternative has been determined to conform at the regional scale to the Puget Sound's air quality maintenance plans. The Selected Alternative would not cause any new or contribute to any existing regional exceedances of the National Ambient Air Quality Standards (NAAQS). Project-level air quality analysis will be needed for those individual elements in the

Selected Alternative that are not exempt from project-level conformity analysis (CFR 93.134).

Endangered Species Act (ESA)

The Endangered Species Act of 1973, as amended (ESA), intends to protect threatened and endangered species and the ecosystems on which they depend. The ESA requires a federal agency to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in direct mortality, destruction, or adverse modification of critical habitat of listed species. This requirement is fulfilled under Section 7 of the ESA by review of the proposed actions and consultation with the appropriate agency responsible for the conservation of the affected species. If necessary, measures will be required to avoid jeopardizing listed species or habitat.

Preliminary review under the ESA (as noted in the FEIS) and informal consultation with the affected Federal resource agencies has commenced. However, as previously noted, because specific project scopes are not known, the impacts, if any, on endangered species and ecosystems cannot be fully or finally evaluated at the corridor-level EIS stage.

In accordance with the methodology and processes agreed upon with the affected Federal resource agencies, the FHWA and FTA will continue to work in coordination with the other I-405 Corridor Program co-lead agencies, NOAA Fisheries, and the USFWS to identify actions that could result in the take of listed species. The I-405 Corridor Program co-lead agencies will continue corridor-wide Section 7 informal consultation under the ESA with NOAA Fisheries and USFWS on the I-405 Corridor Program Selected Alternative. The co-lead agencies will continue to work with NOAA Fisheries and USFWS to define the best method for ESA Section 7 consultation on a corridor level. Thereafter, upon the presentation of specific corridor projects to the Federal co-lead agencies, the co-lead agencies will begin specific

coordination with NOAA Fisheries and USFWS on project-level ESA compliance.

Magnuson-Stevens Act

The 1996 Magnuson-Stevens Fisheries Conservation and Management Act (MSA) amended federal fisheries management regulations to require identification and conservation of habitat that is "essential" to federally managed fish species. Essential habitat is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The Pacific Fishery Management Council (PFMC) is the body responsible to review relevant habitat issues in the Pacific Northwest, including the study area of the I-405 Corridor Program. The PFMC has designated Essential Fish Habitat (EFH) for the Pacific salmon fishery, federally managed groundfish, and coastal pelagic fisheries (NMFS, 1999b; PFMC, 1999). Only EFH associated with the Pacific salmon fishery is present in the study area.

FHWA and FTA will continue to consult with NOAA Fisheries on any I-405 Corridor Program project or proposed activity authorized, funded, or undertaken by the agencies that may adversely affect EFH.

Section 106

Section 106 of the National Historic Preservation Act of 1966, as amended, requires the review of federally assisted projects for impacts to districts, sites, buildings, structures, and objects listed in, or eligible for inclusion in, the National Register of Historic Places. FHWA, FTA, and WSDOT have consulted with the Washington State Historic Preservation Officer (SHPO), to develop an approach to consider cultural resources (archaeological properties, traditional cultural properties, and properties of the historic built environment) at a program level, consistent with the evaluation in the I-405 Corridor Program EIS. Data collection and

analyses were preliminary by design, and are not intended to provide a project-level environmental analysis, documentation, and review. Measures to avoid, minimize, and mitigate potential adverse effects on Section 106 resources have been identified by WSDOT at a corridor level. Since compliance with Section 106 of the National Historic Preservation Act requires lead federal agencies to take into consideration the effect of a project on properties listed in, or eligible for listing in, the National Register of Historic Places, it was agreed that formal compliance with Section 106 will take place during subsequent project-level environmental analysis, documentation, and review. In the interim, absent any commitment to move forward with the construction of specific transportation facilities, there is not any undertaking that the SHPO must review under the Section 106 process.

Consideration of potential project impacts to cultural resources at this corridor level of analysis fulfills both the spirit and intent of Section 106 to take into consideration, at the earliest possible time, the potential effects of the proposal on eligible historic properties. Consistent with this approach, WSDOT is currently engaging in government-to-government consultation with federally recognized and non-recognized Native American Tribes to facilitate "early consultation" under the revised Section 106 regulations.

Floodplains

Pursuant to Executive Order 11988 (Floodplain Management), the I-405 Corridor Program FEIS analysis evaluated potential impacts of the program upon/within the 100-year floodplains and floodways along the corridor, as defined by the Federal Emergency Agency (FEMA). At this point, FTA and FHWA find that no adverse impacts to any 100-year floodplains or floodways would occur as a result of the I-405 Corridor Program. I-405 project level environmental analysis and review will take place prior to any project implementation.

This analysis and further design will ensure that no impacts to the floodplains or floodways will occur unless there is no practicable alternative to such action.

Wetlands

The United States Department of Transportation seeks to assure the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable during the planning, construction, and operation of transportation facilities and projects (DOT Order 5660.1A; Executive Order 11990).

Potentially feasible mitigation sites for the I-405 Corridor Program have been identified by WSDOT within the affected drainage basins. (Mitigation opportunities are identified by basin in the FEIS Chapters 3.5 and 3.8.) Applicable wetland mitigation ratios have not yet been determined but will be determined collaboratively during final design by the project proponents and regulatory agencies. Implementation of the I-405 Corridor Program projects will result in no net loss of wetlands.

With the program's proposed wetland mitigation measures, FHWA and FTA find that the I-405 Corridor Program meets the federal wetland requirements described above.

Farmland

The Farmlands Protection Policy Act (FPPA) of 1981 (7 USC 4201-4209) requires the review of federally funded activities to identify and minimize the conversion of farmland to non-agricultural uses. Pursuant to FPPA, WSDOT assessed farmlands within the study area. All of the potentially affected farmlands score 160 or less on the Farmland Conversion Impact Rating Form (AD-1066) land evaluation and site assessment, and are categorized as farmland not requiring further consideration for protection. Measures to avoid and minimize effects on farmlands have been identified by WSDOT at a

program level. FTA and FHWA find the Corridor Program FEIS analysis to be consistent with the FPPA and other applicable state and federal farmlands protection policies, orders, and guidance. I-405 project-specific level environmental review and documentation will further address specific measures to avoid and minimize impacts to farmlands.

Coastal Zone Management

The Coastal Zone Management Act (CZMA) of 1972 (16 USC 1451 et seq.) encourages advancement of national coastal management objectives and implementation of state management programs. Under Washington's Coastal Zone Management Program, local jurisdictions have developed shoreline management plans. In addition to demonstrating consistency with these plans and the Washington State Shoreline Management Act, projects must meet the requirements of the Washington State Environmental Policy Act, Clean Water Act (33 USC 1251 et seq.) to demonstrate consistency with CZMA.

WSDOT has evaluated the effects of the proposal consistent with the programmatic I-405 Corridor Program EIS. Data collection and analyses were not intended to provide a project-level environmental analysis, documentation, and review. Measures to avoid, minimize, and mitigate potential adverse effects on shorelines, water quality, and air quality have been identified by WSDOT at a program level. Consideration of potential project impacts at this programmatic level of analysis fulfills both the spirit and intent of CZMA at this stage in project development. WSDOT will request certification of consistency with CZMA during subsequent project-level environmental analysis, documentation, and review.

Monitoring and Enforcement

The Division Administrator, Federal Highways Administration and the Regional Administrator, Federal Transit Administration are ultimately

responsible for monitoring and enforcing mitigation measures outlined within this Record of Decision. The Urban Corridors Administrator, Washington State Department of Transportation; Executive Director, Central Puget Sound Regional Transit Authority; and Director, King County Department of Transportation will also ensure the monitoring and enforcement of mitigation measures associated with their agencies' respective projects.

Comments Received on the Final EIS

Only one comment letter on the FEIS was received after it was issued. The letter received was from Judith Lekrone Lee, U.S. Environmental Protection Agency (EPA) Region 10, to James Leonard, FHWA, and Michael Cummings, WSDOT, dated August 13, 2002. The letter contained four main issues. Attachment A includes a copy of the letter and reference numbers to the four main issues. Responses to those issues are as follows:

1.) Page 1, Paragraph 3 and 4 regarding EPA's comment, "Bus Rapid Transit was selected over High-Capacity Transit as the transit mode of choice for the I-405 Corridor Program. Thus, impacts to aquatic resources are substantially overstated for Alternatives 1 and 2…":

> The alternatives considered in the I-405 Corridor Program EIS were identified with participation by EPA to demonstrate a range of potential solutions and compare their potential impacts. Each alternative was evaluated considering the broad range of anticipated environmental effects as well as the transportation performance benefits that would be gained. After weighing all of these effects, FHWA, WSDOT, the other co-lead agencies, and I-405 Corridor Program committees concluded that Alternative 1 would not achieve the purpose and need for the corridor program. Also, Alternative 2 did not perform as well as the Preferred Alternative in meeting the purpose and need,

and it was determined to be a less environmentally responsible choice. Furthermore, the determination of the alternative that best meets the purpose and need is the responsibility of the transportation agencies.

The most important characteristic of the high-capacity transit system contained in Alternatives 1 and 2 was its physical separation and location outside the I-405 roadway, mostly within the Burlington-Northern Santa Fe right-of-way. This is the factor that influenced the greater impacts to aquatic resources in Alternatives 1 and 2 – not the choice of technology between rail transit and bus rapid transit. If either rail transit was included adjacent to the I-405 roadway or bus rapid transit was included within the Burlington-Northern Santa Fe right-of-way, the overall effects on aquatic resources would not be less than reported in the Final EIS for Alternatives 1 and 2, and the impacts likely could be higher because of the expanded footprint and additional impervious surface that would be required. Thus, we believe that the impacts to aquatic resources are accurately presented.

Regarding EPA's concern, addressed on page 1, paragraph 4 of the comment letter, that the Preferred Alternative does not represent a balanced approach or demonstrate a full commitment to viable multi-modal transportation, we would point out the Final EIS (page 3.13-8) concluded that the bus rapid transit system proposed in the Preferred Alternative is expected to provide similar ridership and mobility benefits as would be achieved by either Alternative 1 or 2. In addition, the proposed bus rapid transit system could be brought on line more quickly, at a substantially lower cost, and with greater flexibility for future expansion in response to changes in land use or overall demand. The Preferred Alternative combines this commitment to new transit infrastructure and transit stations with a substantial increase in local bus transit service (up to 75% based on demand), an aggressive TDM

program, HOV and general purpose roadway improvements, and non-motorized transportation improvements. When viewed as a system, we believe the Preferred Alternative represents a comprehensive, regional solution to existing and forecasted transportation needs that is well balanced, cost-effective, and sustainable.

2.) Page 2, "Corridor-Level Mode Phasing and Adaptive Management":

Per the memorandum from Craig Stone, WSDOT Project Director, to the I-405 Executive Committee, project staff has been working with committee members to develop a range of implementation concepts that reflect funding possibilities. The implementation concepts have been based on the following implementation principles, as adopted by the I-405 Executive Committee:

- Fulfill the Vision – The I-405 implementation plan should reflect the vision and intent of the program's Preferred (Selected) Alternative.
- Worst First – The most congested areas of the corridor should be the focus of early implementation efforts and investments.
- Complete Logical Segments – Improvements should be made to their maximum and completed in distinct segments or sections.
- Geographic Investments – Investments should be made throughout the corridor to evenly distribute benefits as reasonably as possible.
- Modal Balance – The implementation plan should include all modes; transit, roads, and TDM, working together as a comprehensive package.
- Achieve Early Actions – Projects should be chosen for their ability to deliver benefits as soon as possible.
- Early Action Environmental – Early environmental improvements should be an

essential component of initial implementation efforts.

- Minimize Overall Costs and Risks – Projects selected should provide opportunities to reduce costs and risks to schedule.
- Minimize Construction Impacts – The implementation strategy should minimize construction impacts to communities by avoiding repetitive work programs.

3.) Page 2, "Conclusions in Chapter 3 regarding the Significance of Impacts":

Chapter 3 of the Final EIS was revised to respond to EPA's comments regarding conclusions on the significance of effects of the alternatives. While EPA prefers use of the terms "significant" and "significance of impacts" when describing the level of effects, it is the policy of FHWA and FTA to avoid or reduce use of these terms in an EIS. Specifically, FHWA Technical Advisory T 6640.8A, dated October 30, 1987, states under Section V:

> G. Environmental Consequences
>
> This section includes the probable beneficial and adverse social, economic, and environmental effects of alternatives under consideration and describes the measures proposed to mitigate adverse impacts. The information should have sufficient scientific and analytical substance to provide a basis for evaluating the comparative merits of the alternatives. The discussion of the proposed project impacts should not use the term significant in describing the level of impacts. There is no benefit to be gained from its use. If the term significant is used, however, it should be consistent with the CEQ definition and be supported by factual information.

FTA does not set thresholds for significance because doing so is not consistent with the CEQ regulations and does not contribute to the public's understanding of the project and its impacts. In addition, experience from other EISs has shown that it can diminish the NEPA objective of balanced decision making that weighs the societal need for the project against its overall negative impact and cost by diverting discussion to specific details of project impact areas and the thresholds themselves.

To improve the discussion of project impacts in the Final EIS, qualifiers including use of the word "substantial" were added to describe the level of impacts where this was appropriate. In addition, expanded discussions were provided for a number of environmental elements to better explain the scientific and analytical bases for evaluation of impacts, the ranking of impacts, and the comparison of the relative effects among alternatives.

4.) Page 3, "Responses to Comments on Transportation, Land Use, Induced Travel and Growth":

All input on draft and preliminary versions of the I-405 Corridor Program documents were considered and changes were incorporated into the documentation where necessary. The FEIS contains full and complete responses to the questions and issues raised regarding transportation, land use, induced travel, and growth.

Findings and conclusions on transportation mode performance are appropriately addressed in the Transportation Section 3.12 of the FEIS. Figures 3.12A-C of the FEIS graphically represent how each alternative accommodates peak period person demand by mode. Tables 3.12-4 through 3.12-7 show the P.M. peak travel time comparisons between alternatives for general traffic, HOV traffic, walk-and-ride transit, and park-and-ride transit. Also, the effectiveness of the

TDM Program, mode common to all action alternatives, is summarized in Table 3.12-12.

Regarding land use and the patterns of growth, Section 3.23 of the FEIS presents the results of the alternative evaluation using the PSRC land use forecasting model (DRAM/EMPAL). Also, Section 3.13 of the FEIS and responses to relevant comments acknowledge that land use in the study area is managed through comprehensive plans prepared for each jurisdiction and guided by countywide planning policies adopted in accordance with the Growth Management Act (RCW 36.70A). After comments on the DEIS were received, a detailed review of consistency with adopted plans and policies was added to the FEIS Section 3.13.

Attachment

Attachment A:

Letter from EPA to FHWA and WSDOT commenting on the I-405 Corridor Program FEIS (August 13, 2002).

Attachment A

Letter from EPA to FHWA and WSDOT commenting on the I-405 Corridor Program FEIS (August 13, 2002).

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

Reply To
Attn Of: ECO-088

AUG 13 2002

99-083-FHW

Attn. James Leonard
Federal Highways Administration
711 South Capitol Way, No. 501
Olympia, WA, 98501

Michael Cummings
Washington Department of Transportation
I-405 Corridor Program
401 Second Avenue South, Suite 300
Seattle WA 98104

Dear Mr. Cummings and Mr. Leonard:

The U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (EIS) for the **I-405 Corridor Program** dated June 2002 We reviewed it in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act (CAA). Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions and a document's adequacy in meeting NEPA requirements.

While we have decided not to oppose WSDOT's implementation of the Preferred Alternative, EPA continues to have major concerns about the potential for significant, long term impacts to aquatic resources in the corridor and the region. There are reasonable project alternatives analyzed in the EIS (Alternatives 1 and 2) which would result in less severe direct environmental impacts to aquatic resources than the Preferred Alternative. The Preferred Alternative also poses a greater risk of secondary and cumulative impacts on aquatic resources over time, which you acknowledge in the final EIS.

The Final EIS now includes additional Sections analyzing the environmental impacts of the Preferred Alternative on all affected resources. It also compares them to the impacts of the action alternatives that were in the draft EIS. During preparation of the Final EIS, Bus Rapid Transit was selected over High-Capacity Transit as the transit mode choice for the I-405 Corridor Program. Thus, impacts to aquatic resources are substantially overstated for Alternatives 1 and 2 in comparison to the Preferred Alternative, fortifying our conclusion that Alternative 2 is the more environmentally responsible choice that achieves the purpose and need. 1

Second, the preferred alternative does not, in our view, represent a balanced approach or demonstrate a full commitment to viable multi-modal transportation. We do not believe that the I-405 Corridor Program will move the region toward a long-term transportation solution as quickly as it can and should.

During our review of the FEIS, we looked at a number of topic areas, including the following:

Corridor-Level Mode Phasing and Adaptive Project Management

In the draft EIS, we proposed an adaptive project management concept whereby the project team would evaluate initial project modes as they are built and operated, prior to determining what the next steps might be, so that implementation could adapt to changing conditions, possibly avoid a full build-out, and achieve an environmentally preferable solution. Under this concept, construction would start by focusing non-structural, least-cost solutions first, under the umbrella of a corridor-wide intensive Transportation Demand Management (TDM) program involving all local jurisdictions in partnership with State and Federal agencies and the Executive Committee. As results are gathered on TDM efforts, the worst trouble spots along the corridor and related arterials would be fixed right away. Then, the selected transit mode could be added in a design that compliments the previous work. Finally, once the performance of these modes can be evaluated, HOV-2 and general purpose lanes could be added if necessary. The benefits to this concept are first that the modes comprising the program can work together optimally and be adapted to evolving conditions along the corridor as construction phases proceed, and second that some environmental impacts and costs can be avoided if full-build out ends up not being necessary. 2

FHWA and WSDOT have chosen not to adopt this overall corridor level mode phasing concept and adaptive project management approach, choosing instead to focus on geographical areas (Corridor Program Option B Program Description implementation plan of July 22, 2002). We are encouraged however, to see that you have made commitments to make early expenditures on a broad TDM program, fix the "worst first" problem areas right away to achieve modal balance, and to take early environmental action to reduce environmental impacts.

Wetland and Water Resources Sections

The Final EIS has made significant technical improvements in the Water Resources and Wetlands Sections addressing a number of agency concerns including our own. We commend WSDOT for their hard work with these Sections and for their high quality. The addition of much more specific information on wetland functions, surface and groundwater impacts, and the geographic distribution of impacts greatly assisted the resource agencies and WSDOT in working collaboratively to an agreement on a comprehensive watershed mitigation strategy for the I-405 corridor program. This agreement, which we discussed in previous correspondence dated July 16, 2002, has the potential to reduce aquatic resource impacts and create some opportunities for real watershed improvements as the program is implemented.

Conclusions in Chapter 3 regarding the Significance of Impacts

As we have stated previously to WSDOT, many sections of the EIS continue to lack clear conclusions regarding the significance of effects on environmental resources or failed to establish clear impact thresholds. Your response to our comments was that you aimed to "avoid 3

value judgements such as the degree of significance of any ... data. (This) decision is left to the ...reader and the program decision makers." With this approach, however, reviewers are left without a clear understanding of WSDOT and FHWA conclusions as to the significance of environmental effects as required by the NEPA regulations at 40 CFR 1502.16 which state, in part, that the environmental consequences section shall include discussions of "direct (and indirect) effects, *and their significance.*" Your choice to omit such conclusions formed part of the basis for our numerical rating of the draft EIS and our alphabetical ratings for Alternatives 3 (and Preferred Alternative) Alternative 4, the alternatives with the greatest risk of harm to environmental resources. 3

Responses to Comments on Transportation, Land Use, Induced Travel and Growth

We are pleased that the Final EIS provides expanded discussions of induced growth, induced travel, the effects of urban growth Areas, and provides an improved tabular display of the geographic distribution of induced growth in the region. However, commenting parties on the Draft EIS raised specific, substantive, technical questions regarding the above topics. Several comments asked for further explanation of WSDOT's conclusions of comparative transportation mode performance in the alternatives section. Others were concerned with the Cumulative Impacts chapter's analysis of land use and the patterns of growth presented in the Draft EIS. In our review of your draft responses, we stated that some of the public comments on these topics did not appear to receive full consideration or evaluation, and that if unanswered, leave some critical conclusions you have made in the EIS open to question. We are disappointed to see that the Final EIS did not provide any additional response to these questions as we requested. We continue to believe that you should and that these responses should be a part of the administrative record. 4

Thank you for providing us an opportunity to comment on the Final EIS. If you would like to discuss EPA's comments and concerns, please contact Jonathan Freedman, at (206) 553-0266.

Sincerely,

Judith Leckrone Lee

Judith Leckrone Lee
Manager, Geographic Unit

cc: Ben Brown, WSDOT