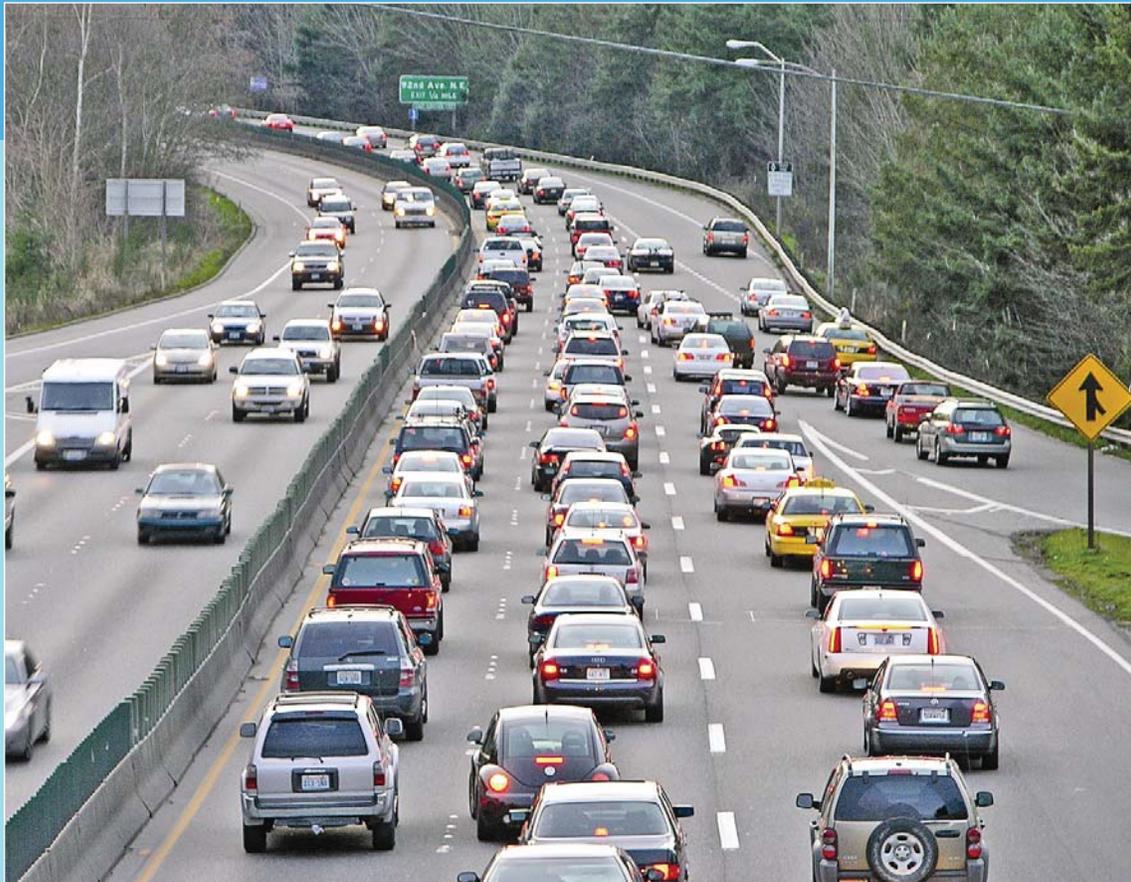


## SR 520, Medina to SR 202: Eastside Transit and HOV Project





SR 520, Medina to SR 202: Eastside Transit and HOV Project  
King County, Washington

## Finding of No Significant Impact

***By the U.S. Department of Transportation  
Federal Highway Administration***

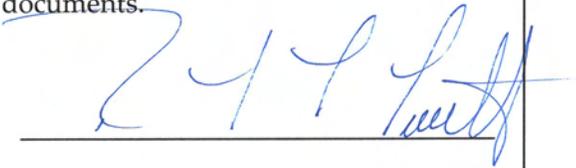
The Federal Highway Administration (FHWA) has determined, in accordance with 23 CFR 771.121, that the proposed project will have no significant impact on the environment.

This Finding of No Significant Impact (FONSI) is based on the Environmental Assessment (EA) (incorporated by reference) and other documents and attachments, as itemized in this FONSI. These documents have been independently evaluated by FHWA and are determined to accurately discuss the project purpose, need, environmental issues, impacts of the proposed project, and appropriate mitigation measures. The review provided sufficient evidence and analysis for determining that an environmental impact statement (EIS) is not required.

FHWA takes full responsibility for the accuracy, scope, and content of the EA, as modified by this FONSI and the referenced documents.

May 17, 2010

Date of Approval

  
Randolph Everett  
Federal Highway Administration  
Major Projects Oversight Manager



## **Title VI**

WSDOT ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact the Department's Title VI Coordinator at (360) 705-7098.

### **Americans with Disabilities Act (ADA) Information**

Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities by calling the Office of Equal Opportunity (OEO) at (360) 705-7097. Persons who are deaf or hard of hearing may contact OEO through the Washington Relay Service at 7-1-1.

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## ATTACHMENTS

- Attachment 1: Errata to EA
- Attachment 2: Notices
- Attachment 3: FONSI Distribution List
- Attachment 4: Mitigation Commitment List
- Attachment 5: Comments and Responses
- Attachment 6: Agency Correspondence

SR 520, MEDINA TO SR 202: EASTSIDE TRANSIT AND HOV PROJECT  
FINDING OF NO SIGNIFICANT IMPACT

## ACRONYMS AND ABBREVIATIONS

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ADA	Americans with Disabilities Act
APE	area of potential effects
BA	biological assessment
BMP	best management practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DAHP	Department of Archaeology and Historic Preservation
dba	A-weighted decibel
DNS	Determination of Nonsignificance
EA	Environmental Assessment
EIS	environmental impact statement
ESA	Endangered Species Act
ESHB	Engrossed Substitute House Bill
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
HOV	high-occupancy vehicle
I	Interstate
MSAT	mobile source air toxic
NAC	Noise Abatement Criteria
NE	northeast
NEPA	National Environmental Policy Act
NOAA Fisheries Service	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEO	Office of Equal Opportunity
PGIS	pollution-generating impervious surface
ppm	parts per million

SR 520, MEDINA TO SR 202: EASTSIDE TRANSIT AND HOV PROJECT  
FINDING OF NO SIGNIFICANT IMPACT

PSCAA	Puget Sound Clean Air Agency
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SMP	Soil and Groundwater Management Plan
SPCC	Spill Prevention Control and Countermeasures Plan
SR	State Route
TESC	Temporary Erosion and Sediment Control Plan
TMP	Transportation Management Plan
TNM	Traffic Noise Model
USC	United States Code
UST	underground storage tank
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WAC	Washington Administrative Code
WDFW	Washington State Department of Fish and Wildlife
WSDOT	Washington State Department of Transportation

## **DESCRIPTION OF PROPOSED ACTION**

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The Washington State Department of Transportation (WSDOT) is proposing to construct the SR 520, Medina to SR 202: Eastside Transit and HOV Project to reduce transit and high-occupancy vehicle (HOV) travel times and to enhance travel time reliability, mobility, access, and safety for transit and HOVs in rapidly growing areas along the State Route (SR) 520 corridor east of Lake Washington. Exhibit 1 shows the project vicinity.

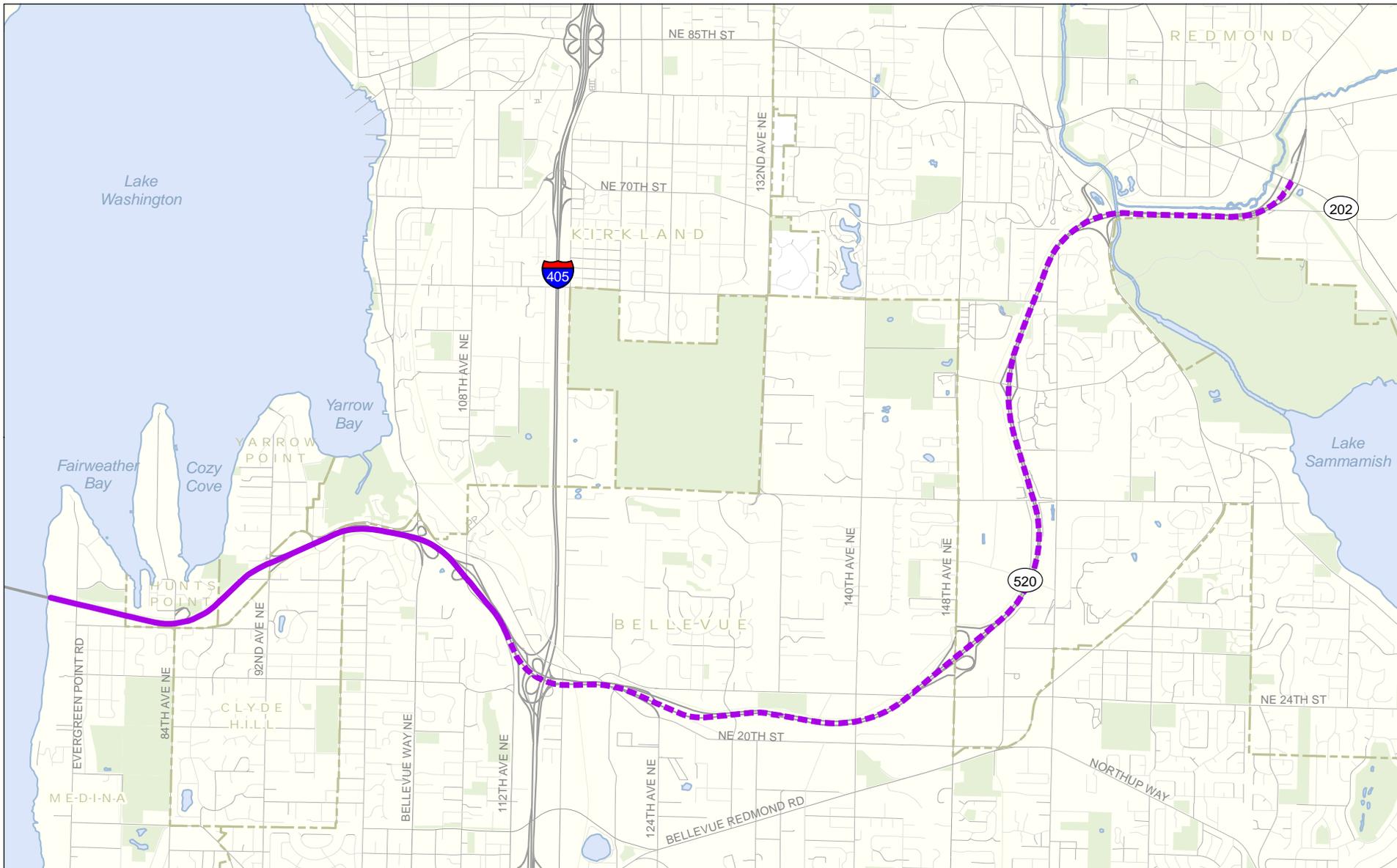
The portion of the project between Evergreen Point Road and 108th Avenue NE was previously part of the SR 520 Bridge Replacement and HOV Project. On June 18, 2008, the Federal Highway Administration (FHWA) authorized WSDOT to develop the SR 520, Medina to SR 202: Eastside Transit and HOV Project as an independent project. The project includes building a complete HOV system between Lake Washington and 108th Avenue NE and restriping the existing HOV lanes from the outside lanes to the inside lanes between the 108th Avenue NE interchange and SR 202 in Redmond. WSDOT and FHWA determined that these were the logical endpoints for the project, based on the existing configuration of the HOV system and transit operations in the SR 520 corridor.

The SR 520, Medina to SR 202: Eastside Transit and HOV Project is an independent project intended to address needs specific to the portion of SR 520 east of Lake Washington. The project limits extend approximately 8.8 miles along SR 520 from the east shore of Lake Washington (vicinity of Evergreen Point Road) to the interchange with SR 202 in Redmond.

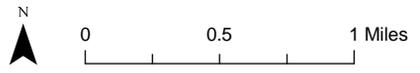
The SR 520, Medina to SR 202: Eastside Transit and HOV Project provides benefit as an independent project for the following reasons:

- The project would complete the Eastside transit and HOV system, providing the infrastructure and operational improvements to support planned population growth, economic expansion, and increases in transit service in the rapidly growing communities east of Lake Washington.
- The project would provide substantial travel time benefits to transit and carpools; these benefits would be realized upon completion of this project, and are not dependent on completion of the new Evergreen Point Bridge.
- The project would enhance public safety by: 1) separating merge movements between buses and other vehicles at the 108th Avenue NE and 84th Avenue NE interchanges; 2) eliminating weaves caused by general-purpose traffic needing to enter or exit via the outside HOV lanes; and 3) widening shoulders to current design standards.

The project would support regional and local transit and land use plans and policies. The project would also comply with ESHB 2878, which directs WSDOT to explore improvements in traffic flow on the Eastside between 2009 (when tolling under the Urban Partnership Agreement is implemented) and the proposed opening of the new Evergreen Point Bridge in 2014.



- Construction Extent
- - - Restriping Extent
- Park
- City Limits



Source: King County (2008) GIS Data (Streams, Streets, Water Bodies), CH2M HILL (2008) GIS Data (Parks). Horizontal datum for all layers is NAD83(91); vertical datum for layers is NAVD88.

**Exhibit 1. Project Vicinity**

Medina to SR 202: Eastside Transit and HOV Project

## ***SR 520 Improvements from Lake Washington to 108th Avenue NE***

The proposed project would reconstruct SR 520 from just west of Evergreen Point Road to just east of 108th Avenue NE. Elements constructed as part of this section include the following:

- Construct a new eastbound HOV lane from Lake Washington to the existing eastbound HOV lane west of the I-405 interchange. This improvement would complete the currently discontinuous HOV network on the Eastside and improve travel time reliability for buses and carpools.
- Relocate the existing westbound HOV lane from the outside lane to the inside lane from Lake Washington to I-405. This change would enhance safety by eliminating the need for merging vehicles to weave across the faster-moving HOV lanes to reach the general-purpose lanes.
- Construct a lid with inside transit stop over SR 520 at Evergreen Point Road.
- Construct a lid and modify the existing half-diamond interchange at 84th Avenue NE.
- Construct a lid with inside transit stop over SR 520 at 92nd Avenue NE and modify the existing interchange.
- Reconfigure the existing interchange at Bellevue Way NE.
- Construct HOV direct access ramps at 108th Avenue NE. This improvement would create a more efficient connection for transit and HOVs from SR 520 to the South Kirkland Park and Ride via local streets.
- Add a bicycle/pedestrian path from Lake Washington to approximately 108th Avenue NE. This improvement would facilitate nonmotorized use of SR 520, provide transit connections for bikes and pedestrians, and complement the existing nonmotorized transportation network on the Eastside.

## ***SR 520 Improvements from 108th Avenue NE to SR 202***

- Restripe existing eastbound and westbound HOV lanes from the outside to the inside lane. This change would enhance safety by eliminating the need for merging vehicles to weave across the faster-moving HOV lanes to reach the general-purpose lanes.

## ***Other Improvements***

- Provide noise walls between Evergreen Point Road and Bellevue Way NE.
- Provide retaining walls and stormwater management system improvements.
- Improve stream habitat by realigning portions of the Yarrow Creek channel, shortening some culverts, and removing six culverts to daylight streams.
- Improve fish passage culvert crossings to restore fish passage and open up habitat that was previously inaccessible to salmon and other fish species.

- Mitigate the project's effects on wetlands by providing compensatory mitigation onsite within the project corridor and offsite at the Keller Mitigation Site located in the Bear Creek basin.
- Mitigate the project's effects on streams by opening approximately 820 feet of aquatic habitat and associated riparian buffers. In addition, WSDOT is committed to restoring a major reach of the Yarrow Creek system and restoring connectivity within Yarrow Creek and several tributaries.

## **EA COORDINATION AND COMMENTS**

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WSDOT held a public hearing on December 16, 2009, following issuance of the Environmental Assessment (EA) on December 3, 2009. The EA hearing took place at the Chinook Middle School in Bellevue, Washington. WSDOT requested that verbal comments be provided to a court reporter, written comments be provided on comment forms or on the Internet via computers provided at the hearing, or follow-up written comments be postmarked or received at the SR 520 project office by January 7, 2010. The Notice of Availability of the EA and Notice of EA Hearing were advertised in *The Seattle Times* and *The Bellevue Reporter* on December 3, 2009.

Display advertisements were placed in the following newspapers on the dates shown:

- *The Bellevue Reporter* on December 3, 2009
- *The International Examiner* on December 3, 2009
- *The Kirkland Reporter* on December 3, 2009
- *The Redmond Reporter* on December 3, 2009
- *The Seattle Daily Journal of Commerce* on December 3, 2009

Approximately 45,000 notification mailers were mailed to nearby residents, to businesses, and to the SR 520 mailing list on December 3, 2009.

A public hearing announcement was posted on the project Web site on December 3, 2009. In addition, materials from the EA hearing were posted on the Web site on December 3, 2009.

E-mail announcements were distributed to approximately 3,900 contacts via the project e-mail list on December 3 and December 14, 2009.

WSDOT distributed a press release to local and regional media outlets. This prompted coverage by print and broadcast media. The release included highlights of the EA, how to review and comment on the EA, and information on how to attend the public hearing.

WSDOT handed out the notification mailer to commuters at the Montlake flyer stop, Evergreen Point flyer stop, South Kirkland Park and Ride, Bellevue Transit Center, and Overlake Transit Center during the evening commute on December 10, 2009, and during the morning commute on December 14, 2009.

In total, the EA and/or executive summary were distributed to over 450 individuals, businesses, jurisdictions, agencies, tribes, legislators, and libraries.

Approximately 85 people attended the December 16, 2009, public hearing. During the comment period, from December 3, 2009, through January 7, 2010, 3 businesses, 11 agencies, 1 tribe, and 67 individuals provided comments.

In general, the tone of comments on the SR 520, Medina to SR 202: Eastside Transit and HOV Project is positive and supportive. Many members of the public and government entities

expressed their appreciation for WSDOT's agency coordination and public involvement efforts, as well as for the opportunity to comment on the EA. Some comments expressed concerns with the project schedule, safety, or elements of the project design as proposed. Other comments describe recommendations or suggestions for modifying specific design elements described in the EA, such as interchanges, transit stops, or bike and pedestrian paths. The top five issues raised (as a percentage of all comments received) are as follows:

1. Project Design Features (15 percent)
2. Transit and HOV (11 percent)
3. General/Miscellaneous (9 percent)
4. Nonmotorized Transportation (8 percent)
5. (3 tied) Construction, General Transportation, and Social Elements (8 percent each)

## **DETERMINATION AND FINDINGS**

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### ***National Environmental Policy Act Finding***

FHWA served as lead agency under the National Environmental Policy Act (NEPA) for the project. WSDOT prepared the EA in compliance with NEPA, 42 United States Code (USC) Section 4321 et seq.; with FHWA's regulations, 23 Code of Federal Regulations (CFR) Part 771; and with the State Environmental Policy Act (SEPA). The EA discusses the potential effects of the project on the environment so that FHWA can determine whether significant adverse impacts (Council on Environmental Quality [CEQ] 1508.27) would occur. If such a determination were made, an environmental impact statement (EIS) would need to be prepared.

The EA indicates that the project's construction and operation will not cause any significant adverse environmental impacts that will not be mitigated. This finding applies to all applicable environmental elements.

A summary of the key findings of the evaluation of the project's environmental effects is provided below. Additional detail about the potential environmental effects of the project may be found in the EA.

#### **Air Quality**

The project is not expected to cause or contribute to any new violation of the National Ambient Air Quality Standards because emissions would be almost identical for the Build Alternative when compared with those for the No Build Alternative. Consequently, it is not anticipated that the project would worsen regional air quality compared with the No Build Alternative.

The project is expected to have a low potential for mobile source air toxic (MSAT) emissions because the amount of MSAT emissions would be roughly proportional to vehicle miles traveled; vehicle miles traveled are estimated to increase by less than 0.3 percent, thus there would be no appreciable difference in overall MSAT emissions due to the project.

Any air quality effects related to project construction will be temporary. Best management practices (BMPs) will be implemented to avoid or minimize any construction-related air quality effects. Dust and odors may be present during construction, but after implementing construction BMPs, these effects will be minor and temporary.

The Puget Sound Regional Council has modeled the effects of this project on regional ozone and carbon monoxide emissions. This project, as well as all others in the Council's Transportation Improvement Program and Metropolitan Transportation Plan, conforms to the State Implementation Plan at the regional level. The U.S. Environmental Protection Agency has approved the current State Implementation Plan for this area. FHWA determined that the project comes from a conforming transportation plan and Transportation Improvement Program. This project conforms to the State Implementation Plan and both federal and state Clean Air Act requirements.

The project includes measures to avoid or minimize any temporary effects on air quality, and no long-term changes in air quality are expected to result from the project; therefore, the project will have no significant adverse impact related to air quality. The roadway improvements could have an overall beneficial effect on air quality in the region by improving traffic flow and reducing idling time. Additional information may be found in the EA, Appendix G, Air Quality Technical Memorandum.

### **Environmental Justice**

According to data from the 2000 U.S. Census, approximately 23 percent of the population of the census block groups in the study area is comprised of minorities, and approximately 6 percent of the population is low-income. Although low-income and minority populations live within the study area, WSDOT does not anticipate that project construction or operation will have high and adversely disproportionate effects on low-income or minority populations.

Project construction will have minor, temporary effects such as higher noise levels, dust, decreased visual quality, and traffic diversions and delays that could affect people living in, working in, and traveling through the study area. Project design and construction BMPs will ensure that adverse effects will not occur or will be minimized. The completed project will increase noise levels and change visual quality for some residents; however, noise levels for most residents will be reduced with the construction of noise walls and BMPs will be used to minimize effects to visual quality.

The project will benefit the area's population by reducing congestion and improving operations on I-405 and SR 520, and by improving local access to these freeways. Upon completion of the proposed project, mobility improvements along SR 520 for public transit and HOVs will benefit local residents, including minority and low-income residents.

The study area is within the "usual and accustomed" area of the Muckleshoot Indian Tribe. When considering all the benefits compared with the impacts, the net result is not expected to have a substantial negative overall effect on fish and aquatic resources. If the net result meets expectations and there is no negative overall effect to fish and aquatic resources, WSDOT expects the result to be that there are no disproportionate and adverse effects on the Muckleshoot Indian Tribe.

The project is not expected to have disproportionately high and adverse impacts on minority or low-income populations. Additional detail may be found in the EA, Appendix H, Environmental Justice Technical Memorandum.

### **Geology and Soils**

The proposed project will have minimal effects on the geology and soils in the study area. There are several hazards in the study area, including unstable slopes, areas of potential liquefaction, and historic landslides. These hazards will be considered during design and construction of the project to minimize the effects.

The project will result in changes in soil conditions as materials are removed to accommodate project elements (e.g., retaining walls) or as soils are moved or placed to improve performance

of project elements. Construction activities on steep slopes and through areas with known or suspected past landslides will use appropriate engineering and construction techniques developed to minimize landslide hazards. Thus, the project will not have a significant impact related to geology and soils. Additional detail may be found in the EA, Appendix I, Geology and Soils Technical Memorandum.

### **Hazardous Materials**

No unavoidable negative effects relating to hazardous materials or human health due to contamination are expected as a result of construction or operation of the project. The most likely project effects associated with hazardous materials include encountering contaminated soils and groundwater, potentially generating hazardous building material waste through demolition, encountering underground storage tanks or leaking underground storage tanks, creating accidental spills, and addressing worker safety and public health issues. In the event that contaminated soil or groundwater is encountered, WSDOT will adhere to standard mitigation measures for addressing hazardous materials. Thus, the project will not have a significant impact related to hazardous materials. Additional detail may be found in the EA, Appendix J, Hazardous Materials Technical Memorandum.

### **Cultural Resources**

WSDOT conducted archival review, tribal consultation, and field surveys early in the project process. Three historic properties were identified as eligible for listing on the National Register of Historic Places (NRHP): the James Arnston House, the BurgerMaster, and the Bellevue Christian School. Two archaeological resources (Lake Washington road bed and a farm road bed) were discovered, but determined not to be eligible for the NRHP.

As part of early coordination for the cultural resources assessment, WSDOT engaged in consultation with five federally recognized tribes: the Muckleshoot Indian Tribe, the Snoqualmie Tribe, the Suquamish Tribe, the Tulalip Tribes, and the Confederated Tribes and Bands of the Yakama Nation. WSDOT also coordinated with the Duwamish Tribe (non-federally recognized) as an interested party.

Cultural resource investigations determined that the proposed project has a low probability for hunter-fisher-gatherer, ethnographic period, historic Indian, and historic period non-Indian archaeological resources.

WSDOT also consulted with the Washington State Department of Archaeology and Historic Preservation (DAHP) under Section 106 of the National Historic Preservation Act. In November 2009 and in April 2010, DAHP sent letters to WSDOT that concurred with a finding of "No Adverse Effects on Historic Properties."

The project is not likely to adversely affect any NRHP-eligible historic structures or archaeological resources. WSDOT will follow an Unanticipated Discovery Plan in the event that unknown archaeological artifacts or human skeletal remains are found during construction. Based on the cultural resources analysis and coordination with the tribes and with DAHP, the project will have no significant impact on cultural or historic resources; the Section 106

coordination requirements for this project have been fulfilled. Additional detail may be found in the EA, Appendix K, Cultural Resources Technical Memorandum.

## **Ecosystems**

### *Wetlands*

The project will temporarily disturb approximately 1.4 acres of wetlands and 0.9 acre of wetland buffer, and permanently fill approximately 7.0 acres of wetlands and 1.7 acres of wetland buffer. These wetlands effects could not be avoided or minimized due to roadway design standards. Several measures were taken during design to avoid or minimize effects to wetlands including adjustment of the project footprint.

To compensate for the permanent effect on wetlands resulting from the project, WSDOT has provided onsite mitigation within the project corridor and offsite mitigation at the Keller Mitigation Site located on a parcel adjacent to Bear Creek and Evans Creek. The Keller Mitigation Site includes rehabilitation of 26.87 acres of wetlands and 3.41 acres of wetland/buffer. The onsite mitigation includes restoration of 0.57 acre and creation of 0.52 acre of wetland within the Yarrow Creek basin. Detailed information on mitigation goals, site configuration, restoration, and monitoring are provided in a Wetland Mitigation Plan that was submitted as part of the application to the U.S. Army Corps of Engineers and the Washington State Department of Ecology for work in waters/wetlands.

The Build Alternative includes all practicable measures to reduce effects to wetlands that may result from the project. Impacts were minimized primarily through site-specific design techniques including steeper side slopes, installing retaining walls, and infiltrating stormwater along fill slopes rather than excavating wetland areas for stormwater treatment. In addition, the project team evaluated several design options. These options included the following: 1) moving the existing HOV lanes to the inside from Evergreen Point Road to 108th Avenue NE; 2) moving the HOV lanes to the inside from Evergreen Point Road to SR 202; 3) implementing an inside HOV lane from Evergreen Point Road to 108th Avenue NE, then switching to the outside HOV lanes from 108th Avenue NE to SR 202; and 4) managing ramps, or using ramp meters and traffic lights to improve traffic flow. Option 2 was chosen as the preferred design to move forward as it satisfies the purpose and need for the project. FHWA finds that there is no practicable alternative to the proposed new construction within wetlands.

### *Wildlife and Habitat*

The project will temporarily disturb approximately 14 acres of wildlife habitat and 3.23 acres of riparian buffer. A total of approximately 65 acres of wildlife habitat and 2.13 acres of riparian buffer will be permanently disturbed by the project. Most of these effects will occur to roadside deciduous and coniferous trees and ornamental trees and lawns. The amount of habitat affected will be relatively small compared with the total of approximately 1,167 acres of habitat available within the study area. Noise walls constructed as part of the project will reduce noise disturbance to urban-adapted species in the study area.

### *Fish and Aquatic Habitat*

Construction activities could temporarily disturb in-water sediments and fish passage, affecting fish and aquatic species and their habitats. These effects will be avoided, minimized, and mitigated through the use of BMPs. The project will result in a gain of 820 linear feet of open channel habitat within fish-bearing streams, including opening up approximately 787 linear feet of stream channel currently in culverts, principally in the Yarrow Creek basin. Six existing culverts will be completely removed and open channel restored. Nine existing crossings, which serve as fish passage barrier culverts, will be replaced with fully fish-passable structures. These improvements will result in a substantial net increase in both instream habitat quality and quantity within the study area.

WSDOT served as the lead agency for the Endangered Species Act (ESA) Section 7 formal consultation on behalf of FHWA pursuant to 50 CFR 402.07. WSDOT contacted the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries Service), the agencies responsible for administering the ESA, early in the project environmental review process.

Federally-listed threatened species that occur within the project vicinity include Coastal Puget Sound bull trout (*Salvelinus confluentus*), Puget Sound Chinook salmon (*Oncorhynchus tshawytscha*), and Puget Sound steelhead (*Oncorhynchus mykiss*). No federally-listed endangered species occur within the project vicinity. A biological assessment (BA) was submitted in June 2009 to the USFWS and NOAA Fisheries Service.

On July 30, 2009, WSDOT received concurrence from USFWS with the determination that “the project will have no measurable adverse impacts to bull trout, their habitat, or prey base in either the short-or long-term.” WSDOT received the Biological Opinion on October 22, 2009, and subsequent concurrence from NOAA Fisheries Service with the determination that the project “is not likely to jeopardize the continued existence of Puget Sound Chinook salmon and Puget Sound steelhead” and “is not likely to destroy or adversely modify designated Puget Sound Chinook salmon critical habitat.”

The project vicinity includes habitat that has been designated Essential Fish Habitat under the Magnuson-Stevens Act for Chinook, coho, and pink salmon. The conservation measures that FHWA included as part of the Proposed Action to address ESA concerns are adequate to avoid, minimize, or otherwise offset potential adverse impacts on the Essential Fish Habitat of Chinook, coho, and pink salmon. Therefore, conservation recommendations pursuant to Magnuson-Stevens Act Section 305(b)(4)(A) are not necessary as stated by NOAA Fisheries Service.

The project is designed to avoid effects to ecosystems to the greatest extent practicable. In all cases where temporary or permanent effects on ecosystems are unavoidable, mitigation will be implemented in accordance with applicable local, state, and federal regulations to compensate for affected resources. Thus, the project will have no significant impact on ecosystems. Additional detail may be found in the EA, Appendix L, Ecosystems Discipline Report.

## **Energy**

Energy will be consumed during construction of the project by activities such as site preparation, equipment operation, and construction lighting. The amount of energy consumed during construction, and the amount of greenhouse gases produced as a result of energy consumption, will depend on the equipment used and the construction methods chosen. WSDOT will adhere to construction BMPs that encourage efficient energy use. Energy will also be consumed during operation of the project due to fuel consumption by cars, heavy trucks, and transit buses as they travel the 520 corridor. Based on the precision of the methodology used to estimate emissions during operation of the project once complete, the project's contribution to greenhouse gas emissions would be similar to what could be expected if the project were not built. Thus, the project will have no significant impact related to energy. Additional detail may be found in the EA, Appendix M, Energy Technical Memorandum.

## **Land Use, Economics, and Relocation**

To construct the project, 13 parcels will need to be fully acquired, and 23 parcels will either be partially acquired or encumbered by permanent easement, for a total of approximately 9.4 acres. An additional 1.3 acres will be temporarily affected during construction. This represents less than 0.01 percent of the total land within the study area and will result in only minor changes in land use. WSDOT will provide fair compensation and relocation assistance for affected people and businesses.

Construction of the project could have minor short-term effects on properties and businesses in the study area, including increased noise, dust, traffic, odor from equipment operations, and/or glare from construction lighting. The project would result in 2,480 direct, indirect, and induced jobs during the peak year of construction (estimated 2012) and a total of 7,326 person-year jobs. A person-year job is equivalent to one person employed for one year.

Once completed, the project will improve traffic circulation and access and reduce congestion in the study area. This will attract customers from a broader geographic area and shorten the commute time for employees of local businesses, resulting in a small improvement in the economic prospects of businesses in the SR 520 corridor. The additional right of way needed to construct the project will be removed from local jurisdictions' tax bases, which will result in a minor decrease in tax revenues.

Suitable soils and active farming do not occur within the project area. Therefore, the Farmlands Protection Policy Act of 1981 (7 USC 4201-4209) and other applicable state and federal farmlands protection policies, orders, and guidance do not apply to the proposed project.

In light of the analyses described above, the project will have no significant impact related to land use, economics, or relocation. Additional detail may be found in the EA, Appendix N, Land Use, Economics, and Relocation Technical Memorandum.

## **Noise**

Project construction will temporarily increase noise levels in some areas. WSDOT has incorporated measures to minimize construction noise. WSDOT has also incorporated noise

walls into the design. These features will substantially reduce noise effects throughout the SR 520 corridor.

Noise levels were predicted at 182 receiver locations, representing an equivalent of 579 residences, using the FHWA Traffic Noise Model (TNM) version 2.5 for existing conditions and for the year 2030 with and without the project. In the absence of the proposed project, 62 receiver locations representing 173 residences would approach or exceed the FHWA Noise Abatement Criteria (NAC). With the proposed project, modeling indicates that without the recommended noise barriers, noise levels would approach or exceed the NAC at 79 receiver locations, representing 194 residences. With the proposed noise abatement measures, noise levels at 14 receiver locations, representing an equivalent of 36 residences, will continue to approach or exceed the criteria. The analysis shows that the addition of noise walls will reduce the number of receiver locations that exceed the NAC when compared to the existing condition.

The proposed project includes noise walls that would be installed along the SR 520 corridor from Evergreen Point Road to just west of Bellevue Way NE. The recommended noise barriers would benefit an equivalent of 437 residences by reducing traffic noise levels by 3 dBA to 19 dBA at these locations.

Noise walls that meet WSDOT's feasibility and reasonableness criteria have been incorporated into the project design to minimize traffic noise effects. Because some noise-sensitive areas cannot be mitigated with noise walls that meet both the feasibility and reasonableness criteria, some residential properties would continue to experience traffic noise levels that exceed the WSDOT noise abatement criteria. However, traffic noise levels at locations that are predicted to meet or exceed the WSDOT criteria once mitigation is in place would not exceed the WSDOT absolute severe impact criteria or the severe increase impact criteria, and therefore no severe residual noise impacts are predicted. Because the project would not result in any severe residual traffic noise impacts, the project will have no significant un-mitigated traffic noise impacts. Additional detail may be found in the EA, Appendix O, Noise Technical Memorandum.

## **Social Elements**

Social elements include community cohesion; regional and community growth; community services; recreational resources; and pedestrian, bicycle, and transit facilities. Communities in the study area could experience temporary effects from construction activities, including increases in noise and dust, visual quality effects from construction activities, and glare from construction lighting. The project is not anticipated to have any adverse effects on the cohesion of neighborhoods adjacent to the corridor because construction of the project would occur primarily within or adjacent to existing WSDOT right of way and would not bisect or isolate any established communities or change the existing community character. Once completed, the project will provide a variety of benefits to communities along the SR 520 corridor. These include decreased noise due to the installation of noise walls, improved access for emergency response vehicles, improved traffic circulation and access, and new and improved opportunities for community interaction and recreation with improved trails and the construction of lids over SR 520 at Evergreen Point Road, 84th Avenue NE, and 92nd Avenue NE. Thus, the project will

not have a significant impact on social elements. Additional detail may be found in the EA, Appendix P, Social Elements Technical Memorandum.

### **Transportation**

Construction of the project will result in temporary effects to travel along the SR 520 corridor. These effects might include reduced speed limits, reduced lanes on arterial streets, temporary closures of lanes or transit stops, or limited freeway access from some arterials. The project will result in the loss of approximately 32 parking spaces from two locations. The project will relieve existing design constraints (e.g., narrow shoulders) and improve traffic operations and safety along the SR 520 corridor. The project will improve transit and carpool access between the local street system and SR 520, improve the reliability of HOV travel, and provide HOV infrastructure and HOV operational improvements needed to support future anticipated growth in transit services in the study area. The project also includes new facilities that will improve and promote bicycle and pedestrian connections and enhance nonmotorized travel in the project area. Thus, the project will have no significant adverse impact on transportation. Additional detail may be found in the EA, Appendix Q, Transportation Discipline Report.

### **Visual Quality and Aesthetics**

Project construction will result in noticeable changes to visual quality wherever demolition and construction occur. WSDOT will follow BMPs for minimizing visual effects of construction activities.

Construction and operation of the project could affect structures, vegetation, and views and create new sources of shadow, glare, or light. Throughout the study area, bands of vegetation on both sides of SR 520 will be temporarily or permanently removed by widening of the roadway, which will alter views of motorists and residents with close views of the roadway. The widened highway throughout the corridor would bring the highway closer to homes built along the right of way. The project will include continuous noise walls of varying heights (8 to 20 feet high) on both sides of the highway from Evergreen Point Road to Bellevue Way. The project will replace bridges at Evergreen Point Road, 84th Avenue NE, and 92nd Avenue NE with landscaped lids (the Bellevue Way bridge would be replaced with a wider bridge). The project will also add two transit stops in the center of the highway at Evergreen Point Road and 92nd Avenue NE, which would include elevator towers and safety walls associated with the lids.

WSDOT has incorporated mitigation approaches based on an extensive collaboration process with local jurisdictions and community members to minimize project effects on visual quality in the project design, and will adhere to all applicable aesthetic design guidelines and visual quality standards. Therefore, with the combination of BMPs implemented during construction (e.g., replanting of vegetation where practicable), adherence to WSDOT's Roadside Classification Plan, and collaboration with local jurisdictions and communities on architectural treatments, the project will not have a significant impact on visual quality or aesthetics. Additional detail may be found in the EA, Appendix R, Visual Quality and Aesthetics Technical Memorandum.

## Water Resources

Water resources could be temporarily affected during project construction. Construction activities such as replacing culverts or installing retaining walls could temporarily alter the quality or flow of surface water or groundwater in the study area. Prior to the start of construction, a Spill Prevention Control and Countermeasures Plan (SPCC), a Temporary Erosion and Sediment Control Plan (TESC), and fugitive dust plan will be developed to determine the appropriate BMPs to be selected and installed during construction.

WSDOT will meet the criteria of the 2008 *Highway Runoff Manual*, which is considered equivalent to the Washington State Department of Ecology's *Stormwater Management Manual for Western Washington* within WSDOT right of way. The project will improve existing water quality by providing water quality treatment for both the new impervious surfaces created by the project and replaced impervious surfaces that currently discharge to streams without treatment. Roadway stormwater will be directed through stormwater water quality treatment facilities before it drains into new outfalls to the streams or is directly discharged into Lake Washington at existing outfalls. The water quality treatment provided will result in a net decrease in pollutant loading of total suspended solids, total copper, dissolved zinc, and total zinc in the Lake Washington basin. New stormwater detention facilities will provide stormwater flow control to reduce runoff rates from the paved surfaces to rates matching a modeled forested runoff condition into the creeks (pre-developed condition). No flow control measures will be provided for discharges directly to Lake Washington, which is a flow-control exempt water body. The duration of stormwater discharges from the constructed project will be designed to match durations for the pre-developed condition for storm events ranging from 50 percent of the 2-year storm up to the 50-year storm event.

There are no streams or lakes with a delineated 100-year floodplain within the project area; thus, the project will not affect floodplains. In addition, the project will have minimal or no effect on groundwater.

Based on the information presented above, the project will have no significant impact on water resources. Additional detail may be found in the EA, Appendix S, Water Resources Discipline Report.

## Section 4(f) Resources

The existence of potential U.S. Department of Transportation (USDOT) Act of 1966 Section 4(f) resources was evaluated as part of the EA. Section 4(f) resources within the study area include the Points Loop pedestrian/bicycle trail, four parks, and three historic properties eligible for listing in the NRHP. The proposed project will meet the *de minimis* effect criteria for the Points Loop Trail and two parks (Fairweather Park and Wetherill Nature Preserve). Additionally, there will be temporary occupancy, but no Section 4(f) use of the two other parks located in the study area (Hunts Point Park and Yarrow Bay Wetlands). FHWA finds that the proposed project will not have use that is greater than *de minimis* of any historic resource, park, or recreational resource protected by Section 4(f) of the USDOT Act of 1966. Agencies with jurisdiction over Section 4(f) resources in the project area have concurred with this finding.

Agency correspondence is included in Attachment 6 of this FONSI. Therefore, the project will have no significant impact on Section 4(f) resources. Additional detail may be found in the EA, Appendix T, Section 4(f) Resources Technical Memorandum.

### **Indirect and Cumulative Effects**

WSDOT reviewed the potential indirect and cumulative effects for each element of the environment and did not identify any significant indirect effects on any resource. WSDOT evaluated the potential incremental effect of direct effects associated with the project, and found that the project would have a negligible contribution to the cumulative effects of past, present, and future actions. Thus, the project will have no significant impact related to indirect or cumulative effects. Additional detail may be found in the EA, Appendix U, Indirect and Cumulative Effects Technical Memorandum.

### **Summary Determination and Finding**

After carefully considering the EA, its supporting documents, and the public comments and responses, FHWA finds under 23 CFR 771.121 that the Proposed Action, with the mitigation to which WSDOT has committed, will not have any significant adverse impacts on the environment. The record provides sufficient evidence and analysis for determining that an EIS is not required.