

# East Link Light Rail Transit Project

## Record of Decision

November 2011

Seattle, Mercer Island, Bellevue, Redmond, King County, Washington

### Decision

The Federal Transit Administration (FTA), as the federal lead agency, completed its Record of Decision for the Central Puget Sound Regional Transit Authority's (Sound Transit) East Link Light Rail Transit Project in Seattle, Mercer Island, Bellevue, Redmond, and King County, Washington. The Federal Highway Administration (FHWA), as a cooperating agency under NEPA, has completed this Record of Decision for elements of the project affecting FHWA right-of-way and requiring FHWA approvals.

The Selected Alternative shown in Attachment A of this Record of Decision is the Locally Preferred Alternative (LPA) identified in FTA's Record of Decision.

FHWA's decision is based on an evaluation of information presented in the Final EIS, the transportation needs of the project study area, and interagency coordination. This decision was made after consideration of all identified impacts and input received from agencies, organizations, and the public. This Record of Decision (ROD) also incorporates comments related to FHWA approvals received during the 30-day waiting period after the Notice of Availability of the Final EIS appeared in the Federal Register, and responses to those comments.

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

11/17/2011

Date of Approval

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## East Link Light Rail Transit Project

The East Link Project is an extension of the Link light rail system providing urban transportation improvements in the Central Puget Sound metropolitan region. The East Link project would connect to the existing light rail system in downtown Seattle and extend the system east to Mercer Island, Bellevue, and Redmond. The project is divided into five geographic segments over an approximately 18-mile corridor. Segment A, Interstate 90, connects downtown Seattle to Mercer Island and South Bellevue via I-90. Segment B, South Bellevue, connects I-90 to downtown Bellevue along Bellevue Way SE and 112th Avenue SE. Segment C, Downtown Bellevue, travels at a tunnel profile through downtown Bellevue and an elevated I-405 crossing at NE 6th Street. Segment D, Bel-Red/Overlake, would travel from the Bel-Red Subarea east of I-405 to the Overlake Transit Center, along the Bel-Red corridor. Segment E, Downtown Redmond, would travel from Overlake Transit Center to Downtown Redmond via the SR 520 corridor and then proceed to Downtown Redmond via the former BNSF Railway corridor. Please see Attachment A: Map of Selected Alternative.

## Final Environmental Impact Statement Issued

The East Link Project is described in the final environmental impact statement (FEIS), approved by the Federal Transit Administration on June 15, 2011 and issued on July 15, 2011. FHWA served as a cooperating agency on the EIS and provided input during its development, including extensive written comments that were submitted on the DEIS. FHWA has conducted an independent review of the FEIS and concluded that our comments have been satisfied. Pursuant to 40 CFR 1506.3, FHWA hereby adopts the East Link FEIS as it relates to the FHWA's decisions, which are detailed below. The FEIS Notice of Availability appeared in the Federal Register on July 15, 2011.

The Federal Transit Administration (FTA), as the federal lead agency, completed its Record of Decision for the Central Puget Sound Regional Transit Authority's (Sound Transit) East Link Light Rail Transit Project on November 16, 2011. FTA's Record of Decision selected the preferred alternative for the construction and operation of the East Link Light Rail Project. The Federal Highway Administration (FHWA), as a cooperating agency under NEPA, has completed this Record of Decision for elements of the project affecting FHWA right-of-way and requiring FHWA approvals. East Link Project elements will affect portions of I-90 in Seattle, Mercer Island, and Bellevue, Washington and portions of I-405 in Bellevue, Washington.

Federal Highway Administration approvals that will be required for East Link include:

- Interchange Justification Report, which contains the analysis necessary for FHWA's approval of the safety and operational impacts of a change in access to the Interstate System.
- Airspace Lease for Use of Interstate Right-of-Way

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- Breaks-in-access, including those determined necessary during the design process as well as those requested during Construction
- Operations and Maintenance Agreement, related to the airspace lease
- Approval of conversion of highway lanes to high capacity transit
- Approval of bridge expansion joint design

## Background and Process

Local, regional, and state agencies have been studying high-capacity transportation alternatives to connect Seattle with the Eastside of King County since the mid-1960s. The history and outcomes of these plans, studies, and public involvement processes is summarized in Section 1.3 of the Final EIS and fully described in the report titled *East Corridor High-Capacity Transit Mode Analysis History* (Sound Transit, 2006). This history forms the basis for the Purpose and Need statement for the East Link Project EIS.

Consistent with 23 CFR Part 450, FTA's decision process was based on comprehensive studies that were completed in cooperation with state and local agencies and broad public input. In particular, the Sound Transit Board and FTA made the following two major decisions after extensive evaluation and review with other agencies and the public before beginning this East Link Project EIS:

- Regional High-Capacity Transit (HCT) to the Eastside via I-90 is necessary.
- Light rail is the preferred HCT technology for the I-90/East Corridor connecting Seattle, Mercer Island, Bellevue, Overlake, and Redmond.

Sound Transit and the FTA, as federal lead agency, initiated the East Link Project NEPA process by publishing a Notice of Intent (NOI) in the Federal Register on August 22, 2006. The environmental scoping process was conducted in September 2006, which included extensive community outreach, formal scoping meetings, and public hearings to solicit public input on the project purpose and need, alternative alignments, profiles, and station locations for detailed analysis in the Environmental Impact Statement (EIS). In November 2008, the Sound Transit 2 (ST2) plan was approved by voters. ST2 is the next phase of mass transit improvements in the Puget Sound region, and includes the East Link Project. The Draft EIS was issued on December 12, 2008. On May 14, 2009, following review of the Draft EIS, and after consideration of public and agency comments received, and other information, the Sound Transit Board identified preferred light rail routes and station locations for inclusion in the East Link Final EIS. In response to public and agency comments, the Sound Transit Board directed staff to evaluate more design options in downtown Bellevue and subsequently modified the preferred light-rail routes and station locations. A Supplemental Draft EIS that analyzed the modifications was issued on November 12, 2010. After the publication of the Final EIS on July 15, 2011, the Sound Transit Board selected the project to be built on July 28, 2011. The Federal Transit Administration identified the Locally Preferred

Alternative (LPA) in its Record of Decision, consistent with the Sound Transit Board's selection of the alignment and stations to be built.

## Project Purpose and Need

The purpose of the East Link Project is to expand the Sound Transit Link light rail system from Seattle to Mercer Island, Bellevue and Redmond via Interstate 90 (I-90) and to provide a reliable and efficient alternative for moving people throughout the region.

Current and projected population and employment trends reveal a need to provide light rail transit between Seattle and the Bellevue and Redmond urban centers. Existing transit will not be able to serve the future transit needs in the project corridor for the following reasons:

- Increased demand for transit services across Lake Washington is expected to double by 2030 as a result of residential and employment growth on both sides of Lake Washington.
- Regional urban center growth plans supported by HCT investments in accordance with Puget Sound Regional Council (PSRC)'s adopted *Transportation 2040*.
- Increased congestion on I-90 will further limit transit performance as the I-90 corridor reaches maximum vehicle capacity during peak-hour travel as early as 2015 (WSDOT, 2006).
- Operating deficiencies in regional bus transit service will continue to occur due to lower speeds and decreasing reliability.
- Limited transit capacity and connectivity between the areas of highest employment density in the region will occur due to constraints of the current road system.

The East Link Project would meet the stated need by providing greater capacity and reliability and improving travel time for people traveling between Seattle, Mercer Island, Bellevue, and Redmond. To meet planned growth in the corridor, Bellevue, Seattle, and Redmond have made land use and planning decisions based upon increased employment and residential density, which would be more fully realized with an HCT connection across I-90. East Link is this connection.

## Selected Alternative

The alternative requiring FHWA approvals was designated as the preferred alternative in the FEIS and is selected as the Locally Preferred Alternative (LPA) in FTA's Record of Decision:

Segment A: Interstate 90 Alternative (A1) (portions occurring within I-90 FHWA ROW);

Segment B: 112<sup>th</sup> SE Modified Alternative (B2M) (portions occurring within I-90 FHWA ROW);

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Segment C: 110<sup>th</sup> NE Tunnel Alternative (C9T) (portions occurring within I-405 FHWA ROW);

Segment D: NE 16<sup>th</sup> At-Grade Alternative (D2A); and

Segment E: Marymoor Alternative (E2).

The portions of the selected alternative that will occur within FHWA right-of-way are limited to portions of Segment A (Alternative A1, in the I-90 right-of-way); Segment B (Alternative B2M, exiting I-90 right-of-way at the Bellevue Way interchange); and Segment C (Alternative C9T, crossing I-405). Alternatives for these segments, and the no-build alternative, are described below with additional detail provided in the FEIS. See Exhibits B-1 through B-3 in Attachment B for a depiction of these alternatives. No portions of the selected alternative in Segments D (D2A) and E (E2) will occur within or affect FHWA right-of-way. The five maintenance facility locations analyzed in the Final EIS are all located in Segments D and E, and none would affect FHWA right-of-way.

## **No Build Alternative**

The No Build Alternative represents the transportation system and environment as they would exist without the proposed project. For the transportation analysis in the East Link Project Final EIS for Segment A (I-90), there are two No Build Alternatives related to implementing the various stages of the I-90 Two-Way Transit and HOV Operations Project. Stages 1 and 2 would place HOV lanes in the outer roadway, and build or improve HOV direct access ramps on I-90 between Mercer Island and Bellevue. Stage 3 of the I-90 Two-Way Transit and HOV Operations Project would place HOV lanes in the outer roadway between Seattle and Mercer Island and improve HOV direct access on Mercer Island. At the time the transportation analysis methodology was established for the East Link EIS, funding for Stage 3 was uncertain. Therefore, one No Build Alternative includes construction and operation of Stages 1 and 2 only, while the other assumes a completed I-90 Two-Way Transit and HOV Operations Project (Stages 1 through 3), with HOV lanes in the outer roadway as well as the center roadway.

Under either of the above two No Build Alternative scenarios, increased roadway congestion into and out of urban centers would occur, even with planned local and regional roadway improvements. Vehicle travel times would increase, especially on I-90, and in some cases double from today. This would limit the region's mobility and constrain access between the designated Puget Sound urban centers. Many intersections adjacent to I-90 and I-405 would operate poorly and not meet standards. With this increase in congestion, public transit speeds would decrease by 30 percent from today and reduce transit's reliability. This would limit the attractiveness of transit as a transportation option and potentially lead to lower overall transit ridership. Even so, projected residential and employment growth is expected to double transit ridership demand across Lake Washington and between Bellevue and



Redmond by 2030 with the No Build Alternative, highlighting the importance of providing reliable transit service.

## **Interstate 90 Alternative (A1)**

Interstate 90 Alternative (A1) crosses Lake Washington via I-90 and connects with the Central Link Light Rail system at the International District/Chinatown Station. From there it enters I-90 via the D2 Roadway (an exclusive access road for transit to the reversible center roadway of I-90). It provides a station in the center of I-90, between Rainier Avenue and 23rd Avenue, just east of the current I-90 Rainier bus stop. The Rainier Station includes pedestrian connections to 23rd Avenue South and Rainier Avenue South. Alternative A1 continues in the I-90 reversible center lanes, first crossing Lake Washington to a Mercer Island station between 77th and 80th Avenues, and then crossing the I-90 East Channel Bridge to connect to Segment B in south Bellevue. Pedestrian access to the Mercer Island Station is via 80th Avenue SE and 77th Avenue SE. Alternative A1 includes an eastbound HOV direct-access off-ramp on Mercer Island at Island Crest Way.

The East Link Project would require the I-90 center roadway to be dedicated to High Capacity Transit, as stipulated in the 1976 Memorandum Agreement (and as amended in 2004) by Seattle, Mercer Island, Bellevue, King County Metro, WSDOT, and Sound Transit. Today, the reversible center roadway is dedicated to peak-direction HOV lanes, and the outer roadways are general-purpose lanes. HOV lanes are being built on the outer roadways in a three-stage project (the I-90 Two-Way Transit and HOV Project), thus allowing HOVs to travel in both directions any time of the day. The FHWA Record of Decision for the I-90 Two-Way Transit and HOV Project (September 2004) found that the Selected Alternative (Alternative R-8A) was chosen in part because it “would accommodate the ultimate configuration of I-90 (High Capacity Transit in the center lanes). Alternative R-8A adds directional HOV lanes on the outer roadways which would provide for reliable transit and HOV operations with the ultimate roadway configuration.” The entire I-90 Two-Way Transit and HOV Operations Project would need to be constructed prior to the East Link Project so that HOV traffic can be moved from the center roadway to the outer roadways. Once the I-90 Two-Way Transit and HOV Operations Project is completed, the Center Roadway will no longer be needed for vehicular traffic and can be converted to High Capacity Transit use through the construction of the East Link Project. Alternative A1 was selected by FTA because it was the only one that met FTA’s purpose and need in this section. The Interchange Justification Report documents FHWA’s conclusion that this alternative will not adversely impact the Interstate.

## **112th Avenue SE Modified Alternative (B2M)**

The FEIS documents the analysis of six alternatives in Segment B. The selected alternative (112<sup>th</sup> Avenue SE Modified Alternative (B2M)) is elevated in the I-90 center roadway, crosses over westbound I-90, and

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continues elevated on the east side of Bellevue Way SE to the South Bellevue Station, located at the current South Bellevue Park-and-Ride. This alternative maintains the westbound and eastbound I-90 HOV direct access ramps. The route proceeds along the east side of Bellevue Way with an elevated station at the existing South Bellevue Park-and-Ride. The South Bellevue Station includes construction of a parking garage with approximately 1400 stalls as well as bus-transfer facilities. This alternative descends from the elevated profile and continues north along Bellevue Way and 112<sup>th</sup> Avenue NE toward downtown Bellevue. Alternative B1 would have eliminated the westbound and eastbound HOV access ramps to I-90. Alternative B2A, B2E, and B3 would have eliminated or changed the eastbound I-90 HOV ramp. Alternative B7 is elevated in the I-90 corridor similar to B2A, B2E, and B3 and would have crossed over I-90 and continued on the north side of I-90 until it reached the BNSF right of way and continued north adjacent to the I-405 corridor. The preferred alternative has the least impact on the Interstates in this segment. The Interchange Justification Report documents FHWA's conclusion that this alternative will not adversely impact the Interstate.

### **110th NE Tunnel Alternative (C9T)**

The selected Alternative C9T travels from Segment B in a tunnel north along 110th Avenue NE to the underground Bellevue Transit Center Station at NE 4th Street. The tunnel continues north to NE 6th Street, where it turns east and transitions to an elevated profile in the center of NE 6th Street. The route transitions to the north side of NE 6th Street to cross 112th Avenue NE, I-405, and 116th Avenue NE. Alternative C9T then turns north along the former BNSF Railway corridor to cross NE 8th Street and reach the elevated Hospital Station.

Ten alternatives were considered in this segment. C3T, C4A, C7E, and C8E cross I-405 north of NE 12<sup>th</sup> street. C14E crosses I-405 between NE 6<sup>th</sup> and NE 8<sup>th</sup>. C11A, C9A, C9T (Selected Alternative), C1T and C2T all cross I-405 at NE 6<sup>th</sup> Street. None of these crossings, including the selected alternative, would adversely affect the operation of I-405. The Interchange Justification Report documents FHWA's conclusion that this alternative will not adversely impact the Interstate.

### **Basis for FHWA Decisions**

The East Link Project Final EIS provides the transportation analysis to support FHWA decisions and approvals for the project. FHWA approvals that will be required for East Link include:

- Interchange Justification Report, which contains the analysis necessary for FHWA's approval of the safety and operational impacts of a change in access to the Interstate System.
- Airspace Lease for Use of Interstate Right-of-Way
- Breaks-in-access, including those determined necessary during the design process as well as those requested during Construction

- Operations and Maintenance Agreement
- Approval of conversion of highway lanes to high capacity transit
- Approval of bridge expansion joint design

Chapter 3 and Appendix H1 (Transportation Technical Report) of the Final EIS contain analyses and results related to regional travel, transit service, highway operations and safety, arterials and local streets, non-motorized facilities, and freight mobility and access. The Final EIS also includes analysis of the project's consistency with regional land use and transportation plans. In addition, FHWA, FTA, Washington Department of Transportation (WSDOT), and Sound Transit worked cooperatively over a four-year period to complete the Final Interchange Justification Report (IJR) in May 2011. On June 22, 2011, FHWA provided WSDOT a finding of engineering and operational acceptability, noting that the final IJR approval may be given at the completion of the NEPA process.

FHWA, as a cooperating agency under NEPA, and as the federal agency responsible for the anticipated project approvals noted above, has considered the findings in the Final EIS related to elements of the East Link Project affecting Interstate right-of-way. These findings are summarized below, as they relate to I-90 and I-405. The summary of findings is organized as they relate to highway operations, safety, construction period effects, and other environmental benefits or impacts.

## Interstate 90

The East Link Project would convert the I-90 center roadway lanes for exclusive light rail use; modify access to the I-90 center roadway; and modify existing ramps for light rail access to and from I-90. These modifications are fully described in the Final EIS and the Final I-90 Interchange Justification Report.

### Operations

- When compared to the No Build Alternative, the light rail project has the capacity to carry from 9,000 to 12,000 people per hour in each direction, which would more than double the person-carrying capacity of I-90. The ability to carry this many people is equivalent to about seven to ten freeway lanes of vehicle traffic.
- The project would increase total person throughput across I-90 during peak traffic periods by approximately 15 to 30 percent in 2030. In general, traffic congestion on I-90 would be shorter in duration and extent as people shift to use light rail.

- With mitigation, the project would maintain or improve peak hour traffic level-of-service at WSDOT controlled intersections near I-90 on Mercer Island. In Seattle, WSDOT controlled intersections would maintain their peak hour level-of-service with Alternative A1.
- The project is designed to preserve both the westbound and eastbound HOV direct access ramps at the I-90 / Bellevue Way interchange and would not result in level-of-service impacts at intersections.
- Freight truck access to and from I-90 outer roadways would be unchanged because none of the general purpose ramps to and from I-90 would be modified with the project.
- Regarding freight mobility, the average truck travel time in the afternoon peak period in 2030 would improve with an approximately 5-minute travel time savings. Average truck travel time in the morning peak period would be comparable with the no-build condition, with a potential 1-minute travel time savings.

## **Construction**

- Before light rail is constructed on I-90, the I-90 Two-Way Transit and HOV Project would be completed. The I-90 Two-Way Transit and HOV Project will provide outer-roadway HOV lanes from Bellevue to Rainier Avenue to improve transit function on the I-90 bridge and allow for future use of the reversible center roadway. The reversible center roadway and D2 Roadway would be closed during construction. As a result, all bus routes, HOVs, and Mercer Island drivers would be rerouted to the outer roadway HOV lanes. Construction impacts would be minimal because most construction would occur within the reversible center roadway. Compared to the no-build condition, travel times for traffic and freight during peak periods would be similar or improved, although person throughput would be less in the peak directions and greater in the reverse peak directions.
- At the I-90 and Bellevue Way interchange, the westbound mainline, HOV direct-access ramps, and ramps to and from I-90 to the east would experience short-term partial (likely nighttime) closures for construction of the elevated structures. Vehicles would be detoured to the corresponding general-purpose or HOV ramp or to another interchange.

## **Environmental Benefits or Impacts**

As discussed above, this ROD is focused solely on FHWA's decisions. Therefore, the environmental benefits and impacts discussed below are limited to those directly related to the portions of the project influenced by the FHWA decisions. Other benefits and impacts are presented in the FTA ROD.

- The project would benefit the region by decreasing daily vehicle miles traveled (VMT) by approximately 230,000 miles and daily vehicle hours traveled (VHT) by approximately 10,000 hours, which would result in lower energy use and reduced greenhouse gas emissions (expressed as CO<sub>2</sub> equivalent (CO<sub>2e</sub>)). The analysis of East Link alternatives shows that there would be a range of 21,535 to 28,835 metric tons annual reduction of CO<sub>2e</sub> emissions in the region in 2030 due to the reduction of VMT and the use of cleaner energy sources for operating the light rail system. This reduction or savings is equivalent to supplying electricity for approximately 3,175 homes for 1 year according to the EPA.
- The portion of the project along I-90 east of the Mount Baker Tunnel (more than 5 miles) would be converted from HOV vehicle use to exclusive use by light rail, resulting in a substantial decrease (about 35 acres) of pollution generating impervious surface (PGIS).
- A segment of I-90 in the project corridor between mileposts 3.4 and 8.9 including the Mount Baker Ridge Tunnel portals is eligible for listing on the National Register of Historic Places (NRHP). Through the Section 106 consultation process, on June 15, 2011 the Washington Department of Archaeology and Historic Preservation concurred with the Federal Transit Administration that the project is consistent with the character and design intent of I-90 and would not impact this segment of the interstate's NRHP eligibility.

As relates to FHWA's decision, the chief environmental impacts are the reduction of greenhouse gasses and reduction of PGIS. These reductions render the build alternatives more environmentally preferable than the no-build alternative. For the purposes of FHWA's limited approvals, there is little distinction between the build alternatives as to environmental impacts. All build alternatives would reduce greenhouse gasses and PGIS roughly equally. Additionally all alternatives, including the No-Build, would preserve the character of the historic neighborhood.

## Interstate 405

The project will cross I-405 in Bellevue with an elevated guideway at NE 6th Street. The East Link Project will not otherwise occupy I-405 and it will not modify access to I-405.

### Operations and Safety

The elevated light rail guideway will span the mainline travel lanes of I-405 and the NE 6<sup>th</sup> Street direct-access ramps. The project will not affect I-405 operations. This crossing has been designed in coordination with Washington State Department of Transportation and will not restrict or preclude future improvements in the I-405 Corridor Program. The project would maintain peak hour traffic level-of-service at WSDOT controlled intersections near I-405.

## **Construction**

The project will require lane closures on I-405, likely at night or on weekends depending on the construction method of the elevated structure over I-405. Closures will likely occur adjacent to the NE 6th Street direct-access ramps and NE 8th Street ramps to and from the south of NE 8th Street, requiring detours.

## **Section 4(f)**

FTA has completed a Section 4(f) Evaluation for this project. All of the FHWA approvals for this project relate to the portions of the project occurring within the Interstate ROW, so there are no 4(f) uses related to the FHWA approvals.

## **Measures to Minimize Harm**

The Federal Transit Administration Regional Administrator, the Washington State Department of Transportation, and Sound Transit ultimately will be responsible for monitoring and enforcing mitigation measures. As stated in FTA's ROD, the mitigation measures will be incorporated into any future grant agreement that FTA may award Sound Transit for the construction of the East Link Project. The FTA's Record of Decision contains a complete summary of required mitigation measures for the East Link Project. Mitigation measures either affecting FHWA right-of-way or that would be implemented within FHWA right-of-way are summarized below. All practicable means to avoid and minimize environmental harm have been adopted.

## **Highway Operations and Safety Mitigation Measures**

During East Link construction, Sound Transit will coordinate with the Washington State Department of Transportation (WSDOT) on incident management, construction staging, and traffic control where the light rail construction might affect freeway traffic. Sound Transit will also coordinate with WSDOT to disseminate construction closure information to the public as needed.

## **Intersection Level of Service**

Intersections on Mercer Island would potentially require turn pockets or traffic signal improvements to adjust for the change in travel patterns to and from the island. Improvements at intersections within WSDOT's jurisdiction include:

- 77th Avenue SE and I-90 eastbound off-ramp: Install a traffic signal.

- 76th Avenue SE/North Mercer Way and I-90 Westbound on-ramp: Modify the westbound channelization to provide left-turn pocket and through/right shared lane.

These improvements would improve the AM and PM peak hour intersection LOS to the same or better than no-build conditions. Sound Transit will be responsible for implementing improvements at the two intersections within WSDOT's jurisdiction prior to East Link opening service.

## **Traffic During Construction**

All mitigation measures associated with the construction of the East Link Project would comply with local regulations governing construction traffic control and construction truck routing. Sound Transit would finalize detailed construction mitigation plans in coordination with local jurisdictions and WSDOT during the final design and permitting phase of the project. Options for mitigation measures are listed below and will be implemented, as necessary, to mitigate traffic impacts due to light rail construction:

- Follow standard construction safety measures, such as installing advance warning signs, installing highly visible construction barriers, and using flaggers.
- Use lighted or reflective signage to direct drivers to truck haul routes and enhance visibility during nighttime work hours.
- Use temporary reflective truck prohibition signs on streets with a high likelihood of cut-through truck traffic.
- In areas with high levels of traffic congestion, schedule traffic lane closures and high volumes of construction traffic during off-peak hours to minimize delays where practical.
- Provide public information through tools such as print, radio, posted signs, websites, and e-mail to provide information regarding street closures, hours of construction, business access, and parking impacts.
- Where necessary, the contractor could be responsible for providing parking areas for construction workers.

## **Freight Mobility and Access Mitigation Measures**

During construction associated with I-90, SR 520, or I-405, Sound Transit will coordinate with freight stakeholder groups by providing construction information to WSDOT for use in the state's freight notification system. Sound Transit will provide information in a format required by WSDOT and compensate WSDOT for any direct costs associated with use of the freight notification system for East Link construction.

## Navigable Waterways Mitigation Measures

A Tribal fishery event on Lake Washington occurs in July. If any barging of construction equipment or materials is required, then Sound Transit will consult with the Muckleshoot Tribe to avoid conflict with the tribal fishing event.

## Air Quality and Greenhouse Gases

For construction activities, Puget Sound Clean Air Agency (PSCAA) regulates particulate emissions (in the form of fugitive dust). To comply with the PSCAA policy of preventing air quality degradation, mitigation options are listed below and will be implemented as necessary and in accordance with standard practice to control particulate matter 10 microns or 2.5 microns or less in size (PM<sub>10</sub> and PM<sub>2.5</sub>, respectively) and emissions of carbon monoxide (CO) and oxides of nitrogen (NO<sub>x</sub>) during construction of the project. Several of these measures would also reduce GHG emissions.

- Spray exposed soil with dust control agent as necessary to reduce emissions of PM<sub>10</sub> and deposition of particulate matter.
- Cover all transported loads of soils and wet materials before transport, or provide adequate freeboard (i.e., space from the top of the material to the top of the truck) to reduce PM<sub>10</sub> and deposition of particulate during transportation.
- Provide wheel washes to reduce dust and mud that would be carried off site by vehicles and to decrease particulate matter on area roadways.
- Remove the dust and mud that are deposited on paved, public roads to decrease particulate matter.
- Route and schedule high volumes of construction traffic to reduce congestion during peak travel periods and reduce emissions of CO, NO<sub>x</sub>, and carbon dioxide equivalent (CO<sub>2</sub>e) where practical.
- Require appropriate emission-control devices on all construction equipment powered by gasoline or diesel fuel to reduce CO and NO<sub>x</sub> emissions in vehicular exhaust.
- Use well-maintained heavy equipment to reduce CO and NO<sub>x</sub> emissions, which may also reduce GHG emissions.
- Cover, install mulch, or plant vegetation as soon as practical after grading to reduce windblown particulate in the area.

The following other readily available mitigation measures could potentially be used:

- Encourage contractors to employ emissions reduction technologies and practices for both on-road and off-road equipment/vehicles (e.g., retrofit equipment with diesel control technology and/or use of ultra-low sulfur diesel).
- Implement construction truck-idling restriction (e.g., no longer than 5 minutes).



- Locate construction equipment and truck staging zones away from sensitive receptors as practical and in consideration of other factors such as noise.

## Noise and Vibration

During final design, all predicted impacts and mitigation measures will be reviewed for verification. During final design, if it is discovered that mitigation can be achieved by a less costly means or if the detailed analysis show no impact, then the mitigation measure may be eliminated or modified.

The potential mitigation options available for noise from transit operations on the East Link Project are primarily sound walls, special trackwork, lubricated curves, and residential building sound insulation. Sound walls are proposed where feasible and reasonable, as determined by Sound Transit based on specific site conditions. Sound walls would be located on the ground for at-grade profiles and on the guideway structure for elevated profiles. Sound walls are preferred because they are effective at reducing noise. For locations where there is a potential for traffic noise to be reflected off the sound walls, Sound Transit will propose to use absorptive treatments to remedy this issue.

A crossover track uses a frog (a rail-crossing structure) to allow the train to either cross over to another track or continue moving on the same track. A gap is provided on top of the frog so that vehicle wheels can pass regardless of which track is in use. With typical frogs, noise and vibration are generated when the wheels pass over the gap. Special trackwork, such as movable point or spring rail frogs, eliminates the gap between tracks at crossovers that causes noise and vibration at these locations.

Sound Transit is currently investigating the use of non-audible warnings for gated and ungated at-grade crossings. If non-audible warning devices are found to be viable, this option could be used to reduce or eliminate bell noise at specific crossings. Where practical, grade separation of at-grade light rail crossings would also be considered to eliminate the need for bells or other audible warning devices. If bells are used at gated crossings, the bells would be set at the minimum noise level that maintains a safe crossing. Finally, the use of acoustic bell shrouds would be examined during final design; the shrouds would direct the bell noise at gated crossings to the intersection.

When source mitigation measures or sound walls are infeasible or not entirely effective at reducing noise levels below the FTA impact criteria, then residential sound insulation would be evaluated and implemented at impacted properties where the existing building does not already achieve a sufficient (as modeled) exterior-to-interior reduction of noise levels. Many newer buildings, particularly in Downtown Bellevue, have good interior noise reduction and additional sound insulation may not be necessary.

## **I-90**

- The only potential noise impact in Seattle would be near the transition from the Mount Baker Tunnel to the floating bridge structures. A light rail expansion joint would be required to allow for bridge movement; as a result, increased noise related to this joint could occur. If, after testing of the expansion joint prototype, the expansion joint near the Mount Baker Tunnel were determined to cause a noise impact, then mitigation is likely to be a short, absorbent sound wall along the structure's side or absorbent material applied to the existing traffic safety barriers.
- No noise impacts would occur on Mercer Island. In Bellevue, noise impacts at residential properties north of I-90 along SE 34<sup>th</sup> Street and 113<sup>th</sup> Avenue SE will be mitigated with a sound wall installed on the elevated light rail guideway.
- Vibration mitigation will be required along the Mount Baker Tunnel area to mitigate groundborne noise impacts at single-family homes along the top of the hillside.
- To reduce noise levels on the Rainier Station and Mercer Island Station platforms, Sound Transit will incorporate design measures to reduce freeway noise for patrons waiting at station platforms.
- For curves of 600-foot radius or less, a trackside or vehicle-mounted lubrication system will be used to mitigate wheel squeal noise. For curves of 600- to 1,000-foot radius, the project will be designed to accommodate a lubrication system if wheel squeal occurs during operation.

## **I-405**

- No noise or vibration mitigation is proposed within the I-405 right-of-way. Sound walls and special trackwork for the crossover will be used to mitigate noise and vibration impacts on the Coast Bellevue Hotel, located adjacent to the I-405/NE 8<sup>th</sup> Street interchange.

### **Construction Period Mitigation**

Several different jurisdictions are responsible for the regulation of construction noise. Most daytime construction activities will be exempt from the noise control ordinances. When required, Sound Transit or its contractor will seek the appropriate noise variance from the local jurisdiction. Sound Transit will control nighttime construction noise levels by applying noise level limits, established through the variance process, and use noise control measures where necessary. The contractor will have the flexibility of either prohibiting certain noise-generating activities during nighttime hours or providing additional noise control measures to meet these noise limits.

Noise control mitigation for nighttime or daytime work will include the following measures, as necessary, to meet required noise limits:

- Install construction site noise barrier wall by noise-sensitive receivers.
- During nighttime work, use smart back-up alarms that automatically adjusts or lowers the alarm level or tone based on the background noise level, or switch off back-up alarms and replace with spotters.
- Use low-noise emission equipment.
- Implement noise-deadening measures for truck loading and operations.
- Conduct monitoring and maintenance of equipment to meet noise limits.
- Use lined or covered storage bins, conveyors, and chutes with sound-deadening material.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Install high-grade engine exhaust silencers and engine-casing sound insulation.
- Prohibit aboveground jack-hammering and impact pile driving during nighttime hours.
- Minimize the use of generators or use whisper quiet generators to power equipment.
- Limit use of public address systems.
- Use movable noise barriers at the source of the construction activity.
- Limit or avoid certain noisy activities during nighttime hours.

Pile driving might be required for construction of the elevated profile over I-405. To mitigate noise related to pile driving, the use of an auger to install the piles instead of a pile driver would greatly reduce the noise levels. If pile driving is necessary, the only mitigation would be to limit the time of day the activity can occur. Pile driving is not expected at most construction locations.

Measures to minimize short-term annoyance from groundborne vibration and groundborne noise from construction activities such as pile installation include use of alternate methods that result in less vibration or noise, such as auger cast piles or drilled shafts in place of driven piles. The hours and duration of these types of activities can also be restricted to hours when vibrations and noise are less noticeable.

## Ecosystem Resources

BMPs will be implemented to avoid construction impacts on aquatic resources, including potential construction activity in Lake Washington (welding or bolting metal jackets together).

Sound Transit will consult with the Tribes to avoid impacting Tribal fisheries from construction work in Lake Washington, from barge/boat transit through the Lake Washington ship canal, or through approaches to the Ballard Locks.

*East Link Project FHWA Record of Decision*

*November 2011*

## **Geology and Soils**

Engineering design standards and BMPs will be used to avoid and minimize potential construction impacts. Based on the review of potential impacts, the design and construction process will address seismic hazards, soft soils, settlement, steep-slope hazards, landslide hazards, erosion and sediment control, vibrations, and groundwater.

## **Electromagnetic Fields**

The I-90 section of the project will incorporate measures to prevent stray electrical current from corroding the steel components of the I-90 bridge, as agreed to with WSDOT.

## **Public Services**

Sound Transit will coordinate with public service providers before and during construction to maintain reliable emergency access and alternative plans or routes to minimize delays in response times.

## **Utilities**

The project includes design measures and coordination with utility providers and the public to minimize impacts on utilities during light rail construction. These measures will include potholing and preconstruction surveys to identify utility locations. Sound Transit will continue to work with utility providers to minimize any potential service interruptions and perform outreach to notify the community of potential service interruptions.

## **Parkland and Open Space**

Benvenuto Viewpoint in the City of Seattle and the Mercer Island Park on the Lid are part of the larger network of I-90 parks along lids and overpasses. Station entrances located within these parks will be designed to be compatible with the park.

Sound Transit will restore disturbed park and open space to pre-project conditions after construction in cooperation with the resource owner. This would include landscaping, paths, and any built features of the park. During construction, pedestrian access to parks and trails will be routed to the remaining open portions of the facilities.

## Determinations and Findings

The Final EIS includes a record of the comments submitted on the Draft EIS and Supplemental Draft EIS. Responses to comments were completed, along with additional environmental analysis developed as part of the Final EIS. The Final EIS also included consideration of, and findings related to, consistency with federal statutes and executive orders.

FTA, as the federal lead agency, found that the Project has met all applicable standards and that all NEPA requirements have been met, as documented in its Record of Decision. FTA's Record of Decision includes discussion of determinations and findings related to:

- National Environmental Policy Act, Environmental Quality Improvement Act and Executive Order 11514, Protection and Enhancement of Environmental Quality
- Executive Order 12372 Intergovernmental Review of Federal Programs
- Executive Order 13175 Consultation and Coordination with Indian Tribe Governments
- Endangered Species Act (ESA) Consultation with Resource Agencies
- Magnuson-Stevens Act Finding
- Migratory Bird Treaty Act, Executive Order 13186 on Migratory Birds, and the Bald and Golden Eagle Protection Act
- Coastal Zone Management Act
- Clean Air Act
- Executive Order on Floodplain Management
- Wetlands: Clean Water Act (Section 404), Executive Order 11990 on the Protection of Wetlands
- Water Quality: Clean Water Act (Sections 401 and 402)
- Noise Control Act of 1972, Quiet Communities Act
- National Historic Preservation Act (Section 106), Executive Order 11593 on Protection and Enhancement of the Cultural Environment, and Executive Order 13007 on Protection and Accommodation of Access to Indian Sacred Sites
- Department of Transportation, Section 4(f)
- Land and Water Conservation Fund Act of 1965, Section 6(f)
- Environmental Justice

## Comments on the East Link Final EIS and Responses

Following publication of the East Link Final EIS, FTA, FHWA, and Sound Transit received comment letters related to the FEIS or the Section 4(f) and Section 106 processes. Comment letters were received from

members of the public, interest groups and organizations, businesses, local jurisdictions, and other federal agencies. The primary highway-related concerns raised and the responses to them are:

- Questions related to why alternative transit modes (e.g., enhanced bus, bus rapid transit, transportation system management (TSM)) were not analyzed as build alternatives to light rail technology on I-90.

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

- Questions related to the relationship between East Link and the I-90 Two-Way Transit and HOV Operations Project and Washington State constitutional issues related to converting highway travel lanes to transit only.

The I-90 Two-Way Transit and HOV project is independent of the East Link project and had a separate NEPA process, and in approving the I-90 Two-Way Transit and HOV Operations Project Record of Decision, FHWA determined that the project would not have adverse effects on operation of the national interstate system. As part of the identification of the preferred alternative for the I-90 Two-Way Transit and HOV Operations Project, the lead agencies identified the selected alternative as the first step towards the ultimate configuration of I-90 with high capacity transit deployed in the center roadway. The existing center roadway HOV lanes will not be converted to light rail until the I-90 Two-Way Transit project adding additional HOV lanes has been completed. There will be no net loss of HOV lanes.

As discussed in the Executive Summary of the East Link Final EIS (ES.10, Areas of Controversy and Issues to be Resolved), in 2009 a lawsuit was filed by Eastside Transportation Association and others challenging the State of Washington's constitutional authority to approve use of the I-90 floating bridge center roadway for light rail transit. Petitioners sought a writ of mandamus barring the governor or secretary of transportation from "taking any action" pertaining to the conversion of lanes of I-90 for purposes of light rail. In April 2011, the Washington State Supreme

Court denied petitioners' request. Following the Supreme Court's decision, the petitioner filed a similar challenge in Kittitas County Superior Court. The Kittitas lawsuit is pending.

- Concern related to the technical feasibility of installing and operating light rail transit on the center roadway of the I-90 floating bridges.

As described in Chapter 2 of the FEIS, the Washington State Legislature Joint Transportation Committee commissioned an independent review team (IRT) to evaluate several design issues related to installing and operating light rail on the I-90 floating bridge, such as expansion joints, weight, stray currents, and bridge maintenance. At the time of the IRT's final report in 2008, the team concluded that all issues identified as potentially affecting feasibility can be addressed through project design measures, provided that the resolutions and recommendations included in that report are addressed. An IRT task force continues to advance work on design solutions to all the issues identified by the IRT and specific design measures will continue to be refined throughout the final design phase of the project. For example, Sound Transit will continue work on a track bridge prototype design and testing program, which will include construction and testing of a full scale track bridge prototype prior to installation on I-90 at the existing expansion joints. FHWA will need to approve the final design for the changes to the I-90 bridge. The technical issues associated with the I-90 floating bridge are discussed on pages 2-22 and 2-23 of the Final EIS.

- Concern related to the transportation analysis for the project on I-90, specifically on traffic congestion, impacts to freight truck traffic, projected ridership and mode share.

There were many different comments on various aspects of the transportation analysis. Please see attachment C for responses to each of the specific comments. The FEIS analysis of transportation is included in section 3.1 of the FEIS. This section describes the transportation analysis in detail. FHWA's review and analysis of transportation impacts has been focused on the impacts to the Interstate system (in this case to I-90 and I-405). FHWA's analysis of the I-405 crossing was limited to ensuring that FHWA's requirements for an airspace lease are met – this focuses on the crossing providing sufficient clearances and being structurally sound. The crossing of I-405 does not impact vehicular access to the Interstate. Changes in access to the Interstate, such as the addition of the Light Rail on I-90, require an Interchange Justification Report (IJR) which must be reviewed and approved by FHWA. FHWA's IJR addressed the design, safety, and operational considerations of the selected alternative. FHWA determined that the IJR contained sufficient analysis to show that East Link will not have an adverse operational or safety impact on I-90.

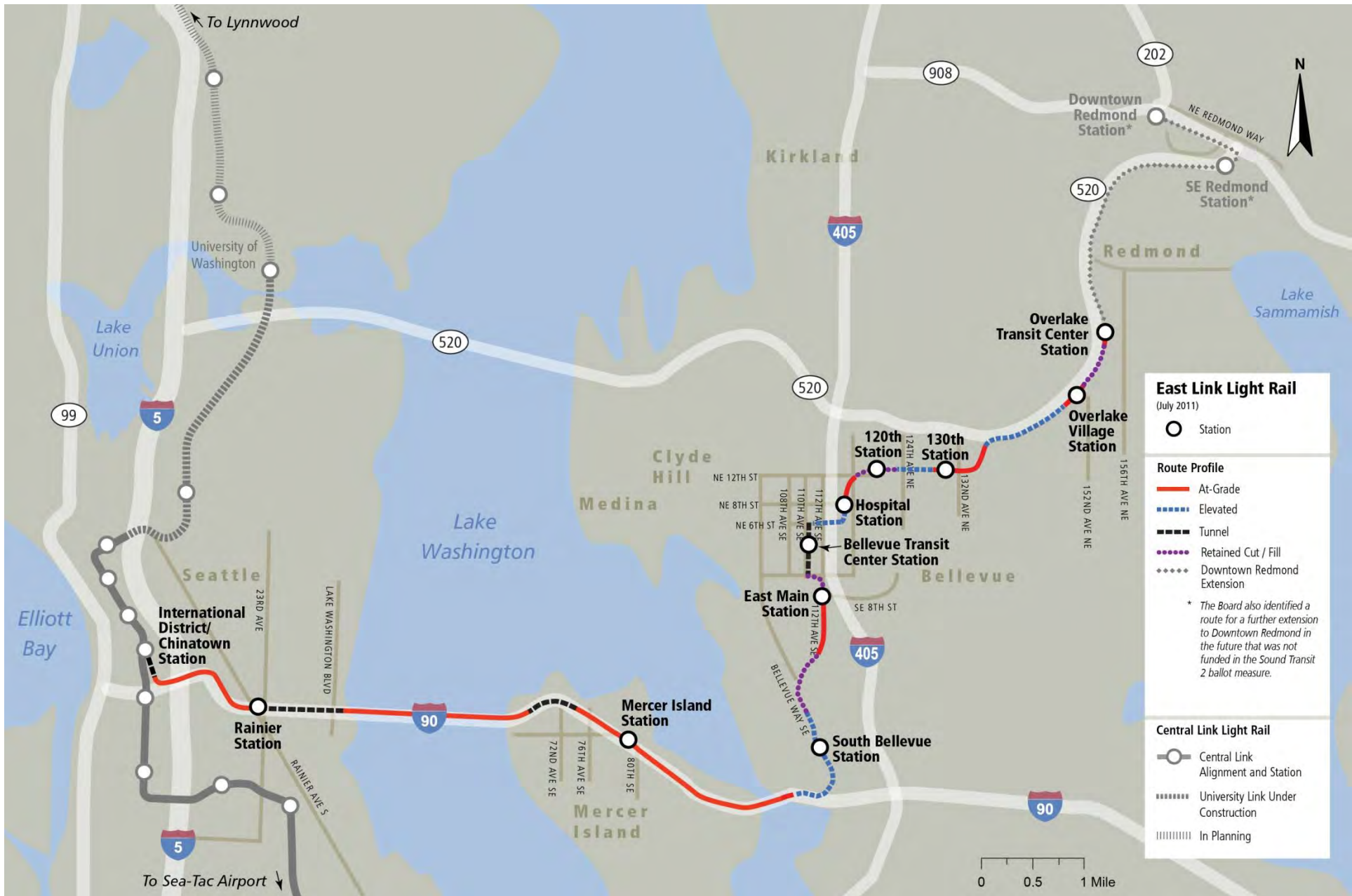
FHWA's review of the IJR resulted in confirmation that the report adequately addresses the requirements of the Policy on Added Access to the Interstate. FHWA issued a finding

of engineering and operational acceptability on June 22, 2011. The IJR can be approved upon completion of the NEPA process.

None of the comments received on the FEIS related to FHWA's approval actions for the I-405 crossing in Bellevue. Responses to the comment letters which were primarily concerning FHWA approvals are included in Attachment C of this Record of Decision. Responses to all comments received are included in FTA's Record of Decision.



## **Attachment A: Map of the Selected Alternative**



East Link Record of Decision – Attachment A: Selected Alternative

## **Attachment B: Maps of the Alternatives Analyzed in the Final EIS**



**Preferred Alternative**

- At-Grade Route
- Tunnel Route

**Other Alternatives**

- At-Grade Route
- Tunnel Route

- Traction Power Substation
- Station
- Segment Limit

- Central Link Alignment and Station

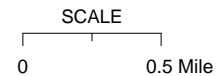
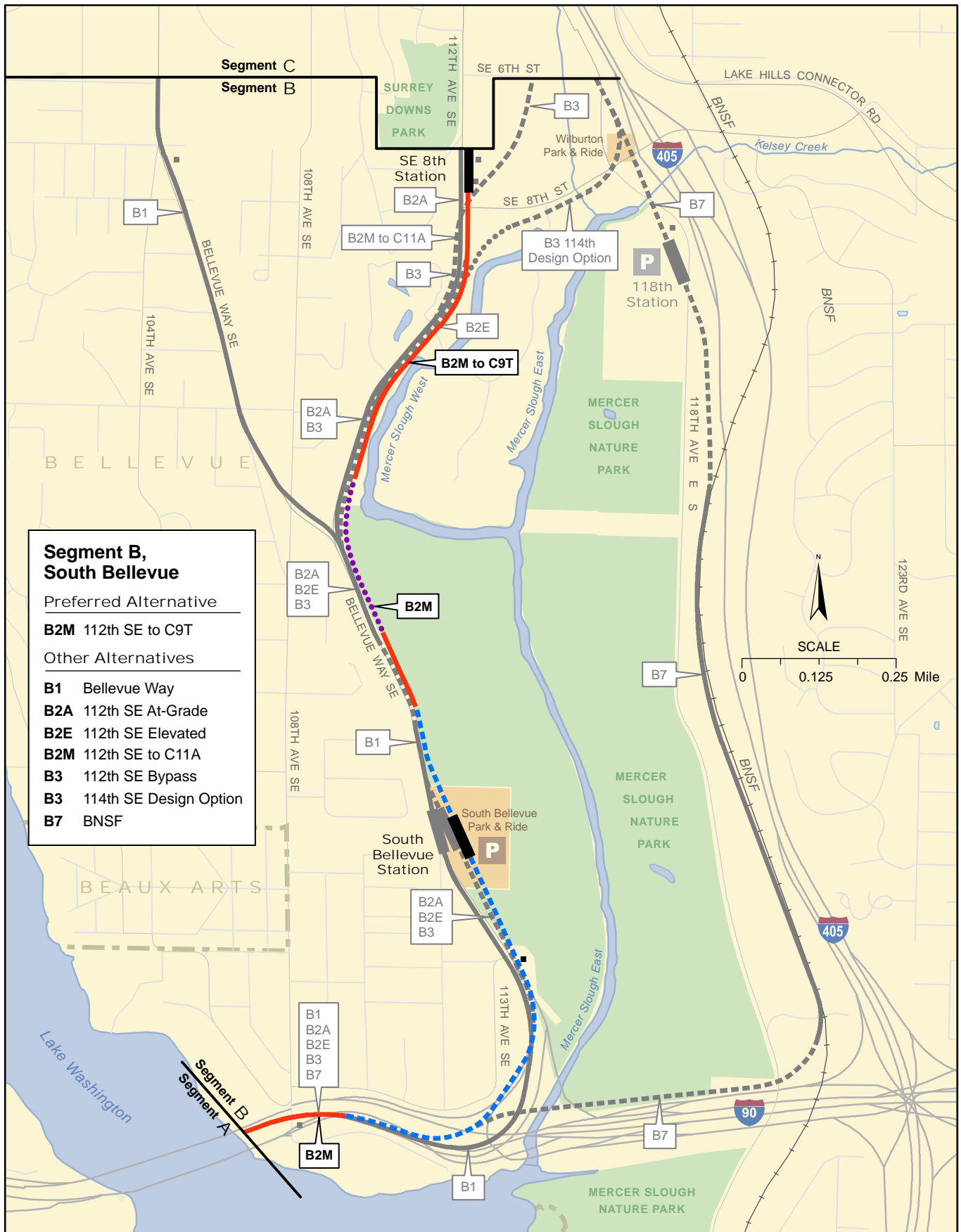


Exhibit B-1  
**Segment A, Interstate 90**  
 East Link Project



**Segment B, South Bellevue**

Preferred Alternative

**B2M** 112th SE to C9T

Other Alternatives

**B1** Bellevue Way  
**B2A** 112th SE At-Grade  
**B2E** 112th SE Elevated  
**B2M** 112th SE to C11A  
**B3** 112th SE Bypass  
**B3** 114th SE Design Option  
**B7** BNSF

- |                               |                           |   |
|-------------------------------|---------------------------|---|
| <b>Preferred Alternatives</b> | <b>Other Alternatives</b> | ■ Traction Power Substation             |
| — At-Grade Route              | — At-Grade Route          | ■ Station                               |
| — Elevated Route              | — Elevated Route          | P New and/or Expanded Park-and-Ride Lot |
| — Retained-Cut Route          | — Retained-Cut Route      | A   B Segment Limit                     |
| — Retained-Fill Route         | — Retained-Fill Route     |   |

Source: City of Bellevue (2005) and King County (2006).

**Exhibit B-2**  
**Segment B, South Bellevue**  
 East Link Project

## Segment C, Downtown Bellevue

### Preferred Alternative

**C9T** 110th NE Tunnel

### Other Alternatives

**C1T** Bellevue Way Tunnel

**C2T** 106th NE Tunnel

**C3T** 108th NE Tunnel

**C4A** Couplet

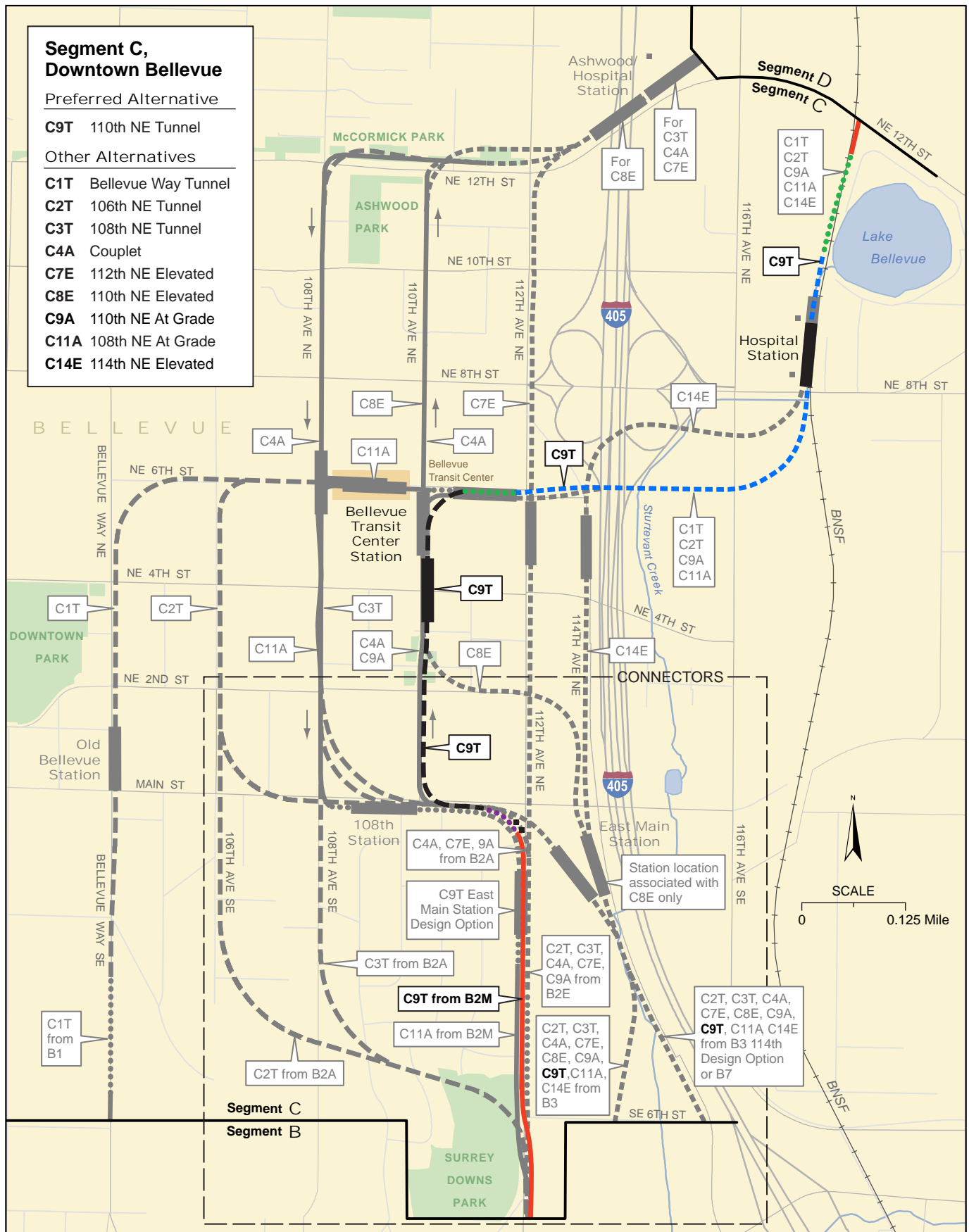
**C7E** 112th NE Elevated

**C8E** 110th NE Elevated

**C9A** 110th NE At Grade

**C11A** 108th NE At Grade

**C14E** 114th NE Elevated



Source: City of Bellevue (2005) and King County (2006).

### Preferred Alternative

- At-Grade Route
- Elevated Route
- Retained-Cut Route
- Retained-Fill Route
- Tunnel

### Other Alternatives

- At-Grade
- Elevated
- Retained-Cut
- Retained-Fill
- Tunnel

- Traction Power Substation
- Station
- P New and/or Expanded Park-and-Ride Lot
- B | C Segment Limit

### Exhibit B-3

## Segment C, Downtown Bellevue

East Link Project



## Attachment C: Comments Received on the Final EIS and Responses

[Letters sent directly to FHWA and/or Otherwise address I-90]

- Bill Hirt
- Eastside Transportation Association (Eager/Paylor)
- Kemper Development Co.(Nurse)
- Washington Trucking Association (Pursely)
- Will Knedlik
- James MacIsaac
- William Popp
- CETA (Niles/Fimia)
- Alfred Cecil

# Letter ELFEIS005

Bill Hirt

Page 1

From: [William Hirt](#)  
To: [fa.trans@mta.com](#)  
Subject: Sound Transit East Link Problems  
Date: Monday, August 15, 2011 5:22:18 PM

Dear FTA,

ELFEIS005-1 Sound Transit's East Link will be a disaster for the vast majority of eastside residents. I have included below three recent emails I have sent to Bellevue City Council protesting this project. They have all been ignored.  
Bill Hirt  
2615 170th SE  
Bellevue, WA  
98008  
425-747-4185  
wjhirt@yahoo.com

Bellevue City Council

Recent articles in local papers have criticized the majority council members for objecting to Sound Transit's preferred light rail route through Bellevue. The council proposal would apparently create a huge "hole" in Sound Transit funding.

ELFEIS005-2 Sound Transit needs to be reminded 40% of their funds come from the Eastside. The added costs of the council's preferred route in no way makes up for Sound Transit failure to meet obligations to spend that money on eastside transportation.

The Sound Transit financial "hole" is a direct result of their own incompetence. The Sounder train operating costs, along with the limited number of riders, are such that each commuter riding from Everett into Seattle costs Sound Transit more than \$45 and another \$45 for the return trip.

Their Central Link rail was originally projected to carry 110,000 riders daily by 2010. They had less than 25,000. The \$75 million dollars lost because of the missing riders is 50% more than the expected yearly revenue from 520 tolls.

What is truly absurd is Sound Transit's proposal to speed up extending Central Link southward, eventually reaching Federal Way. The costs associated with constructing the extension along with the added equipment and operating costs to maintain service over the longer route will far exceed any potential revenue from additional riders.

Sound Transit incompetency soars to even greater heights with their East Link proposal. Central Link, for all its financial problems, has minimal effect on other traffic. East Link will actually increase congestion for the vast majority of cross-lake commuters by forcing all vehicular traffic onto the outer bridge sections.

ELFEIS005-3 Prior to Prop 1 vote, East Link was promoted as the equivalent of up to 10 highway lanes across the bridge. We later learn service will be limited to one train every nine minutes. Each train will be restricted to between two to four cars by either bridge structural concerns or station design.

Sound Transit compounds this capacity problem by restricting access for potential riders. Only

## Response to comment ELFEIS005-1

Your comment has been noted. Please see responses to your comments below.

## Response to comment ELFEIS005-2

Please refer to Section 2.6 of the FEIS for a description of project costs and funding, including a description of Sound Transit's policy for funding capital projects across the five subareas within its taxing district. This section also describes the projected revenue shortfall over the life of the voter approved ST2 program resulting from the recent economic recession. These constraints reiterate the need to maintain project costs within or under budget.

## Response to comment ELFEIS005-3

The transportation analysis along I-90 is provided in Section 3.5 of the Final EIS. This analysis concludes that the project will increase overall person throughput on I-90 in both AM and PM peak periods and have similar or improved travel times for vehicles. By year 2030, it is assumed that East Link trains would operate every 7 minutes during peak periods. Refer to the East Link operating plan located in Appendix E for the light rail operating plan. Additionally, Section 3.5.3.3 provides information on the East Link project capacity, which is a different measure than the operating plan. Capacity is equivalent to seven to ten freeway lanes, based on average persons per vehicle data on I-90 provided by WSDOT. More than one park and ride is planned along the preferred alternative alignment. Park and Rides currently exist or are planned as part of this project at Mercer Island Station, South Bellevue Station, 130th Station, Overlake Village Station, Overlake Transit Center Station, and SE Redmond Station.



ELFEIS005-3	<p>one P&amp;R is planned along the route. Thus, East Link ridership, like Central Link, will fall far short of Sound Transits projected 50,000 daily riders by 2030.</p>
ELFEIS005-4	<p>In conclusion, the council should refuse to approve permits Sound Transit needs for East Link construction. This action would not only prevent them from devastating Bellevue, it would also stop their confiscation of the bridge center section and avoid the resulting increased cross-lake congestion.</p> <p>A small part of the \$5-6 billion saved could be used to convert the bridge center section to two-way bus only lanes with ten times light rail capacity ten years ahead of light rail. The remaining funds could be used to eliminate the need for 520 tolls and to improve 405.</p> <p>Bill Hirt</p> <p>Bellevue City Council</p> <p>Sound Transits Final Environmental Impact Statement (FEIS) perpetuates the farcical arguments from their earlier draft document.</p> <p>They start out justifying light rail across I-90 bridge with the results of their "studies" from 1960 through 2003 which concluded:</p> <p><i>Light rail is the selected HCT technology for the I-90/East Corridor connecting Seattle, Mercer Island, Bellevue, Overlake, and Redmond.</i></p> <p>Yet during the more than 40 years of study they apparently never considered the "no-build" alternative of converting the bridge center section to two-way bus only lanes. The only bus option they studied was adding an HOV lane to the outer bridge and maintaining "peak direction" only for both HOV lanes on the center section. They then claimed the resulting cross-lake bridge capacity wouldn't meet future requirements and recommended light rail. Any competent consultant could have told them each bus only lane could accommodate up to 720 buses per hour (5 second intervals) with 10-20 times light rail capacity.</p> <p>ST continues to insist that light rail is the equivalent of "between 7 to 10 freeway lanes of traffic" and can provide rides to "18,000 to 24,000 people per hour", "more than doubling person-moving capacity across Lake Washington on I-90". They presume up to 800 people in 4-car trains running every 7 minutes. This calculates out at 6857 riders in each direction leaving it unclear how the other 4300-10,300 riders cross the lake.</p> <p>ST assumptions of 800 per train ridership and 7 minute intervals between trains are both "questionable". The 800 riders per train assume more than 500 are willing to stand (each car has only 74 seats). The 4 cars per train assume the bridge expansion joints can withstand loads from four 70-ton light rail cars. Light rail trains have never been installed on a floating bridge and ST has yet to confirm whether its even feasible. 18 months after the DEIS promised to do so.</p> <p>ST reduced the 9 minute intervals between trains in the DEIS to 7 minutes in the EIS to increase capacity. The 9- minute intervals reflected the need to require 4.5 minutes intervals to safely merge with the Central Link. Most subways maintain 4-minute intervals between trains running on the same tracks. The addition 30 seconds presumable accounted for the need to safely merge the two routes. It isn't clear how ST manages to safely merge two routes with 3.5-minute intervals.</p> <p>ST claims East Link would "Substantially reduce travel time for most transit riders". They</p>
ELFEIS005-5	<p>ST assumptions of 800 per train ridership and 7 minute intervals between trains are both "questionable". The 800 riders per train assume more than 500 are willing to stand (each car has only 74 seats). The 4 cars per train assume the bridge expansion joints can withstand loads from four 70-ton light rail cars. Light rail trains have never been installed on a floating bridge and ST has yet to confirm whether its even feasible. 18 months after the DEIS promised to do so.</p>
ELFEIS005-6	<p>ST assumptions of 800 per train ridership and 7 minute intervals between trains are both "questionable". The 800 riders per train assume more than 500 are willing to stand (each car has only 74 seats). The 4 cars per train assume the bridge expansion joints can withstand loads from four 70-ton light rail cars. Light rail trains have never been installed on a floating bridge and ST has yet to confirm whether its even feasible. 18 months after the DEIS promised to do so.</p>
ELFEIS005-7	<p>ST reduced the 9 minute intervals between trains in the DEIS to 7 minutes in the EIS to increase capacity. The 9- minute intervals reflected the need to require 4.5 minutes intervals to safely merge with the Central Link. Most subways maintain 4-minute intervals between trains running on the same tracks. The addition 30 seconds presumable accounted for the need to safely merge the two routes. It isn't clear how ST manages to safely merge two routes with 3.5-minute intervals.</p>
ELFEIS005-8	<p>ST claims East Link would "Substantially reduce travel time for most transit riders". They</p>

**Response to comment ELFEIS005-4**

Your comment regarding permits has been noted. Please see Section 3.5 of the Final EIS for a description of highway operations and safety. The ST2 funding package, approved by voters in 2008, provides funding for light rail between downtown Seattle and Overlake. These funds cannot simply be transferred to other projects.

**Response to comment ELFEIS005-5**

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal

Register: February 14, 2007, Vol. 72, Number 30) and guidance found at:  
<http://environment.fhwa.dot.gov/integ/related.asp>

The I-90 Two Way Transit and HOV Operations Environmental Impact Statement analyzed several options for allowing transit and HOV operations to occur in both directions across I-90, including converting the center roadway to transit and HOV only lanes (Alternative R-2B) and adding transit only shoulder lanes that would operate in the opposite direction of the reversible center roadway (Alternative R-5). Further information is available here:

<http://www.wsdot.wa.gov/projects/i90/twowaytransit/>.

#### ***Response to comment ELFEIS005-6***

The capacity of East Link, which is between 18,000 and 24,000 people per hour, is based on a maximum LRT headway of 4 minutes and a person capacity per train car of 600 to 800 riders. This is different than the expected ridership in 2030. The assumption that East Link trains can operate with headways of up to 4 minutes is beyond the current planning horizon year 2030, which assumed a 7 minute headway. Four minute headways would occur when the system is at maximum operational capacity. Table 3-6 and Section 3.4.3 of the Final EIS provide information on passenger level of service, which would be the same or better with the East Link Project during the PM peak-hour commute.

As described in Chapter 2 of the FEIS, the Washington State Legislature Joint Transportation Committee commissioned an independent review team (IRT) to evaluate several design issues related to installing and operating light rail on the I-90 floating bridge, such as expansion joints, weight, stray currents, and bridge maintenance. At the time of the IRT's final report in 2008, the team concluded that all issues identified as potentially affecting feasibility can be addressed through project design measures, provided that the resolutions and recommendations included in that report are addressed. An IRT task force continues to advance work on design solutions to all the issues identified by the IRT and specific design measures will continue to be refined throughout the final design phase of the project. For example, Sound Transit will continue work on a track bridge prototype design and testing program, which will include construction and testing of a full scale track bridge prototype prior to installation on I-90 at the existing expansion joints.

#### ***Response to comment ELFEIS005-7***

The merge near International District / Chinatown Station will be able to safely accommodate the two operating lines.

#### ***Response to comment ELFEIS005-8***

Section 3.5.3.3 of the Final EIS includes the I-90 transportation analysis and vehicle travel time. Section 3.4.3.3 and Table 3-8 include the travel time savings for transit riders.

ELFEIS005-8 also claim other commuters will also benefit because "Although congestion would still occur on I-90 with the East Link Project, it would be shorter in duration and affect a smaller area as people shift to ride light rail".

Both claims are absurd. East Link doesn't have the capacity or the accessibility to carry more than a fraction of cross-lake commuters. Forcing all vehicular traffic onto the outer bridge will drastically increase congestion for buses and for all other vehicles the vast majority of cross-lake commuters use.

ELFEIS005-9 In conclusion, all the recent kerfuffle over which light rail route through Bellevue is like arguing about which side of the Titanic is safer. ST needs to be "persuaded" to cancel East Link. A small fraction of the \$5-6 billion saved could be used to initiate express bus service connecting each of the eastside P&R lots with Seattle via bus-only lanes on bridge center section. The remaining funds could be applied to the 520 rebuild and 405 improvements.

Bill Hirt

Bellevue City Council

Sound Transit's recently released final Environmental Impact Statement makes the same absurd assertions as the draft version. It claims installing East Link on the bridge will be the equivalent of adding up to ten lanes of freeway. They plan to provide this capacity with four-car trains running every 7 minutes into and out of Seattle.

ELFEIS005-10 They assume each car, which has 74 seats, will carry up to 200 people. Thus each 4-car train can "theoretically" accommodate 800 riders. With 7 minutes between trains, 8 2/3 can cross the bridge in each direction for a total of slightly more than 17 trains per hour. Thus the maximum possible ridership across the bridge is 17 x 800 or 13,600, an answer they could have gotten from my 8-year old grand daughter. Yet, Sound Transit's EIS claims East Link can carry up to 24,000 riders per hour.

The reality is, for a whole host of reasons too numerous to detail tonight, the peak ridership will be less than half the 13,600 level. Thus, East Link will never carry more than a small fraction of cross-lake traffic forcing the vast majority of commuters onto the outer bridge sections in both directions. Yet, Sound Transit continues to make the absurd claim all the vehicles forced onto the outer bridge will actually encounter reduced congestion.

ELFEIS005-11 One of the more egregious examples of Sound Transits incompetency is the fact they've spent millions and years evaluating all sorts of light rail alternatives on the eastside without ever confirming they can use light rail on the I-90 bridge. No one has ever installed Light rail on a floating bridge. A major concern is the structural integrity of the expansion joint connections between the floating and fixed part of the bridge. These connections have already needed replacement on the current bridge.

Sound Transits 2008 DEIS referred to some preliminary test results which concluded: "it is feasible to design a light rail track system" for the I-90 bridge. The Federal Highway Administration responded with a Feb. 25, 2009 letter containing the following statement: "We think there is additional work to be done to determine if it is feasible to design an expansion joint to accommodate light rail". Some 30 months later, that's 2 1/2 years even to Sound Transit, they still haven't confirmed feasibility.

ELFEIS005-12 Time limits prevent me from detailing at least another half-dozen examples of ST incompetency. I firmly believe if they had not been allowed to lie with impunity about East

**Response to comment ELFEIS005-9**

The ST2 funding package, approved by voters in 2008, provides funding for light rail between downtown Seattle and Overlake. These funds cannot simply be transferred to other projects.

**Response to comment ELFEIS005-10**

The transportation analysis along I-90 is provided in Section 3.5 of the Final EIS, and Section 3.5.3.3 provides additional information on the East Link project capacity, which is equivalent to seven to ten freeway lanes. The East Link capacity calculation assumes that East Link trains can operate with headways of up to 4 minutes, which is beyond the current planning horizon (2030) and is not used as part of the ridership forecast. Four minute headways would occur when the system is at maximum operational capacity. Because East Link will not be operating at capacity with 4 minute headways within the planning horizon of 2030, page 3-25 of the FEIS presents a ridership forecast of 50,000 riders per day based on operating with 7 minute headways for 2030.

This analysis concludes that the project would increase overall person throughput on I-90 in both AM and PM peak periods and have similar or improved travel times for vehicles. As stated in Section 3.5.3.3; "One of the key reasons the East Link project would transport more people across I-90 is because bidirectional light rail would be a more efficient use of the center roadway space than the current reversible, one-directional vehicles operations. The roadway's restricted access and egress also limit vehicle capacity and throughput."

**Response to comment ELFEIS005-11**

The technical issues associated with the I-90 floating bridge are discussed on pages 2-22 and 2-23 of the Final EIS. Please also see response to comment ELFEIS005-6 above for a discussion of the independent review team (IRT) findings and the status of resolving design issues identified by the IRT.

ELFEIS005-12

Link capability, voters would never have approved Prop 1 in 2008. As it is, they continue to perpetuate fabrications for a project whose only winners will be the huge construction companies who will make millions from the 8-10 billion required to complete light rail in 2021. Money that could be far better spent on the 520 bridge or 405 improvements. The losers will be major parts of Bellevue that can look forward to being devastated by light rail construction and operation, along with the vast majority of cross-lake commuters who will face increased congestion and eventual gridlock trying to get into and out of Seattle.

ELFEIS005-13

The only way to stop this debacle is for the Bellevue City Council to refuse to grant Sound Transit the permits they need for construction. I know some of you have dedicated a major part of your adult life toward making Bellevue a better place to live. I can't believe you would allow it to be devastated by light rail.

Bill Hirt

***Response to comment ELFEIS005-12***

Your comment has been noted. The ST2 funding package, approved by voters in 2008, provides funding for light rail between downtown Seattle and Overlake. These funds cannot simply be transferred to other projects.

Please see Section 3.5 of the Final EIS for a description of highway operations and safety which shows that the project would have either similar or improved vehicle travel times and increased person throughput across Lake Washington in both the AM and PM peak periods compared to the No Build Alternative.

***Response to comment ELFEIS005-13***

Your comment has been noted.



# Letter ELFEIS008

Eastside Transportation Association

Page 1

## Eastside Transportation Association

*"Dedicated to improving our quality of life and environment by reducing congestion through increased mobility"*

P.O. Box 50621  
Bellevue, WA 98015

August 12, 2011

Mr. Rick Krochalis, Region X Administrator  
Federal Transit Administration  
Seattle, WA  
[rick.krochalis@dot.gov](mailto:rick.krochalis@dot.gov)

RE: Sound Transit East Link FEIS

Dear Mr. Krochalis,

The Eastside Transportation Association (ETA) is a private sector group whose membership is concerned with transportation for the areas east of I-5 in the Puget Sound region of western Washington. The area is home to major employers including Microsoft, The Boeing Company, Google, Expedia, Paccar, Symetra and many more in addition to five major hospitals and a combined population of the area exceeding that of the City of Seattle. ETA's membership includes concerned citizens, business representatives and transportation professionals. We support policies that encourage each mode of transportation to operate efficiently and economically to meet growing demands for both personal and freight travel.

ELFEIS008-1 The East Link project would connect to the existing light rail system in downtown Seattle and extend the system to Mercer Island, Bellevue, and Redmond. ETA has previously and consistently expressed concern about the cost, transportation impacts and poor projected performance of East Link. Review of the FEIS documents has intensified our concerns. Analysis of the FEIS shows a continuing Sound Transit pattern of misrepresentation apparently designed to mislead the public as to the potential impacts and benefits of East Link. These comments focus on the proposed taking of I-90's 2-lane center roadway for East Link light rail. **There are national implications, setting a precedent of removing valuable roadway capacity for a poor performing rail concept.** The comments are organized under two main headings:

- No alternatives were evaluated for Segment A.
- No low-cost, transportation system management alternative was provided in the DEIS, SDEIS, nor in the FEIS.

### 1. NO ALTERNATIVES WERE EVALUATED FOR SEGMENT A.

ELFEIS008-2 Segment A is the portion of East Link on I-90 between I-5 at the west end and Bellevue Way on the east end. No alternative to the taking of the I-90 center, 2-lane roadway was

## Response to comment ELFEIS008-1

The East Link Project would dedicate the I-90 center roadway for high capacity transit as stipulated in the 1976 Memorandum Agreement (as amended in 2004) among Seattle, Mercer Island, Bellevue, King County Metro, and WSDOT. At the same time, additional roadway capacity on I-90 will be provided by the I-90 Two-Way Transit and HOV Operations Project (also known as the R-8A Project). The additional roadway capacity from the R-8A Project is included in the East Link Final EIS No Build Alternative as described on pages 2-6 through 2-9 of the Final EIS. The R-8A Project is restriping I-90 and making other improvements to add new HOV lanes to the I-90 bridge in each direction of travel. The FHWA Record of Decision for the I-90 Two-Way Transit and HOV Project (September 2004) found that the Selected Alternative (Alternative R-8A) was chosen in part because it "would accommodate the ultimate configuration of I-90 (High Capacity Transit in the center lanes). Alternative R-8A adds directional HOV lanes on the outer roadways which would provide for reliable transit and HOV operations with the ultimate roadway configuration."

The environmental impacts from the use of the I-90 center roadway for the East Link Project are analyzed in the East Link Final EIS. The environmental impacts for the R-8A Project are analyzed in the 2004 Final EIS for the I-90 Two-Way Transit and HOV Operations Project.

As discussed in the Executive Summary of the East Link Final EIS (ES.10, Areas of Controversy and Issues to be Resolved), in 2009 a lawsuit was filed by Eastside Transportation Association and others challenging the State of Washington's constitutional authority to approve use of the I-90 floating bridge center roadway for light rail transit. Petitioners sought a writ of mandamus barring the governor or secretary of transportation from "taking any action" pertaining to the conversion of lanes of I-90 for purposes of light rail. In April 2011, the Washington State Supreme Court

ELFEIS008-2

provided. In addition to a "No Build" analysis, all branches of government are required to study, develop and describe appropriate alternatives to recommended courses of action. Surely there must be alternatives to taking the Center Roadway of a vital highway facility. Apparently none were ever considered except for a comparison of SR-520 and I-90, and this happened before the NEPA/SEPA analysis.

The following items describe specific issues related to Segment A.

1.1. **Constitutional Issue For The Center Roadway Of I-90.** The 18<sup>th</sup> Amendment to the Washington State Constitution says, "All fees collected by the State of Washington as license fees for motor vehicles and all excise taxes collected by the State of Washington on the sale, distribution or use of motor vehicle fuel and all other state revenue intended to be used for highway purposes, shall be paid into the state treasury and placed in a special fund to be used exclusively for highway purposes." Because highway user fees were used in construction of the center roadway, taking the center roadway for light rail (a non-highway purpose) would be a violation of the State Constitution.

ELFEIS008-3

Nine private citizens, including Kemper Freeman, and the Eastside Transportation Association filed a petition in the Supreme Court of Washington seeking a writ of mandamus barring respondent Governor Christine Gregoire from taking any action pursuant to the authorization in the state of Washington's biennial transportation budget for a valuation of the center lanes of Interstate 90 between Seattle and Bellevue pursuant to the Sound Transit 2 Regional Transit System Plan's proposal for the eventual conversion of these lanes to a light rail line. In April 2011, the Supreme Court concluded that a writ of mandamus would in any event be premature insofar as no transfer and conversion of the lanes has yet occurred. They did not say that such a taking was or was not constitutional; rather the Court sidestepped the issue.

The legal battle has now moved to Kittitas County Superior Court. The petitioners now include 12 private citizens and the Eastside Transportation Association. Speaking about choosing the Kittitas County Superior Court to place the suit, George Kargianis and Phil Talmadge, counsel for the plaintiffs, said, "This is not a Puget Sound only issue. What happens in that seven mile stretch and over the bridge affects everyone in the state." Counsel explained that Interstate-90 serves as the gateway to Snoqualmie Pass and Puget Sound for all of Washington's agriculture and commerce. "We are asking Kittitas County Superior Court to hear our case because the County is the most central in the state and borders Interstate I-90 and linking eastern and western Washington."

ELFEIS008-4

1.2. **Sound Transit Erroneously Claims Higher 2030 Person Throughput On I-90 With East Link.** Sound Transit claims that "Overall, the East Link Project would increase total person throughput by 14 to 25 percent compared to the no-build

denied petitioners' request. Following the Supreme Court's decision, the petitioner filed a similar challenge in Kittitas County Superior Court. The Kittitas lawsuit is pending.

In FHWA's Interchange Justification Report approval letter of the East Link project (please see Appendix G of Appendix H1 [Transportation Technical Report]), FHWA determined that the project would not have adverse effects on operation of the national interstate system. FHWA determinations related to use of Interstate ROW for the East Link project are limited in scope to the East Link project. Use of Interstate ROW for any other transit, rail or other projects on any part of the Interstate system would require separate FHWA review and approval. Additionally, for the East Link project, it should be noted that HOV lanes will not be converted to light rail until the I-90 Two-Way Transit project adding additional HOV lanes has been completed. There will be no net loss of HOV lanes.

**Response to comment ELFEIS008-2**

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA

considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

***Response to comment ELFEIS008-3***

Your comment has been noted. Please see response to comment # ELFEIS008-1. Petitioners' constitutional challenge and request for a writ of mandamus was denied by the Washington Supreme Court in April 2011. The Kittitas lawsuit is pending.

***Response to comment ELFEIS008-4***

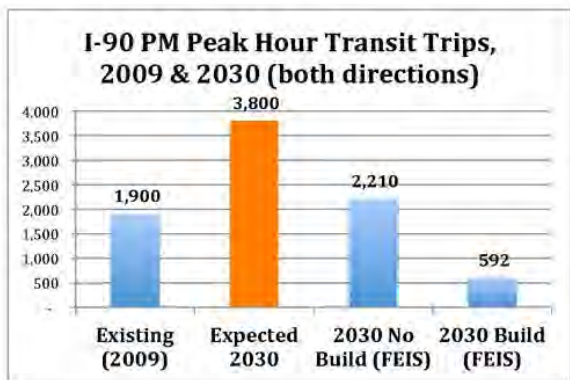
Appendix A of Appendix H1 of the Final EIS for the Transportation Methods and Assumptions Report provides information on how the East Link transportation analysis was prepared.

ELFEIS008-4

condition...<sup>1</sup> Table 5-7 on page 5-18 in the H1 Appendix to the FEIS shows the Sound Transit estimates of throughput with East Link. Sound Transit does not provide any of the assumptions in their estimates. (A public disclosure request has been submitted, but information has not been received). However, using information from the DEIS and other local travel data, we were able to “decode” the Table to uncover person trips by mode. Results are shown in the figure below.

Information prepared from PSRC data for the Regional Transit Task Force indicated a doubling of transit ridership on I-90 by 2030. Doubling the 2009 estimate of 1,900 peak hour transit trips results in an estimate of about 3,800 in 2030. These are shown as the left two bars in the figure below. The two bars on the right are the Sound Transit FEIS estimates for No Build and Build. It appears that Sound Transit has understated I-90 2030 transit trips for No Build and inflated Build. Why should the vastly more expensive light rail serve 168% more riders than No Build buses providing comparable trip times and fewer transfers?

ELFEIS008-5



Sound Transit’s 2030 No Build scenario projects I-90 transit at 10% of total persons trips. That is less than the existing 13%. For Build, 25% of persons are on transit. That is a 168% transit trip increase over No Build. By Sound Transit’s estimates for 2030, transit for the Build scenario would grow at an

ELFEIS008-6

Page 3-42, Chapter 3, East Link FEIS  
<sup>2</sup> See Table 3-2, p. 27/225 in Appendix H1 of the FEIS

**Response to comment ELFEIS008-5**

The information presented in the figure for 2030 Build and No Build Transit Trips does not come from the Final EIS. Based on the information provided in the comment, it is unclear how the No Build and Build Transit Trips depicted in this figure were determined. Sound Transit’s ridership estimates are determined from the Sound Transit ridership patronage model, which has been reviewed by the Federal Transit Administration and two State Expert Review Panels. This model incorporates residential and employment growth forecasts developed by the Puget Sound Regional Council, predicting that transit demand in the No-Build Alternative will double across Lake Washington by year 2030. With the East Link project, it is forecasted that transit ridership across Lake Washington would increase by about 25 percent from the No-Build Alternative. This is summarized in Section 3.1 and described in more detail in Sections 3.4 and 3.5 of the Final EIS.

**Response to comment ELFEIS008-6**

Table 3-2 in Appendix H1 of the Final EIS provides Screenline 2 (Lake Washington) person mode share information for both SR 520 and I-90 combined. Therefore it is not reasonable to compare that mode share data to mode share data for I-90 only. The percentages you refer to are not consistent with the definition presented in the Final EIS for growth in transit mode share. Refer to Table 3-19 for the person mode share information for the No-Build and Build conditions for both I-90 and SR 520 crossings. Exhibit 5-6 in Appendix H1 provides mode share information on I-90 only.



ELFEIS008-6

annual rate 8 times that for No Build. It appears that Sound Transit's East Link achieves a purported "higher person throughput" by grossly inflating transit ridership for Build and depressing No Build ridership. Boosting PM peak hour buses to 87 (both directions), instead of 51 make No Build serve the same number of persons as Build. Apparently, Sound Transit figures were contrived to support a conclusion they wish were true.

**1.3. Sound Transit's Egregious Comparison Of Light Rail and Freeway Lanes.**

Sound Transit claims that East Link "...would have a peak-hour capacity of up to 18,000 to 24,000 people per hour (equivalent to between 7 to 10 freeway lanes of traffic)..."<sup>3</sup> That is a lie, obviously intended to garner public support. It is not true and ST has been told that many times. In fact, it's a lie with national standing because light rail advocates all around the country use it. They develop this by comparing the theoretical crush capacity of light rail with actual results for freeways.

Light rail does not achieve those crush volumes - not even close. Comparison of actual light rail passenger volume with freeway person volume in 11 U.S. urbanized areas shows that freeway lanes are 5 times more productive than light rail, as measured by daily person miles of travel<sup>4</sup>. In peak commute hours, freeways are still 3 times as productive as light rail.

See the figure on the next page.

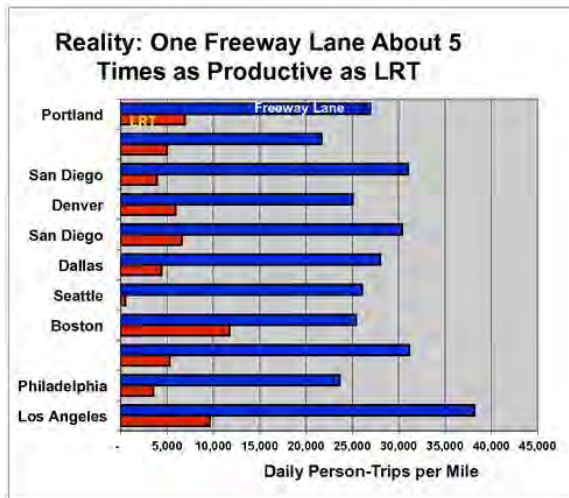
ELFEIS008-7

<sup>3</sup> Page ES-14, Executive Summary, East Link FEIS

<sup>4</sup> Based on 2009 National Transit Database and the Texas Transportation Institute's 2010 Urban Mobility Report (2009 data).

**Response to comment ELFEIS008-7**

East Link's capacity is estimated to be 18,000 to 24,000 people per hour. This is not considered a ridership forecast, but is an estimate of how many people could ride the East Link system. The East Link capacity calculation provides a high-level understanding of what this project could achieve but was not utilized in any of the transportation analysis documented in the East Link Final EIS. More appropriately, the ridership forecasts from Sound Transit's model, which predicts approximately 50,000 daily riders by year 2030, was used in the environmental analysis.



ELFEIS008-7

ELFEIS008-8

ELFEIS008-9

1.4. **East Link Does Not Maintain The Same Number Of Traffic Lanes.** The FEIS claims "Truck freight companies will not lose capacity on I-90, because at completion of light rail the projects will maintain the same number of general purpose and HOV lanes that exist on I-90 today."<sup>5</sup> There are 8 existing lanes (3 in each of the outer roadways and 2 in the center roadway). The I-90 Two-Way Transit and HOV Operations Project (R8A), which received a Record of Decision in 2004, will increase the lane count to 10 by restriping the outer roadways. By taking the center roadway, East Link will reduce the lane count to 8.

1.5. **Sound Transit Claims Higher Truck Volumes On I-90 With East Link.** Sound Transit claims "The East Link Project would have an overall slight beneficial impact on trucks traveling on I-90. As people choose to use light rail, the travel time of trucks during the morning peak hour are comparable and improve by an average of 5 minutes in the afternoon compared with the No Build Alternative."<sup>6</sup> However, as shown below, WSDOT's 2006 center roadway study showed a reduction in truck volumes.

<sup>5</sup> Source: Sound Transit's East Link Truck Mobility Fact Sheet, Winter 2009

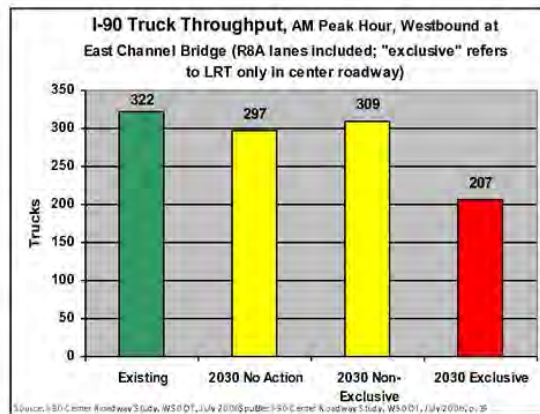
<sup>6</sup> See p. 8-1, Chapter 8, FEIS Appendix H1.

**Response to comment ELFEIS008-8**

The statement cited is accurate as currently there are eight travel lanes on I-90 across Lake Washington; six of those lanes are designated for general-purpose use and two of those lanes are HOV designated. With East Link, there will be eight travel lanes; six of which will be designated for general-purpose traffic and two HOV lanes. As described in Section 2.3.1 of the Final EIS, one No Build Alternative scenario analyzed assumes completion of all stages of the I-90 Two-Way Transit and HOV Operations Project. While the I-90 Two-Way Transit and HOV Operations Project received a Record of Decision in 2004, those outer roadway HOV lanes on the I-90 bridge have not been constructed. They are expected to be operational before the center roadway is closed for East Link construction.

**Response to comment ELFEIS008-9**

While the 2006 WSDOT I-90 Center Roadway Study and the 2011 East Link Final EIS were conducted with appropriate transportation analysis methods, the two analyses use different modeling approaches. Refer to Appendix H of Appendix H1 of the East Link Final EIS for a description and overview of the recent I-90 Transportation Studies, including the differences in modeling parameters and assumptions used in the 2006 Center Roadway Study. The East Link Project assumed a set of reasonable assumptions and methodologies that were based on decisions and agreements since the Center Roadway Study was published. Some of these differences include: the East Link analysis assuming tolling on SR 520; utilizing the latest release of the Puget Sound Regional Council's regional travel demand model at the time of analysis; incorporating Sound Transit's ridership transit forecasts into the PSRC forecasts; and assuming a different usage in the I-90 HOV lanes. Additionally, the Center Roadway Study deferred some technical efforts that the East Link project conducted in greater detail. Therefore the East Link analysis better reflects the current understanding of future travel conditions along I-90 when compared to the 2006 Center Roadway Study. Further,



ELFEIS008-9

1.6. **The Approved Mission Of The Center Roadway.** From the 2004 Record of Decision: "Alternative R-8A will provide HOV lanes on the outer roadways. It will retain the existing reversible operations on the center roadway, with both lanes operating in the same direction, westbound in the AM and eastbound in the PM."

ELFEIS008-10

1.7. **Questionable Traffic Speed Improvements on I-90 with Light Rail.** Sound Transit claims improved general-purpose traffic speeds with light rail compared to No Build.<sup>7</sup> First, this seems unreasonable with the required added vehicle traffic in the outer roadways operating with the narrower lanes and added weaving with the R8A two-way transit project. Second, this claim is in conflict with the I-90 Center Roadway report prepared by WSDOT in 2006. That study indicated a 13% increase in general-purpose travel times with the "exclusive" (light rail) use of the center roadway. Using the same model, Sound Transit claims the opposite: with light rail, general-purpose travel times decreased by 15%.<sup>8</sup> Is this another case of forcing the models to produce Sound Transit's desired result?

ELFEIS008-11

<sup>7</sup> See p. 3-48 and Table 3-23 in Chapter 3, FEIS, Appendix H1  
<sup>8</sup> See Table H-1 "History of I-90 Agreements and Studies", Appendix H of Appendix H1, East Link FEIS.

the Center Roadway Study confirmed the utility of the center roadway as an HCT facility with no center roadway access for vehicles. WSDOT is a co-lead for the East Link Final EIS, and the transportation analysis provided in the 2011 Final EIS was reviewed and approved by WSDOT.

**Response to comment ELFEIS008-10**

The I-90 Two-Way Transit and HOV Operations Project ROD relates to that specific project and not the future use of the center roadway after that project's completion. The quoted statement refers to a description of Alternative R-8A in the ROD. The 2004 FHWA ROD also states that basis for selecting Alternative R-8A is in part because that alternative "would accommodate the ultimate configuration of I-90 (High Capacity Transit in the center lanes). Alternative R-8A adds directional HOV lanes on the outer roadways which would provide for reliable transit and HOV operations with the ultimate roadway configuration."

**Response to comment ELFEIS008-11**

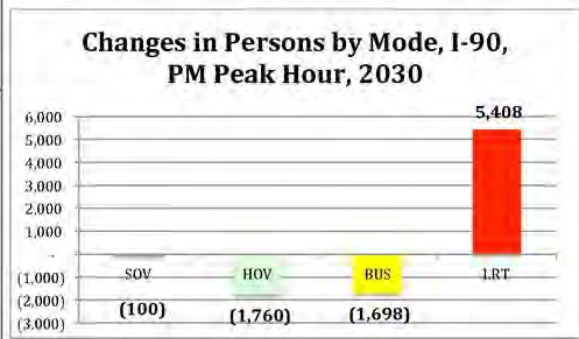
Please see response to comment #ELFEIS008-9 for the comparison between the 2006 Center Roadway Study and the 2011 East Link FEIS. The elements of the I-90 Two-Way Transit and HOV Operations Project, including the narrower shoulder and travel lanes and weaving sections, were evaluated in the Final EIS for that project, which can be found here: <http://projects.soundtransit.org/Projects-Home/Project-List/I-90-Two-Way-Transit-and-HOV-Operations-Stage-1/Final-EIS-for-Interstate-90-Two-Way-Transit-and-HOV-Operations-Project.xml>. The East Link Final EIS transportation analysis incorporates these project features as part of the baseline, or "No Build" transportation network for future year conditions (see Table 2-1 on page 2-8 of the East Link Final EIS).

**2. NO LOW-COST, TRANSPORTATION SYSTEM MANAGEMENT ALTERNATIVE WAS PROVIDED IN THE DEIS, SDEIS, NOR IN THE FEIS.**

In addition to No Build, all branches of government are required to study, develop and describe appropriate alternatives to recommended courses of action. The range of alternatives should be representative of the range of choices to permit intelligent comparative evaluation. In analysis of person throughput on I-90,<sup>9</sup> there is no acknowledgement that a well-designed BRT system could far exceed the East Link capacity and do so in seated comfort, and while also providing for other high-occupancy vehicles in the center roadway. The FHWA process for permitting the access changes to I-90 required for light rail require a complete consideration of a TSM alternative. This would probably be defined as express buses using I-90 the way the lanes are configured now. Sound Transit eliminated TSM in 2005, before the EIS scoping for East Link began in 2006.

ELFEIS008-12

**2.1. Most East Link Riders Are Projected To Switch From Buses and High-Occupancy Vehicles (HOV).** Light rail advocates, including Sound Transit, sell the concept as attracting riders out of their cars. In fact, slightly less than 2% of the projected East link ridership would switch from single-occupant vehicles (SOV). By Sound Transit figures, 64% would switch from more efficient HOVs and buses. Only about 1,800 of projected 5,400 East Link riders would be new transit riders, and those may be mythical.



ELFEIS008-13

<sup>9</sup> See p. 3-42 of the FEIS, for example).

**Response to comment ELFEIS008-12**

Please refer to the response to comment ELFEIS008-2 for discussion of the planning history in the corridor, which considered and evaluated other transit modes on I-90; and FTA's consideration of this planning history as well as scoping comments received during the East Link scoping process prior to determining the final purpose and need for East Link.

Changes in access to the Interstate require an Interchange Justification Report (IJR) which must be reviewed and approved by FHWA. The IJR must be developed in accordance with the requirements of FHWA's Policy on Access to the Interstate System (published in the Federal Register on August 27, 2009). Policy Point 2 states: "The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a))". Per FHWA's policy, analysis needs to be provided that addresses the design, safety, and operational considerations of these alternatives. Please note, as reflected in Policy Point 2, FHWA's policy considers mass transit, such as light rail, to constitute reasonable transportation system management. FHWA determined that the IJR for this project provided adequate documentation in Policy Point 2 about how the Light Rail option was selected over other transit alternatives during the Sound Transit Long-Range Planning and ST2 development processes and that the IJR in Policy Point 3 contains sufficient analysis to show that East Link will not have an adverse operational or safety impact on I-90 by increasing person capacity and throughput across Lake Washington, having similar or improved vehicle travel times and reducing the number of accidents per person on I-90.

FHWA's review of the IJR resulted in confirmation that the report adequately addresses the requirements of the Policy on Added Access to the Interstate. FHWA issued a finding of engineering and operational

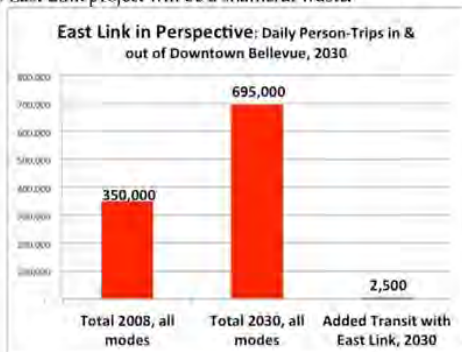


acceptability on June 22, 2011. The IJR will be approved upon completion of the NEPA process.

***Response to comment ELFEIS008-13***

The figures you present for ridership and mode shift do not come from the Final EIS. Based on the information provided in the comment, it is unclear how the numbers depicted in this figure were determined. Mode share information on both the I-90 and SR 520 crossings of Lake Washington is provided in Table 3-19 of Chapter 3 of the Final EIS. This table provides the shift in SOV, HOV and Transit modes with and without the East Link Project across Screenline 2 (Lake Washington). The East Link project is forecasted to have approximately 50,000 daily riders by year 2030 and about 10,000 will be new transit riders.

2.2. **Sound Transit’s Grossly Optimistic Assertion That “Light Rail Would Support Increased Density In Bellevue And Redmond... Consistent With Regional Land Use Plans...”**<sup>10</sup> Consider the example of downtown Bellevue. Travel demand is projected to grow at an average +3.2% per year from 2008 to 2030 reaching 695,000 daily person trips in 2030.<sup>11</sup> Sound Transit figures indicate that 2,500 daily transit trips would be added by the East Link project (most would be previous bus riders). That 0.4% contribution is so small as to be insignificant; East Link would serve only 1.5 months of growth. At a cost of \$3 billion or more (in 2007\$) for basically zero contribution to downtown needs, this East Link project will be a shameful waste.



During the 2030 PM peak hour, downtown Bellevue’s roadway network could only serve about 78% of the trip demand, leaving an un-served gap of about 11,000 person trips. East Link could serve only about 3% of this gap. See the figure below.

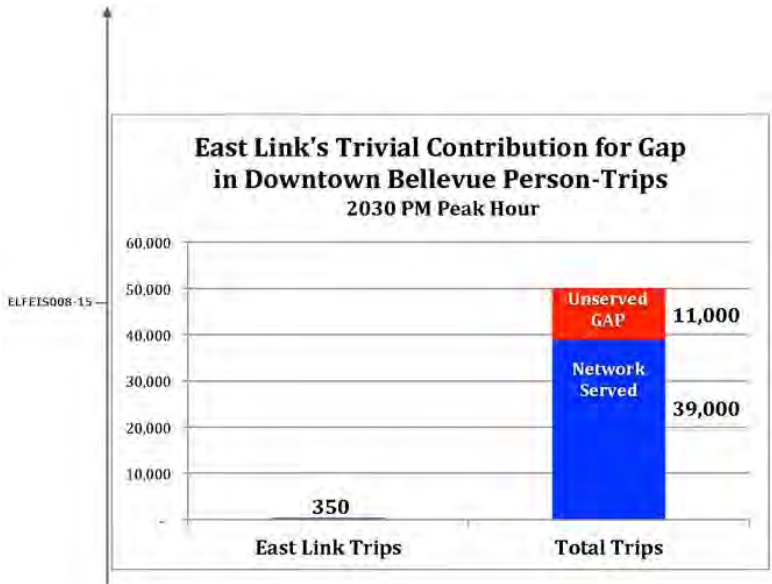
<sup>10</sup> Page 3-9, Chapter 3, East Link FEIS  
<sup>11</sup> Source: BKR Documentation Report, City of Bellevue and Sound Transit, Feb 2010

**Response to comment ELFEIS008-14**

Please refer to Appendix F4.2 for how the East Link project is consistent with specific regional and local long-range plans within the study area. The Sound Transit figures you present (2,500 daily transit trips) do not come from the Final EIS. The source document you cite (BKR Documentation Report) was prepared by the City of Bellevue, not Sound Transit. The daily trips estimated in that report (350,000 in 2008 and 695,000 in 2030) represent all motorized trips for all motorized modes (transit, SOV, HOV) into, out of, and within downtown Bellevue. This report does not indicate what percentage of the 695,000 person trips are estimated for East Link or other transit modes, so it is not clear how you derived the 2,500 daily transit trips you show in this graph. As indicated in Section 3.4 of the Final EIS, East Link would carry up to 50,000 daily riders and up to 8,000 of those would be from Segment C (downtown Bellevue) stations.

**Response to comment ELFEIS008-15**

The figures for East Link trips in downtown Bellevue you present do not come from the Final EIS. It is unclear how the 350 East Link trips during the 2030 PM peak hour you reference were determined. As shown in Table 6-17 of the Transportation Technical Report (Appendix H1 to the FEIS), the estimated 2030 PM peak-period (3-hour) station ridership at the Bellevue Transit Center is over 6,000. This estimate includes pedestrian and bicyclist access as well as bus transfers at the transit center. An un-served demand into and out of Downtown Bellevue further highlights the need for light rail.



ELFEIS008-15

**2.3. Vanpools Could Outperform East Link.** In 2003 there were about 1,300 vanpools in operation in King, Pierce and Snohomish Counties. In that same year, a Vanpool Market Action Plan, sponsored by WSDOT indicated market potential for almost 10,000 vanpools in the same 3 counties.<sup>12</sup> Only about 420 of these would be needed to carry the same number of riders as East Link in the PM peak hour (peak direction). Vanpools in this region are nearly self-supporting financially. Unlike the publically subsidized, huge capital costs and operating deficits of East Link, vanpools require little public subsidy.

ELFEIS008-16

**Response to comment ELFEIS008-16**

Vanpools are an important transportation mode in the Puget Sound region and have a specific market they serve – usually coworkers or people who work in the same vicinity who volunteer to drive, fuel, clean and schedule maintenance and repair for the van (source WSDOT website <http://www.wsdot.wa.gov/Choices/rideshare.htm>). Light rail serves different markets by connecting employment and population centers with frequent reliable service. Vanpools do not meet the purpose for the East Link project, which is to expand the Sound Transit Link light rail system from Seattle to Mercer Island, Bellevue and Redmond via Interstate 90, as stated in Chapter 1 of the Final EIS. Please also refer to response to comment #ELFEIS008-2 for more information regarding the planning history which considered various transit modes in the East Corridor. Funds for construction of the East Link Project have already been approved by voters as part of ST2 in November 2008.

<sup>12</sup> Puget Sound Vanpool Market Action Plan, WSDOT, July 2003

*No comments*

- n/a -

Thank you for the opportunity to comment.

Sincerely,

Handwritten signature of Richard Paylor in black ink.

Richard Paylor, Chairman  
Eastside Transportation Association

Handwritten signature of Dr. William R. Eager in black ink.

Dr. William R. Eager, Research Chairman  
Eastside Transportation Association



# Letter ELFEIS011

Kemper Development Company

Page 1



August 12, 2011

Rick Krochalis, Region X Administrator,  
Federal Transit Administration  
Washington D.C.  
rick.krochalis@dot.gov

Re: Sound Transit – Eastlink FEIS

Dear Mr. Krochalis;

ELFEIS011-1

The Company I represent, Kemper Development Company, Bellevue, WA, has spent considerable funds investigating and studying the plans and performance of light rail. In one sentence we have found that light rail costs too much, takes too long to build, and does too little in terms of transportation. In fact light rail in the United States seems to be more of a faith based idea than a factual matter of benefit and cost analysis.

The Sound Transit FEIS for Eastlink light rail from Downtown Seattle, across Lake Washington, through Bellevue and on to Redmond has some very serious flaws and omissions. In the material below some of those flaws and omissions are noted and discussed.

## I. FEIS DEFICIENCY:

### FAILURE TO ANALYZE AND CONSIDER THE NATIONAL PRECEDENT FOR THE INTERSTATE HIGHWAY SYSTEM:

ELFEIS011-2

Sound Transit is organized under Washington State Law covering Municipal Corporations. In essence Sound Transit operates with the legal powers as a city in the State of Washington. If Sound Transit acquires rights for the two I-90 Center Express lanes for the exclusive purpose of light rail it would set a National precedent for the Interstate Highway System.

Page 1 of 6

Kemper Development Company, Post Office Box 4186, Bellevue, WA 98009, (425) 646-3660

## *Response to comment ELFEIS011-1*

Thank you for your comments. Please see Section 2.6 of the Final EIS for a discussion of costs and funding, Section 2.7 for the project schedule and Chapter 3 for transportation changes that would result from the project. Please see responses to the subsequent comments in this letter regarding alleged flaws and omissions.

## *Response to comment ELFEIS011-2*

Your comment has been noted. Please see Appendix B of the Final EIS for a description of public involvement that took place before the November 2008 vote on the Sound Transit 2 Plan.

As discussed in the Executive Summary of the East Link Final EIS (ES.10, Areas of Controversy and Issues to be Resolved), in 2009 a lawsuit was filed by Eastside Transportation Association and others challenging the State of Washington's constitutional authority to approve use of the I-90 floating bridge center roadway for light rail transit. Petitioners sought a writ of mandamus barring the governor or secretary of transportation from "taking any action" pertaining to the conversion of lanes of I-90 for purposes of light rail. In April 2011, the Washington State Supreme Court denied petitioners' request. Following the Supreme Court's decision, the petitioner filed a similar challenge in Kittitas County Superior Court. The Kittitas lawsuit is pending.

The Sound Transit Board identified light rail as the preferred mode using a route along I-90 in July of 2006. In July of 2008 the Sound Transit Board adopted Sound Transit 2: A Mass Transit Guide, the Regional Transit System Plan. The East Link Light Rail Transit Project is included in ST2. ST2 was approved by voters in November 2008. Please see Section 3.5 in the Final EIS for a discussion of impacts to I-90 and Section 3.8 for a discussion of impacts to truck routes. Please see Section 1.2 of the Final EIS for a description of the need for the East Link Project.

The mantra in Seattle has been, "The voters voted for Eastlink therefore everything is okay". Yes, but when the voters voted they did not have benefit of even a draft EIS. Nor did the voters realize the transfer from Washington State Department of Transportation to Sound Transit of the I-90 two Center Express Lanes for 7 miles would violate the Washington State Constitution.

The State Constitution protects all of the people in the State of Washington from their government taking some action that they do not want to occur. The 18th Amendment to the State Constitution protects highways built all or in part with gas tax revenues for "Highway Purposes". There is strong precedent case law by the WA. ST. Supreme Court up holding the 18th Amendment. Also, several attorney general opinions have been issued supporting the 18th Amendment.

ELFEIS011-2

A minority of the State's adult population voted for the Sound Transit Eastlink plan. The plan benefits the same minority population and degrades the service levels of the I-90 Corridor for the majority of the people in the State who rely on the corridor for commerce and travel.

The "local majority", who are in fact a minority of the State's adult population, does not give consideration to Interstate travel on the I-90 Corridor into Seattle which is a super-regional city. No consideration was given for the interstate trucking from the Port of Seattle to the mid-western U.S.

The precedent opens the door for other cities in the U.S. with an interstate highway nearby to negotiate with their state DOT for exclusive use of a portion of Interstate Highway to suit their transportation purposes. Examples, which seem unbelievable but in a political environment might be achieved, could be a bicycle/jogging parkway in an urban area or a parking lot near an urban area.

The speculation need not continue.

**II. FEIS DEFICIENCY:**

**FAILURE TO INCLUDE A TSM ALTERNATIVE**

**I-405 Corridor ROD – Oct 2002**

The I-405 Corridor includes the area east of I-5 in King and Snohomish counties between the Tukwila and Lynnwood interchanges, 30 miles. "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." (Pg. 2 of I-405 ROD).

ELFEIS011-3

In approving of the I-90 Two-Way Transit and HOV Operations Project Record of Decision, FHWA determined that the project would not have adverse effects on operation of the national interstate system. FHWA determinations related to use of Interstate ROW for the East Link project are limited in scope to the East Link project. Use of Interstate ROW for any other transit, rail or other projects on any part of the Interstate system would require separate FHWA review and approval. Additionally, for the East Link project, it should be noted that HOV lanes will not be converted to light rail until the I-90 Two-Way Transit project adding additional HOV lanes has been completed. There will be no net loss of HOV lanes.

**Response to comment ELFEIS011-3**

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR

Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

***Response to comment ELFEIS011-4***

Please see response to comment # ELFEIS011-2 above, regarding the use of the I-90 center lane and the current court case regarding this issue. The R-8A project is not used as mitigation for environmental impacts from the East Link Project. While the R-8A project did not include high capacity transit (HCT), it was designed to accommodate HCT in the center roadway in the future. As described in Section 2.3.1 of the East Link Final EIS, the No Build Alternative included an option that considered completion of all stages of the R-8A project, including operation of all HOV lanes provided by the R-8A project. Please see response to comment #ELFEIS011-3 above regarding the planning history leading to the light rail mode choice.

ELFEIS011-4

Page 3.2-43 of the DEIS for the I-90 R-8A Project stated quite emphatically:

*The Project is not a light rail or High Capacity Transit (HCT) project; it is intended to improve regional express bus transit and HOV operations. If there is a high capacity transit project proposed for I-90 in the future, it would have its own environmental analysis. The project alternatives have been reviewed (only) to determine whether they would be adaptable for a future light rail project.*

"Alternative R-8A will provide HOV lanes on the outer roadways. It will retain the existing two lane reversible operation on the center roadway, with both lanes operating in the same direction, westbound in the AM and eastbound in the PM. SOVs will only be allowed to use the center roadway between Rainier Avenue in Seattle and Island Crest Way on Mercer Island." (Pg. 9 of R-8A ROD). In the final operating configuration of R8-A there is to be 10 lanes total, 6 general purpose lanes, two outside HOV lanes, and two reversible Express Transit/HOV lanes.

I-90 Two-Way Transit and HOV Operations Project (R8A) record of decision (or FEIS for the project) stated that nothing in the R8A study process considered the impacts of HCT/LRT being operated in the corridor. R8A was to be complete and operating prior to the introduction of HCT/LRT. Therefore, the base for a light rail alternative should be the R8A configuration with BRT/HOV operations.

In summary, the study work and records of decision for the I-405 Corridor Project and the I-90 Corridor R8-A Project which have been cited above reached conclusions that require a full TSM/BRT alternate system analysis in the Final Environmental Impact Statement for Eastlink.

**III. FEIS DEFICIENCY:**

**FAILURE TO ANALYZE THE FULL IMPACTS TO THE INTERSTATE HIGHWAYS OF I-405 THROUGH BELLEVUE, WA, AND TO I-90 FROM BELLEVUE TO THE INTERNATIONAL DISTRICT OF SEATTLE, WA.**

*No comments*

- n/a -



**Washington State Constitutional Question:**

ELFEIS011-5

The taking of the I-90 Center Roadway from the State of Washington in violation of the 18<sup>th</sup> Amendment to the State Constitution is currently being litigated in the Washington State Superior Court, Kittitas County.

**Interstate I-90 Modifications and Risks:**

First, it is known that modifications to a six mile center roadway of I-90 will be necessary according to Sound Transit. These modifications are significant.

Second, the degradation in strength of the existing floating bridge due to the modifications to the bridge by adding significant weight which creates a greater risk of the Bridge sinking. These modifications will also cause closures of the bridge in the future during high wind conditions. These items mention in the Expert Review Panel Study of the issues.

ELFEIS011-6

Third, the technical issues of transitions from solid structures to the I-90 Floating Bridge at both ends have not as yet been resolved. This remains an open question of how the transitions by the light rail trains might affect the Bridge and the land structures. Since the light rail tracks are planned to not be centered on the Bridge there will not only be vertical movements by the train loading on the Bridge but torsional forces.

Fourth, there are stray electrical currents within the Bridge which also need a resolution. If not checked these could significantly degrade the existing Bridge structure.

All of the above technical issues related to Sound Transit light rail threaten the safety and reliability of the Interstate Highway, I-90.

**Interchange Modifications:**

ELFEIS011-7

Certain I-90 interchanges on Mercer Island and South Bellevue Way are proposed for modification. Sound Transit has already asked the Mercer Island City Council for approval to remove certain ramps on I-90. Sound Transit has not completed a FHWA Interstate modification justification study on these changes.

**I-405 Crossing:**

ELFEIS011-8

There will be an elevated crossing of I-405 in Downtown Bellevue which will cause significant disturbance to the public and potentially limiting the alternatives for future expansion of I-405.

**Response to comment ELFEIS011-5**

Please see response to comment # ELFEIS011-2 above.

**Response to comment ELFEIS011-6**

The technical issues associated with the I-90 floating bridge are discussed on pages 2-22 and 2-23 of the Final EIS, including the discussion and findings of load testing conducted on the bridge to evaluate the additional weight from light rail (which would not change the bridge's ability to remain safe during storm events). As described in these sections of the FEIS, the Washington State Legislature Joint Transportation Committee commissioned an independent review team (IRT) to evaluate several design issues related to installing and operating light rail on the I-90 floating bridge, such as expansion joints, weight, stray currents, and bridge maintenance. The IRT concluded that all issues identified as potentially affecting feasibility can be addressed through project design measures. An IRT task force continues to advance work on design solutions to all the issues identified by the IRT and specific design measures will continue to be refined throughout the final design phase of the project. For example, Sound Transit will continue work on a track bridge prototype design and testing program, which will include construction and testing of a full scale track bridge prototype prior to installation on I-90 at the existing expansion joints. If during operation the bridge is closed due to high wind, alternate bus service would be temporarily employed to provide service to light rail patrons.

**Response to comment ELFEIS011-7**

Sound Transit completed a FHWA Interchange Justification Report in June 2011 and received a preliminary finding of engineering and operational acceptability. This report documented and included all of the ramp modifications included with *Preferred Alternatives A1* and *B2M*. The letter providing the finding of engineering and operational acceptability is located in Appendix H1 of the Final EIS.

***Response to comment ELFEIS011-8***

The WSDOT is a co-lead on the EIS and coordination occurred in the preliminary engineering and environmental review of the East Link alternatives. As part of this process, WSDOT and Sound Transit ensured the improvements included in the I-405 Program were not prohibited with any of the potential East Link elevated crossings.

Your consideration of these important matters in relation to our community will be greatly appreciated.

Sincerely,



Bruce L. Nurse, Vice President – Transportation  
Kemper Development Company  
575 Bellevue Square  
Bellevue, WA. 98004

[bnurse@kemperdc.com](mailto:bnurse@kemperdc.com)

cell # 206-799-5616  
direct office # 425-460-5790

Comment Post Script by the Author:

For the past 20 years I have been watching and studying the evolution, planning, development, cost, financing and politics of Sound Transit in the three county area of Puget Sound in the State of Washington. I have never in my 50 years in business encountered an organization created by the peoples' government, under state laws, without recourse to the voters with a culture of pure propaganda, half-truth, distortion, and misrepresentation of facts. I stop short of saying what others have said about just plain liars in much of the public information brought forward.

ELFEIS011-9 In my business career I have never been involved with a project that the more information that was discovered the worse the project looked from both a performance and financial point of view. In the first 10 years of operations Sound Transit performance has been far worse than we ever had predicted from a cost and performance basis.

It is extremely unfortunate that the Congress created a pot of money called "New Starts" to fund light rail. Congress in doing so made a mode choice and it was the wrong one from a tax payer's point of view and the traveling public is concerned. We must change this and also avoid the horrendous boondoggle that high speed rail represents.

***Response to comment ELFEIS011-9***

Your comment has been noted. Please see Section 2.6 of the Final EIS for a discussion of costs and funding. The East Link Project is not applying for New Starts Funding. Table 3-9 on page 3-25 of the Final EIS shows the projected daily ridership for the preferred alternatives.

# Letter ELFEIS015

Washington Trucking Associations

## Page 1

August 12, 2011

Dan Mathis, Region X Administrator, FHWA

Dear Mr. Mathis:

I am writing to express the concerns of the 1,000 members of the Washington Trucking Associations with the Sound Transit Final EIS I-90 East Link project. In particular the assertion in 3.8.3.1 (Impacts During Operation Freight on Regional Highways) which states that the East Link project when completed will have a beneficial impact on travel time for trucks across the Bridge.

ELFEIS015-1

This assumption appears to be based on Sound Transit's projected light rail ridership which claims to reduce single occupant vehicles, thereby allowing trucks to move more freely. Unfortunately, Sound Transit has a long history of over estimating projected ridership. As an example, the Seattle downtown to SeaTac Airport light rail, once completed, carried 50% less riders than Sound Transit had projected.

In addition, Sound Transit predicts that by the year 2030 truck traffic growth on I-90 would increase about 2% or less during peak times. This flies in the face of the American Trucking Associations US Freight Transportation Forecast to 2022, which indicates there will be a 24% increase in general freight over that time period.

ELFEIS015-2

Sound Transit also states that between the years 2020 and 2030, that a higher percentage of trucks is expected to cross Lake Washington during off peak times. While the trucking industry does everything in its power to avoid traveling during peak congestion times, we do not make the final decision on when we will be on the roadway. With the advent of warehouse on wheels and just in time delivery, our customers dictate our travel times. Therefore, to make the assumption that as time goes on trucking will choose to operate more during off peak hours is simply not accurate.

ELFEIS015-3

We have further concerns about the model used to project light rail's ridership and what impacts it would have on congestion. The information we have received indicates that slightly less than 1% of the projected East Link ridership will switch from single occupant vehicles, and that 64% would switch from more efficient HOVs and buses. Only about 1800 of the projected 5400 East Link riders would be new transit riders, and those may be mythical based on Sound Transit's past predictions.

ELFEIS015-4

In closing, we would ask that Sound Transit's FEIS be scrutinized very carefully before we spend billions of dollars to fix a congestion problem that may well be made worse by adding light rail to the I-90 Bridge.

ELFEIS015-5

Thank you in advance for your consideration. If you have any questions or we can be of further service, please feel free to contact me.

Letter 15 was sent to FHWA official Dan Mathis as shown. A duplicate letter was also sent to FHWA official Victor Mendez.

### *Response to comment ELFEIS015-1*

Sound Transit's ridership estimates are determined from the Sound Transit ridership patronage model. With the East Link project, transit ridership across Lake Washington is forecasted to increase by about 25 percent from the No-Build Alternative. This is summarized in Section 3.1 and described in more detail in Sections 3.4 and 3.5 of the Final EIS.

Comparing future ridership forecasts for East Link to Central Link's initial ridership levels is not an appropriate comparison for several reasons. First, forecasts prepared for Central Link using Sound Transit's incremental ridership model in the late 1990's/early 2000's was based on a system plan different than the current operating light rail system as well as a bus service integration plan that has not been fully implemented. Ridership forecasts for Central Link assumed a light rail line between the University District area (45th Street) and south of Sea-Tac Airport (South 200th Street). Currently, Central Link is operating between downtown Seattle and Sea-Tac Airport. Other factors affecting Central Link ridership during its first two years of operation include an adjustment of people's behaviors to a new transportation mode (light rail); implementation of new fare system (the Orca card); and the economic recession and unemployment, which has depressed transit ridership during this period.. These issues primarily relate to the rate of ridership maturity on the Initial Segment of Central Link, not to the forecasting methodology in Sound Transit's ridership model used for East Link (which has been reviewed by the Federal Transit Administration and two State Expert Review Panels). Overall, sound Transit's Central Link ridership has consistently increased since service implementation.



***Response to comment ELFEIS015-2***

The reference to 2 percent per year is an annual growth rate not an overall total growth rate. Assuming an annual 2 percent growth rate, volumes would increase by approximately 30 percent from the existing (2007) conditions to year 2022.

***Response to comment ELFEIS015-3***

Currently the majority of freight along this corridor travels outside the peak periods as shown in Exhibit 3-28 of the Final EIS. That trend is expected to continue in the future as forecasted by the Puget Sound Regional Council (PSRC) (i.e., that the majority of daily freight movements will continue to occur outside the morning and afternoon peak periods).

***Response to comment ELFEIS015-4***

The East Link project is forecasted to produce about 50,000 riders per day and of those riders approximately 10,000 would be new transit riders. This information is located on page 3-6 of the Final EIS, under the bullet titled “Limited Transit Capacity and Connectivity.”

***Response to comment ELFEIS015-5***

Chapter 1 of the Final EIS discusses the project’s purpose and need. As described in Section 1.2.3, the outer roadway is expected to reach its maximum vehicle capacity by 2015. Increased congestion in the No-Build condition will further exacerbate bus service delays and limit mobility between Seattle and the Eastside communities creating a need for the project. As described in Section 3.5 of the Final EIS, the traffic operations on I-90 during the peak periods would be similar or improved with the project.

*No comments*

- n/a -

Sincerely,

Larry A Pursley  
Executive Vice President  
Washington Trucking Associations  
(253) 838-1650

# Letter ELFEIS016

Will Knedlik

Page 1

**From:** Will Knedlik [<mailto:interstate90userscoalition@gmail.com>]  
**Sent:** Sunday, August 14, 2011 9:13 PM  
**To:** LaHood, Ray (OST)  
**Cc:** Mendez, Victor (FHWA); Rogoff, Peter (FTA); [hammonp@wsdot.wa.gov](mailto:hammonp@wsdot.wa.gov); Mathis, Daniel (FHWA); Krochalis, Rick (FTA); [dyed@wsdot.wa.gov](mailto:dyed@wsdot.wa.gov)  
**Subject:** Request to deny Record of Decision for East Link Project and to make criminal referral

ELFEIS016-1

This submission requesting the United States Department of Transportation to deny a Record of Decision for the East Link Project proposal stated within a nominal Final Environmental Impact Statement for a light-rail plan for the Interstate 90 corridor from Seattle, Washington to Bellevue, Washington (as formally issued on July 15, 2011), and instead to make a criminal referral to the United States Department of Justice respecting the Central Puget Sound Regional Transit Authority (doing business as Sound Transit and hereinafter the "agency"), is based upon legally fatal defects identified in the following paragraphs, *seriatim*, together with several further lethal failures identified in an attachment incorporated by reference hereinbelow and in an annex also thus incorporated hereinbelow, and along with major false statements therein and previously in order to degrade freight mobility through critical I-90 elements of the Dwight D. Eisenhower National System of Interstate and Defense Highways and to obtain \$1.313 billion in New Starts funds from the United States Treasury through clearly false pretenses made by the agency to the Federal Transit Administration over the signature of its chief executive officer Joni Earl (signed *qua* "Joan M. Earl") that are documented hereinafter.

The agency has acquired **no** lawful right to use the multibillion-dollar center roadway of the I-90 corridor for its East Link Project, as the Washington State Supreme Court has squarely informed that junior taxing district in explicitly stating that it has obtained "nothing to establish a mandatory duty to transfer the center lanes" over the I-90 floating bridge and through other related components of that key corridor, in *Freeman v. Gregoire*, \_\_ Wn.2d \_\_, (2011), and as is discussed more fully in the attached appeal of the nominal FEIS for that plan addressed to and pending before Ms. Earl, and incorporated herein for all purposes by this reference thereto

ELFEIS016-2

Further, the agency is almost certain to be unable to gain any legal right to use those multibillion-dollar center lanes in the I-90 corridor, **constitutionally**, because such rail usage is unconstitutional under the Washington State Constitution's Article II, §40 – since rail modalities are **not** among "highway purposes" lawful pursuant thereto – due to the Washington State Supreme Court's long standing and *sine qua non* decision whereby it has explicitly so defined "highway purposes" through *State ex rel. O'Connell v. Slavin*, 75 Wn.2d 554 (1969).

Still further, the agency is even more certainly unable to obtain any lawful right to use the multibillion-dollar center roadway in the I-90 corridor, **statutorily**, because it cannot meet the paramount statutory obligation for any lawful transfer, on even a temporary basis, namely that such facilities as "held for highway purposes" are "not presently needed," factually, for such constitutionally mandated ends, as required by RCW 47.12.120.

Yet further, the agency is still more certainly unable to obtain any legal right to use those multibillion-dollar center lanes in the I-90 corridor, **procedurally**, because the State of Washington's counsel conceded to our state Supreme Court, during oral argument on September 16, 2010, in open court, that "the two center lanes of I-90 are not surplus and are needed for highway purposes" (as subsequently pleaded, on June 2, 2011, by attorneys for plaintiffs, in *Freeman et alia v. Gregoire et alia*, Kittitas County Superior Court Cause No. 11-2-00195-7, Amended Complaint for Declaratory Judgment, Writ of Prohibition or Mandamus, and Injunction).

ELFEIS016-3

The agency is likewise certainly unable to obtain any lawful right to use the multibillion-dollar center roadway in the I-90 corridor, **financially**, because it lacks the monetary resources required to fund actual market value of the applicable highway facilities, as is discussed more fully in a hereinbelow-annexed letter addressed to Hon. Rob McKenna, who is the current Washington State Attorney General, in requesting his Office for an adequate defense of the Motor Vehicle Fund's integrity respecting the financial value of the center roadway or for cession of lawful authority (and as

## Response to comment ELFEIS016-1

The East Link Project does not propose to use any New Starts funding. The Final EIS analyzes the environmental impacts of the East Link project. The legal issues identified here and elsewhere in your comment letter and attachments, fall outside the scope of analysis required under the National Environmental Policy Act.

## Response to comment ELFEIS016-2

As discussed in the Executive Summary of the East Link Final EIS (ES.10, Areas of Controversy and Issues to be Resolved), in 2009 a lawsuit was filed by Eastside Transportation Association and others challenging the State of Washington's constitutional authority to approve use of the I-90 floating bridge center roadway for light rail transit. Petitioners sought a writ of mandamus barring the governor or secretary of transportation from "taking any action" pertaining to the conversion of lanes of I-90 for purposes of light rail. In April 2011, the Washington State Supreme Court denied petitioners' request. Following the Supreme Court's decision, the petitioner filed a similar challenge in Kittitas County Superior Court. The Kittitas lawsuit is pending.

## Response to comment ELFEIS016-3

Please see response to comment # ELFEIS016-1 above.

ELFEIS016-3 incorporated herein for every purpose by this reference thereto), and as is effectuated by the absolute limit of \$800 million on its bonded indebtedness as established by statutory contract authorizing its local taxing powers until its thereby-approved parameters for an initial light-rail plan has been completed from Tacoma to Lynnwood and from Seattle to Redmond (and as outlined more fully in preliminary documentation of the agency's \$1.313 billion fraud on the United States Treasury hereinbelow).

ELFEIS016-4 The agency is also certainly unable at the present juncture to obtain any legal right to use those multibillion-dollar center lanes in the I-90 corridor, **administratively**, because it has utterly failed to this date to conduct minimally adequate alternatives analysis for the make-or-break Segment A running from Seattle to Bellevue, **SINCE IT HAS MADE ABSOLUTELY NO ALTERNATIVES ANALYSIS OF ANY KIND WHATSOEVER IN COMPLETE DEFIANCE FOR THE ENVIRONMENTAL REVIEW PROCESS**, as documented more fully in the appeal now before Ms. Earl, and as incorporated herein for every purpose by earlier reference thereto.

ELFEIS016-5 However, what the agency has done is to substitute explicit misrepresentation for mandatory explication, and the core purpose of its central outright lie respecting falsely purported freight mobility can have no factual, legal, logical or other purposes except for the intentional concealment of its plans for major degradations of freight mobility within the pivotal I-90 corridor connecting Boston Harbor with the Port of Seattle, as well as servicing major ports in Philadelphia, New York, New Jersey, Cleveland and Chicago, *inter alia*, and for its related cover up of enormous undermining, thereby, not only of the fundamental purposes for, but also of the current functionality by, the very critical I-90 element of our nation's interstate-and-defense highway system.

In particular, as the attached appeal documents more fully, the agency's nominal FEIS utilizes the bold-faced lie that "the East Link Project would have an overall beneficial impact on trucks traveling on I-90," based on its falsifications of WSDOT data sets that of necessity must be willful, and it so adds to most serious wrongdoing by means of such generic misrepresentations through its falsified answers to the Port of Seattle's pivotal-and-substantial concerns about freight access to its waterfront-and-airport facilities in response to prior draft-and-supplemental environmental impact statements. These falsifications should be subject to a criminal referral.

Said false claim regarding freight mobility in the nominal FEIS made in order thereby to degrade the pivotal I-90 corridor, as an essential element of our nation's core system of interstate-and-defense highways, follows the agency's earlier false claims made over the signature of Ms. Earl to obtain \$1.313 billion in federal New Starts funds, through two approved full funding grant agreements, whereby she ratified financial plans falsely claiming lawful borrowing authority of well over \$2 billion despite knowing this amount to be *circa* three times larger than the agency's maximum authority for long-term debt of \$800 million at least until its initial light-rail plan has been completed (as approved by Pierce County, King County and Snohomish County as a central *quid pro quo* term for authorizing its access to residents of those counties to request local taxing powers).

Among quintessential legal constraints on the agency established through that thus-negotiated statutory contract between it and the three counties, as above referenced, is an absolute ceiling of \$800 million on its total long-term debt at least until its entire "Phase I" plan has been completed, as is stated as follows:

ELFEIS016-6 **Maximum Bonding Level:** To ensure that the RTA maintains a reasonable, fiscally prudent debt level, an overall long term debt ceiling of \$800 million shall be established. This ceiling represents 17% of the total Phase I capital program. This is to be compared with other major rail capital programs nationally which have utilized bonds to finance up to 50 percent of such projects. This ceiling is designed to maximize the level of tax reduction after 16 years if further capital projects are not approved, to ensure that a healthy capital program for Phase II is possible without a tax increase above the .4 sales, .3 MVET package, and to certify to the public that this project will be managed based on sound fiscal principles (*The Regional Transit System Master Plan* at page 3-10, emphasis in original, as formally adopted by the agency on October 29, 1994, and as officially approved by Pierce County Ordinance No. 94-148 on December 9, 1994 (which, in Section 2 thereof, directly "incorporated herein by reference" the complete *Master Plan*), by King County Ordinance No.

### Response to comment ELFEIS016-4

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

### Response to comment ELFEIS016-5

Your comment has been noted. Freight movement on I-90 is discussed in Section 3.8 of the Final EIS. See also Response to comment ELFEIS008-9 for a brief discussion of the differences between WSDOT's 2006 analysis and the more recent analysis contained in the 2011 Final EIS.

***Response to comment ELFEIS016-6***

The East Link Project does not propose to use any New Starts funding. The “maximum bonding level” cited in your comment was contained in the 1994 Phase 1 System Plan, which was not approved by the voters in 1995. The Phase 1 System Plan was formally rescinded by the Sound Transit Board by Resolution No. 73 adopted May 1996. Sound Transit is subject to the statutory bonding limits contained in Chapter 81.112 RCW. Sound Transit is currently authorized to incur debt in an amount equal to 1 ½ percent of the value of taxable property within the service area, without securing voter approval for bonds. With the approval of 60 percent of the region’s voters, Sound Transit may incur aggregate indebtedness of up to 5 percent of the value of taxable property within the service area.



11,603 on December 12, 1994 [which, thereby, effectuated each substantive term of the statutory contract at issue herein], and by Snohomish County Motion No. 94-436 on December 14, 1994),

Beyond this explicit contractual obligation created by the agency's formally adopted, officially approved, constitutionally operational and herein legally controlling statutory contract, its Motion No. 4's "Financial & Engineering Principles for RTA Debt Management" also further document squarely and state explicitly that "An \$800 million ceiling on long-term debt has been established in the Master Plan," as negotiated with and approved by the three counties as required to obtain local taxing authority, and still further specify directly, in an "Interpretation" section, both **how** principles for debt management "insure [sic] that no more than \$800 million of the total capital costs were funded through long term debt," and also **how** this absolute ceiling for all long-term borrowing is to remain, in place, even if it underestimated "the total capital costs," originally, during its negotiations of every obligation legally controlling the statutory contract thereby created: "If the cost of Phase I were to increase beyond present estimates, it should be assumed that the \$800 million limitation would survive any such adjustments."

ELFEIS016-6

Further, the agency's then-Board chair, Hon. Bruce Laing, clearly stated to all Board members before the formal adoption of Motion 4 that: "We do know we are limiting debt to \$800 million, and we intend to reduce that debt as rapidly as possible; it will only be that high if we have no other alternative. I think we are saying the tax rate will go down after 16 years, but this is a Master Plan that has additional phases. If the voters approve Phase II, it will affect tax rates" (official Board Minutes, February 10, 1995, at page 11, which state immediately after this exposition of the absolute limit of \$800 million on long-term debt for all of its Phase I: **"It was moved by Mr. Nickels, seconded by Mr. Miller and carried by the unanimous vote of all Board members present to approve Motion No. 4, as amended"** (bolding in the original)).

Thus, the agency's adoption and ratification of "all statements, representations, warranties, covenants and materials that it has submitted to FTA" through Ms. Earl's signature – including the "Financing Plan," identifying almost exactly three times more borrowing authority than was and is legally authorized by the binding terms of the statutory contract whereby its local taxing powers were obtained, as "accepted by the [U.S.] Government" as consideration for two full funding grant agreements providing \$1.313 billion from the federal treasury, and as specifically "incorporated by reference and made a part of this Agreement" as executed based on this huge fraud in order to obtain \$1.313 billion through its false statement – constitute violations both of federal civil laws respecting false statements and also of federal criminal laws.

Taken together, the documentation above outlined, along with the attachment and annex incorporated hereinabove, squarely indicates both that the U.S. Department of Transportation should deny a Record of Decision for the East Link Project pursuant to the nominal FEIS in view herein (due to fatal legal defects and to other lethal failures thereby demonstrated), and also the appropriateness of a criminal referral (as well as recovery of all monies obtained by the agency, through false statements, with criminal penalties).

Additionally, referrals to the Inspector General regarding the Federal Transit Administration and to Hon. Rob McKenna respecting the Washington State Department of Transportation – as co-lead agencies in the submission of a nominal FEIS containing patently fraudulent statements *vis-à-vis* purported freight mobility in the commercially quintessential I-90 element of the Dwight D. Eisenhower National System of Interstate and Defense Highways – would appear to be indicated if the Department that you lead is at all committed to protecting our country's assets and its economic security against multibillion-dollar frauds being imposed against the United States of America of those types squarely manifested in this instance, through intentional falsifications identified hereinabove, preliminarily, with rather substantial particularity.

Respectfully submitted,

Will Kneidik

No comments

- n/a -

*No comments*

- n/a -

Attachment: SEPA Appeal with Appendices A – D

Annex: *Qui tam* letter to Honorable Rob McKenna

*Nota bene*: Signed original, with attachment and with annex, to follow in hard copy format.

**Interstate 90 Users Coalition**

August 12, 2011

Honorable Rob McKenna

Office of Attorney General

Olympia, WA 98504-0100

Re: Request for defense of the Motor Vehicle Fund's integrity or for cession of lawful authority

Honorable General:

This correspondence requests your Office either to ensure reasonable values for core highway assets in the Interstate 90 corridor imperiled by a "Term Sheet" signed in August, 2010 by the Washington State Department of Transportation and by the Central Puget Sound Regional Transit Authority – as is necessary to fulfill Article II, §40 of the Washington State Constitution through preservation of all thus-protected fuel taxes deposited in and expended from the Motor Vehicle Fund pursuant to RCW 46.68.070 – or else to cede its authority to allow *qui tam* litigation to obtain market-based valuations for those critical properties funded by every fuel-tax payer, statewide, and recoveries based thereon.

The actual monetary value of central I-90 assets at issue is at least several billion dollars, today, and this already enormous amount is increasing rapidly, at present, due to fundamental economic forces lifting valuations, now, especially very major tolling initiatives (as discussed in the attached SEPA appeal of CPSRTA's nominal Final Environmental Impact Statement, for its proposed uses of those pivotal state properties, at pages 4 to 8 therein). However, WSDOT's above-noted agreement with CPSRTA would legally require the state to pay that junioertaxing district to reduce freight mobility in the commercially indispensable



No comments

- n/a -

I-90 corridor, through exclusive rail use of the center roadway, so as not only to degrade freight transport, but also to undercut our state's highly fragile economy thereby.

Thus, rather than our state receiving several billion dollars from rational prices for I-90's expensive highway assets paid for by every fuel-tax payer statewide, as urgently needed here for crumbling bridges, dangerous roadbeds and other failing transportation infrastructure, the "Term Sheet" in view compels the state to accept **less than nothing** for billions of dollars worth of assets – in violation of our state Constitution – by paying a subordinate agency, serving just parts of three of 39 counties, to degrade freight movements, in the economically quintessential I-90 corridor, at the same time when Gov. Christine Gregoire is chairing the "Connecting Washington Task Force," **personally**, because:

Effective transportation is critical to maintaining Washington's economy, environment and quality of life. However, funding for Washington's transportation system is insufficient over the long term (<http://www.governor.wa.gov/priorities/transportation/connectwa.asp>).

For nearly 60 years, your Office has correctly recognized that the state Constitution imposes a legal obligation on state officers to preserve assets acquired and developed for "highway purposes," with state fuel taxes, as constitutionally protected by Article II, §40, and as statutorily segregated into the Motor Vehicle Fund to guarantee that essential constitutional safeguard pursuant to RCW 46.68.070.

[Interstate90UsersCoalition@gmail.com](mailto:Interstate90UsersCoalition@gmail.com)

[wknedlik@gmail.com](mailto:wknedlik@gmail.com)

Thus, General Smith Troy's analysis in AGO 51-53 No. 376, on August 13, 1952, squarely stated "at the outset that if unused lands were given to a city or county for no monetary consideration it would constitute an unlawful diversion of motor vehicle funds, as such land is purchased from a definite fund provided by the motor vehicle users," and General Slade Gorton's subsequent review of that previous opinion in AGLO No. 62, on July 17, 1975, resulted in his later decision to "adopt this same analysis with respect to the question of consideration in connection with leases" (pursuant to RCW 47.12.120): *i.e.* "What, if any, monetary or other valuable consideration is necessary in order to permit the state highway department to lease or sell to a county or city land previously acquired by the department for highway purposes with moneys from the state motor vehicle fund?"

In particular, Deputy Attorney General Philip Austin explained as to any transfers of properties "not presently needed" (for "highway purposes"): "In those instances in which the highway lands (including air space) purchased with motor vehicle fund moneys are to be leased or sold to a county or city for nonhighway purposes, the purchaser or lessee, even though it is also a governmental agency, will be required to provide such monetary or other consideration as is necessary, under the particular factual circumstances involved, to avoid an unlawful diversion of motor vehicle funds."

General Gorton's averments that "where other consideration is constitutionally required, because the lands are to be used for other than highway purposes, such consideration may take various forms," and "need not necessarily be monetary or be precisely equivalent to the fair market rental or sale value of the subject lands" appear faulty, but WSDOT's failure to recover even a single penny for the tax account financed by all fuel-taxpayers, statewide, and its agreement, instead, to pay a district

No comments

- n/a -

servicing merely parts of three counties to take state assets worth billions – for **less than nothing** – go far beyond what any sane official could purport to be prudent, much less to fulfill the Washington State Supreme Court’s mandate that our state’s jurisprudence is to be constructed from “the facts of each case upon mixed considerations of logic, common sense, justice, policy, and precedent,” *King v. State*, 84 Wn.2d 239, 250 (1974), including its own *sine qua non* decision whereby it has explicitly defined “highway purposes” through *State ex rel. O’Connell v. Slavin*, 75 Wn.2d 554 (1969).

Although our state Supreme Court has recently determined that CPSRTA has obtained “nothing to establish a mandatory duty to transfer the center lanes,” on the I-90 floating bridge and across related elements of that corridor, in *Freeman v. Gregoire*, \_\_\_ Wn.2d \_\_\_, \_\_\_ (2011), follow-on litigation in Kittitas County Superior Court by Kemper Freeman and by other plaintiffs to prevent any surrender, due to Article II, §40, pleads your senior assistant Bryce Brown’s statement to our state Supreme Court, in his oral argument on September 16, 2010, that “WSDOT was committed to transferring the I-90 lanes to Sound Transit for light rail” (through the taxpayer-robbing “Term Sheet” at issue).

Hence, given extremely adverse consequences for **every** fuel-tax payer, **statewide**, request is hereby made for your Office either to ensure reasonableness in any lease, based on actual market values, or else to cede equitable, legal and other authority necessary to protect **all** such citizens across our state.

Respectfully submitted,

/s/

Will Knedlik

cc: Honorable Paula Hammond

Attachment: SEPA Appeal with Appendices A - D

# Letter ELFEIS018

James W. Maclsaac

Page 1

Honorable Ray LaHood, August 16, 2011

Page 1 of 5

August 16, 2011

Secretary Ray LaHood  
U.S. Department of Transportation  
Washington, D.C.

[Ray.LaHood@dot.gov](mailto:Ray.LaHood@dot.gov)

RE: Sound Transit East Link FEIS

Dear Secretary LaHood:

A major shortcoming of the East Link DEIS, SDEIS and FEIS is its purposeful omission of a TSM alternative that compares an optimal all-bus system for East King County to the proposed East Link build alternative.

#### NEPA requirement

Several contributors to the NEPA East Link environmental scoping in 2006 pressed for inclusion of a strong all-bus alternative. This request was reiterated in comments on the 2008 draft EIS, and in comments on a 2009 supplemental draft EIS.

In response, Sound Transit has refused to include an enhanced all-bus transit system Build alternative for East King County in the Final EIS and the expected Record of Decision. The last response from Sound Transit in the Final EIS (Response to CETA comment EL663-1) is "As no agency has adopted a policy, developed a plan, or identified funding for a high-performance express bus service for the same markets that East Link light rail is designed to serve, the described service is not reasonable and foreseeable and has not been included in the Final EIS." Sound Transit makes reference to earlier screening out of bus alternatives carried out by the agency's consultants during 2005 as part of its Light Rail Master Plan Update released during 2006 prior to the EIS scoping.

The failure to analyze a competitive bus alternative to light rail in the East Link DEIS and FEIS is a breach of the National Environmental Policy Act (NEPA). The NEPA process Section 1502.14 requires that project proponents: "Rigorously explore and objectively evaluate all reasonable alternatives. Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. Include reasonable alternatives not within the jurisdiction of the lead agency."

#### East Link LRT – A forced Choice

East Link was force-selected over other HCT alternatives for East King before an EIS process was initiated for the project. As a result Sound Transit ruled out any all-bus TSM alternatives for inclusion in the EIS process.

### *Response to comment ELFEIS018-1*

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

ELFEIS018-1



Sound Transit was created as a regional agency to promote and create a rail transit system for the three-county central Puget Sound region. In 1994 it adopted a 125-mile light rail master plan plus an 80-mile commuter Rail line from Tacoma to Everett. In 1995 its 80+ mile Phase 1 light rail program was rejected by voters. The light rail project was scaled down to a 21-mile "starter rail" line, and a Regional Express bus element was added to gain support of the suburban subareas of the Sound Transit tax area. The regional bus routes were placed on routes that over time would be replaced by extensions of the light rail system. This revised Phase 1 *Sound Move* program was adopted by voters in 1996.

In 2006 Sound Transit updated its long range regional transit plan. It devised ways to show light rail as the preferred transit mode alternative (that is its mission) and reconfirmed the 125-mile light rail system, plus further extensions, that would totally replace its Regional Express bus system. The PSRC included this LRT master plan in its subsequent MTP update since it had no other agency than the Sound Transit rail agency to look to for regional transit plans.

In a 2005 Issue Paper E-1 and its supplemental papers, Sound Transit forced a choice of LRT over the other system alternatives based on transit ridership on the I-90 trans-lake bridge crossing and the way it constructed the non-LRT alternatives. The only all-bus transit system alternative evaluated was termed the HOV/BRT alternative. Rather than constructing a bus system that could operate both on and off available priority transit/HOV facilities, Sound Transit devised a system that forced BRT to emulate LRT – operating only on exclusive BRT guideways with stations fed by local transit and park-ride access, and with BRT buses making stops at all stations (no skip stops for buses when full). To escalate the capital cost estimate of the HOV/BRT alternative, the alternative included multi-\$billion rebuilds of the SR-520 and I-90 interchanges with I-405 to provide freeway-to-freeway transit/HOV ramp systems.

As to ST's claim that LRT would serve 60% more riders on the I-90 corridor than the HOV/LRT alternative, ST's own Expert review Panel as well as many others severely criticized that finding because it did not show transit use on both trans-lake bridges. By Public Disclosure request MacIsaac obtained from Sound transit its 2030 total systemwide transit estimates together with estimates on both bridges. The estimates obtained from ST are highlighted in yellow on the following exhibit. MacIsaac prepared the combined bridge estimates in the bottom table.

The difference in systemwide transit ridership among alternatives (top table) is statistically insignificant – less than +/- 1% from systems average. Due to forced emulation of LRT for the other system alternatives, the transfer rate increased from 1.37 under No ST2 action to 1.59 average among the five alternatives. For the two bridges trans-lake transit usage today is about 60% via SR-520 (even without transit/HOV lanes on the bridge) and 40% via I-90. The HOV/LRT alternative generally maintained that ratio – the minimum time O-D patterns for trans-lake trips. The way the LRT alternative was coded for East Link, East Link forced more than a complete reversal of bridge use by transit – to 30%/70%. That is why LRT showed a far superior use of the I-90 corridor compared to the other alternatives. Though faulted by its own ERP, Sound Transit never did publish transit use estimates for both bridges in any of its supplemental papers.

See: [http://www.soundtransit.org/documents/pdf/projects/seis/1\\_I-90\\_East%20King%20County%20High%20Capacity%20transit%20Analysis%20-%20.pdf](http://www.soundtransit.org/documents/pdf/projects/seis/1_I-90_East%20King%20County%20High%20Capacity%20transit%20Analysis%20-%20.pdf)

### *Response to comment ELFEIS018-2*

Please see Section 1.3 of the Final EIS for a brief description of the process in selecting light rail as the preferred technology, including the update and environmental review process for the Regional Transit Long-Range Plan that occurred between 2004 and 2006. The East Link Light Rail Transit Project identified in ST2 was approved by voters in November 2008. Sound Transit's mission is to provide high capacity transit (both regional bus and rail service, including both light rail and commuter rail). Regional Express buses will continue to operate independent of and as a complement to light rail system as the light rail network expands. Sound Transit works closely with the PSRC and other transit agencies in the region (King County Metro, Pierce Transit and Community Transit) in planning regional transit. For a high-capacity transit (HCT) system to maximize efficiency and ridership, it should operate in an exclusive right-of-way. This is what was evaluated for Sound Transit's Long-Range Plan. Based on the analysis, the Sound Transit Board identified light rail as the mode for the East corridor.

### *Response to comment ELFEIS018-3*

Mode share information on both the I-90 and SR 520 crossings of Lake Washington is provided in Table 3-19 of Chapter 3 of the Final EIS. With the East Link Project, the transit mode share would increase by up to 25 percent across Lake Washington, while the HOV and SOV mode shares decrease. Transit transfer rate information for the No-Build and Build conditions is provided in Table 4-10 of Appendix H1. East Link would have a slightly less transit transfer rate than the No-Build alternative as East Link is planned to connect with North Link to provide a one-seat transit trip in the study area.

Sound Transit's ST Express bus service, as well as King County's transit routes, were analyzed for the level of service and operations. As shown in Table 3-7 of Chapter 3 of the Final EIS, transit service along I-90 operates about 50 percent on-time for level of service (LOS) of either E or F. Future light rail service across I-90 is expected to have a reliability of LOS A. Light

rail will also operate with more frequent headways during the peak and off-peak periods of the day compared to Sound Transit's ST Express service and operate for more hours of the day. East Link will have an overall transit travel time savings (door-to-door) of about 9 minutes compared to buses. This information is provided in Section 3.4.

**2030 Total Daily Transit Ridership -- Five East King System Alts**

Scenario	Total Linked Trips	Boardings Local Bus	Boardings HCT <sup>1</sup>	Total Boardings	Transfer Ratio
	HOV/BRT	653,700	680,600	346,400	1,027,000
Busway/BRT	654,400	677,400	368,500	1,045,900	1.60
<b>LRT</b>	<b>658,000</b>	<b>648,000</b>	<b>387,600</b>	<b>1,035,600</b>	<b>1.57</b>
Monorail	650,100	664,500	368,500	1,033,000	1.59
RC BRT	652,600	663,800	379,000	1,042,800	1.60

<sup>1</sup> Includes Regional Express Bus boardings.

Source: Sound Transit, supplement to Issue Paper E-1: I-90/East King County High Capacity Transit Analysis, March 2005.

**2030 Transit Ridership on I-90 Across Lake Washington**

	Total Daily		Pk Hour, Pk Direction		
	4-Lane SR-520	6-Lane SR-520	4-Lane SR-520	6-Lane SR-520	
	HOV/BRT	38,800	29,500	3,700	
Busway/BRT	37,900	29,400	3,700	2,900	
<b>LRT</b>	<b>58,800</b>	<b>51,500</b>	<b>5,500</b>	<b>4,500</b>	<b>70%</b>
Monorail	43,200	35,600	4,200	3,200	
RC BRT	47,400	39,400	4,600	3,600	

**2030 Transit Ridership on SR-520 Across Lake Washington**

	Total Daily		Pk Hour, Pk Direction		
	4-Lane SR-520	6-Lane SR-520	4-Lane SR-520	6-Lane SR-520	
	HOV/BRT	24,000	39,500	2,200	
Busway/BRT	25,900	41,000	2,300	3,800	
<b>LRT</b>	<b>9,100</b>	<b>18,600</b>	<b>700</b>	<b>1,900</b>	<b>30%</b>
Monorail	16,700	28,600	1,400	2,800	
RC BRT	15,000	26,900	1,200	2,600	

**2030 Transit Ridership on Both Bridges Combined**

	Total Daily		Pk Hour, Pk Direction		LRT AM Pk Hr
	4-Lane SR-520	6-Lane SR-520	4-Lane SR-520	6-Lane SR-520	
	HOV/BRT	62,800	69,000	5,900	
Busway/BRT	63,800	70,400	6,000	6,700	6,400
<b>LRT</b>	<b>67,900</b>	<b>70,100</b>	<b>6,200</b>	<b>6,400</b>	<b>70,100</b>
Monorail	59,900	64,200	5,600	6,000	3,150
RC BRT	62,400	66,300	5,800	6,200	33%

Source: Sound Transit Presentation to ERP on April 3, 2005.

Data as supplied by Paul Matsuoka on request

ELFEIS018-3

1800 Rider Shift

ELFEIS018-4

In summary, LRT was selected as the preferred alternative for the Eastside HCT system over the bus alternative by forcing the bus alternative to emulate LRT operations, focusing only on the forced shift of trans-lake transit ridership to the I-90 corridor with the LRT alternative, and assuming major multi-\$billion rebuilds of the I-90 and SR-520 interchanges with I-405 to add Transit/HOV ramp systems for the HOV/BRT alternative. The Issue Papers had little public exposure without comment periods. ST unilaterally (with support of East King rail-seeking elected officials) selected the LRT alternative for East King and forced the PSRC to include it in its MTP without focused public input on the lack of alternatives to East Link.

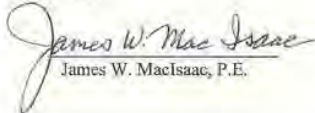
ELFEIS018-5

Today the Puget Sound region has one of the most successful bus transit systems in the country. Express buses perform their own collection/distribution services then express to destinations via the extensive Transit/HOV lane systems. One ST Express Bus route 550 between downtowns Seattle and Bellevue already provides the primary service of East Link at travel times and frequencies comparable to East Link. Other existing regional bus routes (545, 554 and 555/556) currently provide equal and in some cases better travel times between Seattle and Eastside cities compared to East Link. No attempt was made to simply expand upon the existing regional transit system as a TSM alternative to the expensive East Link project.

Secretary LaHood, we urge you and the FTA and the FHWA to require development and evaluation of a reasonable expansion of the current region's bus transit systems as an alternative to the East Link project, as required by NEPA, before you prepare and issue your RODs.

Thank you for the opportunity to comment.

Sincerely,



James W. MacIsaac, P.E.

*MacIsaac has over 45 years of professional transportation engineering experience with the planning of transportation systems in the Puget Sound region, beginning with the Puget Sound Regional Transportation Study (PSRTS) in 1965 – the first ever multi-county computerized land use and transportation study for the region. He served as the most senior transportation engineer with the Puget Sound Council of Governments when it absorbed its regional transportation functions in 1967. He later served with two international transportation consulting firms before forming his own transportation engineering firm which he managed for 20 years before going into individual consulting practice. Before and since retirement in 2003 he has served on technical committees for several regional transportation projects, including extensive monitoring of the Sound Transit regional transit programs.*

**Response to comment ELFEIS018-4**

Please see response to comments #ELFEIS018-1 and 18-2 above.

**Response to comment ELFEIS018-5**

Your comment has been noted. Please see response to comments ELFEIS018-1 and 18-2 for a discussion why the TSM and BRT alternatives were not considered in the Final EIS. Please see Section 3.4.3.2 of the Final EIS for a discussion of bus level of service and operations.



Honorable Ray LaHood, August 16, 2011

Page 5 of 5

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Cc:

Federal Transit Administrator Peter Rogoff, [peter.rogoff@dot.gov](mailto:peter.rogoff@dot.gov)

Rick Krochalis, Region X Administrator, FTA, [rick.krochalis@dot.gov](mailto:rick.krochalis@dot.gov)

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*No comments*

- n/a -

# Letter ELFEIS019

William Popp Associates

Page 1

*No comments*

- n/a -

William Popp Associates

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August 15, 2011

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**Subject: Comments on FEIS for Sound Transit's East Link Proposal**

Recipients:

The information presented herein may substantially impact the decision being contemplated with respect to Sound Transit's (ST) preferred B2M alternative as represented in the project FEIS. As a result of a review starting with *FEIS Chapter 7, Section 7.6 Review of City of Bellevue B7R Study*, we have uncovered new information and opportunities as well as heretofore unrecognized crucial mistakes, omissions, and some misrepresentations impacting the choices made in the selection of ST's preferred alternative. These new issues and opportunities were discovered by selectively reviewing information in the DEIS, SDEIS, FEIS and the City of Bellevue's B7R study (aka ARUP study or B7R/C9T study).

As you may be aware, the B7 alternative analyzed by ST in the SDEIS was B7/C9T which included a station and small garage at a remote location (118<sup>th</sup> Ave SE) and another station at Main Street on the Red Lion site with the alignment connecting directly to the Main Street tunnel portal of the 110<sup>th</sup> Ave SE C9T alignment. This is the same tunnel alignment that ST's preferred alternative B2M connects to.

The B7R/C9T alternative included a station and large garage at I-90/Bellevue Way (B7R portion), and a station at Main Street with a connection to a shortened 110<sup>th</sup> Ave SE tunnel alignment via NE 2<sup>nd</sup> Street. The B7R/C9T alternative or possible variations thereof represent the City of Bellevue's preference.

My standing to provide comments on this issue comes from 35 year residency in the impacted Enatai neighborhood, many years of professionally compensated involvement with transportation planning issues in Bellevue and the eastside of Lake Washington, and a background of regional transportation planning with the Puget Sound Council of Governments (forerunner of Puget Sound Regional Council).

Some of the foregoing comments on the FEIS are admittedly lengthy and technical but necessary to convincingly frame the issues. The comments are decidedly focused on the Segment's B and C and are as follows:

**1. Future LOS estimates on Bellevue Way are irrational.**

The ST intersection traffic analysis (Appendix H1, Sub Appendix D) shows PM peak LOS F at the South Bellevue Park and Ride lot (SBP&R) signalized intersection for 2007 (believable) and LOS D for no-build (unbelievable) as well as build in 2020 and 2030. The future year LOS estimate for no-build cannot be better than existing when there is no improvement proposed for Bellevue Way, I-405 is operating at capacity even with its assumed Master Plan improvement, the Bellevue CBD is forecast to double in trip generation, and there are frequent existing traffic congestion events in the corridor. And the ST build proposal (signal at south driveway to P&R and southbound HOV lane conversion of center turn lane) only provides an insignificant (5 sec) improvement in the LOS delay value vs no-build. This deficiency should be corrected prior to finalizing mitigation for the ROD.

ELFEIS019-1

**2. ST Forecast model problem is recognized.**

In the absence of Bellevue Way widening or significant diversion to I-405 which is at capacity in 2030, the no-build can only be better than existing if the forecast volumes are lower than existing. And that is what has apparently happened. The ST traffic forecast volumes on Bellevue Way and 112<sup>nd</sup> Ave SE are acknowledged as up to 20% "different" (translation -- lower) than the BKR volumes (see FEIS Chap 7 discussion on p.7-39). And 20% reduction in volume can cause a two level-of-service improvement which would take it from F to D. Note -- when this author made a Public Records Request for the ST forecast volumes in January 2011 (PD 10-211), the reply was these are not available, otherwise the deductive reasoning would not be necessary.

According to the FEIS Appendix H, sub Appendix A, the PSRC model modal split run and adaption and import of vehicle trip tables to Bellevue-Kirkland-Redmond (BKR) is supposed to "be consistent with the vehicle demand distribution found in the future year BKR model" -- but there is no mention of trip generation consistency. And to argue that the difference is due to diversion of SOV trips to transit trips is disproved by the no-build results and is not believable for the build either given the anemic market share of person trips that East Link actually captures. There is also no calibration documentation, or formal approval information that we have found in the FEIS.

ELFEIS019-2

It is not likely that ST's ad-hoc model would produce more credible traffic forecasts than the BKR model on which the City has spent years and millions of \$ and has produced documentation which has been periodically reviewed by a number of agencies. In addition the City bases its land use and transportation plans and programs and concurrency approvals on use of this model as do the cities of Kirkland and Redmond.

The obvious discrepancies in the ST traffic forecast should be corrected prior to finalizing mitigation for the ROD.

**3. Use of an understated forecast results in substantially understated B2M traffic impacts.**

ELFEIS019-3

**Response to comment ELFEIS019-1**

The intersection analysis was conducted according to the Transportation Methods and Assumptions Report included in Appendix A of Appendix H1 of the Final EIS. Within this report, the approaches for the travel demand forecasting and intersection analysis are described. This report and analysis was coordinated and reviewed with all cooperating agencies, including the City of Bellevue.

At the Bellevue Way SE and the South Bellevue Park and Ride intersection, Sound Transit received an existing conditions signal timing file from the City of Bellevue prior to the East Link DEIS. Since that time, the City of Bellevue has indicated they have adjusted signal operations along Bellevue Way SE. Because the existing conditions year of analysis is year 2007, no adjustments were performed to the intersection signal phasing. In the future year analysis, adjustments were performed based on the Transportation Methods and Assumptions Report and the intersection performance improved.

**Response to comment ELFEIS019-2**

The transportation forecasts in Segment B (and along Bellevue Way SE) are predicted to increase in the future as stated in Table 3-1. As the East Link project is a regional project spanning many jurisdictions, using the adopted regional PSRC model (with detailed transportation network refinements from the Bellevue-Kirkland-Redmond [BKR] model) is an appropriate travel demand forecasting approach. As part of the calibration process undertaken for the East Link project, base year data from the PSRC model was within 10 percent of existing volumes. Throughout the EIS process, the forecasts and general modeling approach was coordinated and reviewed with all cooperating agencies, including the City of Bellevue.

**Response to comment ELFEIS019-3**

Section 3.6.3 of the Final EIS describes roadway improvements included in Alternative B2M to improve access and circulation surrounding the

ELFEIS019-3	<p>ST does not acknowledge the need for any mitigation on Bellevue Way since they show future LOS D at the P&amp;R intersection, although they do discuss an optional minor fix consisting of signaling the south driveway and optionally converting the existing center two-way-turn lane south of the P&amp;R to a southbound HOV lane. But the impacts of these improvements is a very minor 5 second reduction in their delay estimates. With the existing traffic and/or the BKR forecast, improvements are needed for operation of the P&amp;R facility and mitigation of impacts on Bellevue Way and 112<sup>th</sup> Avenue corridor traffic flows.</p> <p>The traffic congestion and resulting neighborhood diversions likely to be created by the unmitigated B2M proposal will negatively impact the daily lives of thousands of residents in at least four communities, not to mention the accessibility of the retail core of the CBD. This issue is currently unrecognized and the situation needs to be corrected prior to finalizing the ROD.</p> <p>It is estimated that a new southbound GP lane is needed on Bellevue Way from the 112th wye to I-90 to provide adequate traffic operations for the existing SBP&amp;R condition as well as to address the corridor LOS needs with B2M garage operation. This independent conclusion could be accepted or verified with new forecast and LOS analysis to inform the final alignment decision and the ROD.</p>
ELFEIS019-4	<p><b>4. The impacts and cost of the added GP lane improvement represent a substantial change in the proposal.</b></p> <p>Per City of Bellevue staff, the cost of the added lane is approximately \$30 to \$40 million. This amount should be added to the B2M FEIS project cost as it is required for satisfactory operation of the P&amp;R lot, represents a substantial change to the proposal, and the implementation thereof is likely to cause significant adverse impacts (WAC 197-11-440(6)(c)(iv)) to residents, topography and flora and fauna along the bluff on the west side of Bellevue Way. Per the WAC, detail analysis of this mitigation is required.</p>
ELFEIS019-5	<p><b>5. The impacts and cost of ST's current mitigation proposals along 112<sup>th</sup> Ave north of the "Y" represent a substantial change in the proposal.</b></p> <p>The most recent mitigation proposal consists of an elevated crossing of 112<sup>th</sup> Ave SE at about SE 15<sup>th</sup> St and a west side running alignment partly elevated along Bellefield Park Condominiums and Surrey Downs with additional property and park takes and an undercrossing of SE 4<sup>th</sup> St along with a new partial trench station. Estimated cost for this revision is \$35 million. The estimated cost of this change should be added to the B2M FEIS cost for comparisons to the B7R and other alternatives.</p>
ELFEIS019-6	<p><b>6. FEIS fails to present the beneficial impacts of closure of the SBP&amp;R lot on Bellevue Way and 112th Ave SE corridors as a result of B7R.</b></p> <p>The ARUP BKR-volume-based Traffic Impact Analysis (ARUP Technical Memorandum 04<sup>1</sup>) indicates that the signalized intersection at the SBP&amp;R will operate at LOS F for AM and PM under the 2030 B7/C9T condition (existing P&amp;R in operation) and LOS B and C respectively for B7R/C9I (lot closed). It also</p>

<sup>1</sup>City of Bellevue East Link Light Rail B7/C9T to NE 2nd Portal (B7 - Revised) Alternative TM04 - South Bellevue Traffic Impact Analysis 215382/TM04 Final I June 2011

South Bellevue Park and Ride. These roadway improvements would provide a similar intersection LOS with the project compared to the No-Build Alternative.

*Response to comment ELFEIS019-4*

As described in Chapter 2 of the Final EIS and per the Sound Transit Board Resolution No.2011-10, the selected alternative does not include an additional lane on Bellevue Way SE north of the South Bellevue Park and Ride. The Final EIS transportation study reports that another lane north of the South Bellevue Park and Ride is not necessary for satisfactory operation of this facility and traffic operations around the facility.

*Response to comment ELFEIS019-5*

To follow through with Sound Transit Board's Motion M2011-62, the City of Bellevue and Sound Transit are working to develop an agreement that would provide for evaluating possible modifications to the project scope to address city goals of mitigating traffic, noise and visual impacts to the surrounding neighborhoods. The modifications must remain within the ST2 budget. The cost and effects of the possible modifications will be evaluated. If these changes are outside the range of impacts and alternatives evaluated in the Final EIS, then additional environmental review may be necessary.

*Response to comment ELFEIS019-6*

The B7R option represents suggested revisions to the B7 alternative by the City of Bellevue, as described in Chapter 7 of the Final EIS. Traffic operations along Bellevue Way SE are influenced by a variety of sources. These factors include the park and ride but also the freeway operations along I-90. Much of the traffic congestion experienced along Bellevue Way SE is created in part from the I-90 mainline conditions. As both B7R and B2M include a park-and-ride along Bellevue Way, many transportation effects are similar although the South Bellevue Station with Alternative B2M is located on the east side of Bellevue Way SE while

with B7R the station would be located within the Enatai neighborhood on the west side of Bellevue Way SE.

We rechecked the statement on page 7-39 regarding satisfactory intersection operations with Alternative B7, and the statement is correct. This statement is based on the intersection operating at LOS D in year 2030 as indicated in Appendix D (page D-5) of Appendix H1.



ELFEIS019-6

quantifies, with micro-simulation modeling, the huge PM peak hour corridor delay to the north that this existing P&R operation causes – without the added burden of a tripled lot size as per B2M.

The Memorandum also suggests that B7R protects the Enatai neighborhood from traffic diversions from Bellevue Way due to the freer operation of that corridor with the elimination of the SBP&R lot.

The FEIS (p. 7-39) incorrectly claims that the SBP&R intersection operates satisfactorily under B7/C9T and fails to present the quantified substantial beneficial impacts of closure of the SBP&R lot on Bellevue Way and 112th Ave SE corridors as a result of B7R/C9T.

**7. B7R presents a huge environmental windfall that constitutes significant new information.**

ELFEIS019-7

This is in the form of potential conversion of the 11.5 acre SBP&R lot to park and wetland for the Mercer Slough area. Since this environmental opportunity is not discussed in the ARUP studies it is not considered an FEIS omission since this is essentially new information. But it is assumed in the FEIS that the lot would close with B7R. This potential action essentially offsets all of the B7R's limited permanent park and wetland and impervious surface environmental impacts and makes up for a host of past and some future environmental takings in the Slough as well.

**8. FEIS misstates impacts on Enatai neighborhood character and traffic patterns.**

ELFEIS019-8

FEIS (p-7-39) claims the Environmental Technical Memorandum says the B7R garage and station would "substantially change the character of the Enatai neighborhood because it would add intense activity, change neighborhood views and alter traffic patterns". The Enatai neighborhood is huge at 952 residential units, within limits of the neighborhood recognized by City of Bellevue as a sub area, and by the Enatai Neighborhood Association. The actual statement deals with only the residences on the west side of 113<sup>th</sup> Avenue SE and the impact on their views and aesthetic character with merging of local residential and transit traffic at the north end of the garage. And the Traffic Impact Analysis Memorandum observes that there should be very little negative traffic impact on the south Enatai neighborhood and points out the unlikelihood of traffic diversions through the Enatai neighborhood due to B7R.

**9. Opportunities identified in the ARUP report to save substantial costs in the B7R/C9T alignment are not mentioned in the FEIS.**

ELFEIS019-9

Since costs and ridership are the principle criterion utilized by ST for the preferred alignment selection, the next several issue points are focused mainly on cost as the ridership is better than the B2M datum .

ARUP's suggestion for deleting the East Main station and realigning C9T results in a cost reduction of some \$115 million (without considering residual value for the Red Lion site or tunnel cost adjustment) And there is only a minor reduction in estimated ridership of 1000 boardings. For only \$6 million more a gently curved at-grade station abutting the future I-405 RoW could be incorporated if an ST design deviation were to be obtained.

**Response to comment ELFEIS019-7**

The City of Bellevue's B7R study did not suggest that the South Bellevue Park and Ride lot could be converted to park and wetland for the Mercer Slough area. WSDOT owns the South Bellevue Park and Ride Lot property. If the lot was closed under the B7R proposal, WSDOT may choose to use the site for other purposes and it would not automatically be available for wetland mitigation. Furthermore, preservation of existing wetlands is a preferred method of mitigation over creation of new wetlands, which is what would be required in this situation.

**Response to comment ELFEIS019-8**

As stated, this description of neighborhood effects comes from the City of Bellevue's Environmental Technical Memorandum that evaluated the B7R. Please see Sections 7.6.2.4 and 7.6.1 of the Final EIS for discussion summary of the City's analysis of how the proposed B7R station and garage would change neighborhood views and alter traffic patterns, respectively. The station and garage would be located on a bluff in the Enatai neighborhood as shown in Exhibit 7-2 of the Final EIS and would thereby increase activity in this neighborhood. The station and garage does not need to affect all elements of the neighborhood to have an effect on the character of the neighborhood.

Regarding traffic issues, the station is located within the Enatai neighborhood on the west side of Bellevue Way SE. An access road into the station is also located within Enatai and therefore provides a viable connection for park and ride users to potentially travel on within the Enatai neighborhood.

**Response to comment ELFEIS019-9**

Sound Transit worked with the City of Bellevue and ARUP to provide base cost estimating information. The City presented their estimated costs and cost saving considerations, as well as environmental effects of this combination to Sound Transit. This information is compared with the most closely represented fully studied Final EIS alternative, the B7 and



ELFEIS019-9

An additional \$15 to \$20 million savings “opportunity” is also identified by using the more appropriate corridor estimate method for the BNSF RoW versus ST’s “across the fence” method.

Initial cost reduction for the above items is \$130 to \$135 million. Because the City of Bellevue stopped the ARUP study due to budget ceiling and to inform the FEIS process, these potential cost reductions were not fully documented. But in light of the importance of costs and the changing comparison datum, the decision makers should have the advantage of that information prior to finalizing the ROD, unless there is a favorable decision on issue 12 below, which then takes precedence.

**10. The costs for B2M/C9T substantial changes and ARUP “opportunities” should be incorporated in the final alignment decision.**

B7R/C9T is noted in the FEIS as \$150 million more expensive than B2M/C9T (it is actually \$140 million). However, the added costs for B2M/C9T mitigation include Bellevue Way widening of \$35 million and an estimated cost of \$35 million for the new 112th Ave SE grade separation and west-side running proposal per issue points 4 and 5. Therefore, with say \$135 million in cost reduction opportunities for B7R and the additional mitigation costs of some \$70 million for B2M/C9T, the B7R alignment now has the cost advantage at some \$65 million (140 – 135 – 70 = 65). The decision makers should have the advantage of this information prior to finalizing the ROD, unless there is a favorable decision on issue 12 below, which then takes precedence.

**11. FEIS considers B7R/C9T costs not directly comparable to ST’s.**

This is believed to be an unstudied position on ST’s part. A great deal of effort reportedly went into maintaining an “apples to apples” comparison with the SDEIS data, even to the extent of having ST prepare the RoW estimates after ARUP had already completed theirs. In fact it is ST’s RoW estimates and practices that are the most problematic for the industry experts. But for the construction cost estimates, we found that ARUP closely followed the ST model and in those cases where the ARUP unit costs varied from ST’s, the ARUP costs were typically higher. This consultant considers that if ST were to carefully examine ARUP’s cost estimate detail it would find this to be true. Since the FEIS cites the B7R project costs as noted in issue 10 above, there is apparently a certain level of acceptance of the estimates. We consider the ARUP estimates to be representative of ST’s cost estimate practices as applied to East Link and are thus used herein for comparison and conclusion purposes.

**12. Unexplored benefits of B7R/C14E**

Costs

A B7R/C14E combination is not addressed in the FEIS due, it is believed, to late receipt of the ARUP reports. There are a number of advantages to this combination the most significant being the cost, which is lower than B2M/C11A, the ST cost datum. This astounding fact eliminates the need for Bellevue and ST to come up with some \$320 million in additional funds and/or savings for the tunnel. There would be no contribution required from the City or ST.

The cost of C14E per the FEIS is \$495 million, cheaper by \$60 million than C11A and \$295 million less than C9T. And the cost advantage of the B7R/C14E combination versus B2M/C11A, without any “opportunities” adjustment to ARUP’s B7R estimate, is now \$85 million assuming the latest B2M mitigation costs of \$70 million. Without the mitigation, the cost advantage is still positive at \$15

C9T Alternative– to the degree that information was available- in Section 7.6 of the Final EIS. As described on page 7-37 of the Final EIS, the City’s cost estimates declare that B7R would cost 10 to 14 million dollars more than the B7 to C9T alternative.

**Response to comment ELFEIS019-10**

See response to comments #ELFEIS019-04 and -05 above.

**Response to comment ELFEIS019-11**

Sound Transit worked with ARUP and provided them cost data as requested. Sound Transit reviewed the cost estimate and found that while many portions were comparable, some assumptions differed from Sound Transit’s light rail construction experience. However, Sound Transit used the cost estimates as presented for comparative purposes.

**Response to comment ELFEIS019-12**

B7R would be more expensive than Alternative B7. A B7R/C14E combination, while being within the ST2 plan budget, would have lower than average ridership. Sound Transit’s study of the right of way “opportunities” are not fully possible along the former BNSF corridor since the project must incorporate future freight/commuter rail within the right of way. Please refer to comments #13, 14 and 15 of this letter for additional responses.

LFEIS019-12

million. And with only the RoW "opportunities" adjustments to B7R, the cost advantage is \$30 to \$35 million. In other words ST could save at least \$15 to \$35 million from their baseline budget.

But a more appropriate action would be to allocate those savings for an extension of the C14E moving sidewalk to 104<sup>th</sup> Avenue which would greatly improve the 5 and 10 minute walk-shed for the NE 6<sup>th</sup> St station, and thus its ridership. The desirability of that people mover spine has been long recognized dating back to 1976 when a people mover grant application was filed with UMTA (now FTA).

LFEIS019-13

Ridership

On the ridership front, B3/C14E which is similar in stations to B7R/C14E, has a total east link ridership of 48,500 which compares favorably to 49,000 for B2M/C11A and 50,000 for B2M/C9T. The C14E downtown station attracts some 4000 riders under the B3 combo and we estimate that the station will easily pick up another 1500 - 2000 riders with an extension of the moving sidewalk west from 110<sup>th</sup> to 104<sup>th</sup> plus a walk link across the freeway on the planned extension of NE 6th St to serve the planned CBD expansion including TOD development of the auto row area. This missing NE 6<sup>th</sup> Street pedestrian link is an apparent mistake in the SDEIS and is believed to have negatively affected transit share for the NE 6<sup>th</sup> Station.

The B7R station should also increase by some 500 trips as found in the ARUP documents and which were not used for unexplained reasons. It is quite likely that B7R/C14E with some pedestrian system enhancements per above will have CBD and total system ridership that is superior to all tested alternatives. A modal split run to verify is not a significant expense.

Environmental

With the above modest adjustment to the ridership estimate, C14E is better than C11A or C9T on 17 out of the 24 total comparison criteria used in the FEIS. Construction risks and traffic impacts are substantially moderated with this combination. Regarding B7R, the FEIS does not contain full comparison data but if it did the data should be vastly superior to B2M with adjustment for the substantial environmental and traffic benefits of closure of the South Bellevue Park and Ride lot, plus recognition of the environmental benefits of the gantry construction method for crossing the Slough as discussed in the ARUP study.

ELFEIS019-14

In addition, the elimination of substantial residential takings and avoidance of direct noise and exposure impacts on four residential communities cannot be overstated in terms of social and environmental benefit. In addition the elevated C14E substantially avoids impacts on Sturtevant Creek.

With respect to noise, the B7R analysis repeated the same mistakes of the SDEIS in that a cross-over track, which is a major source of noise, is located adjacent to the first apartment complex at the south end of the BNSF corridor. In addition, most if not all, of the existing residential properties in the BNSF corridor have already been mitigated for excessive noise associated with I-405 and the prior railroad use as a condition of building permit approval. No recognition of that fact is given in the FEIS.

Conclusions

ELFEIS019-15

B7R/C14E combo is some \$15 to \$35 million less than ST's baseline B2M/C11A budget. With the needed mitigation for B2M, the theoretical difference could be as high as \$85 to \$105 million. This

*Response to comment ELFEIS019-13*

A moving sidewalk was proposed by the City of Bellevue as part of Alternative C14E to connect with the Bellevue Transit Center to provide a link to other modes of transit. A sidewalk extension to the west beyond the Bellevue Transit Center would need to be completed by another agency or private interest. Extension of this sidewalk was not considered to the east along NE 6th Street as the NE 6th Street extension project was not considered a reasonable and foreseeable assumption by year 2030. A list of the background projects assumed in the transportation analysis is provided in Appendix A of Appendix H1 of the Final EIS. This list of background projects was reviewed and coordinated with the City of Bellevue and WSDOT.

*Response to comment ELFEIS019-14*

Your comment has been noted. The B7R comparison provided in the Final EIS was based on the studies prepared by the City of Bellevue on this option.

The Noise Section 4.7 of the Final EIS has been updated since the Draft EIS to reflect the noise barriers as installed by the I-405 South Bellevue project. The location of the cross-over along the former BNSF corridor was also studied further in preparation of the Final EIS. The findings were that the cross-over could only be shifted slightly due to profile and alignment constraints in where the cross-over can feasibly be positioned. This adjustment is reflected in the current design and noise and vibration analysis in the Final EIS.

ELFEIS019-15

astounding result means there is no need for Bellevue and ST to come up with some \$320 million in additional funds and/or savings for the downtown tunnel. Accordingly, there would be no contribution required on the part of the City or Sound Transit for this alternative. The budget savings could be used to extend the moving sidewalk to the west for a likely substantial increase in boardings for Link as well as the bus system. With this feature, ridership could be superior to all other alternatives.

In addition B7R/C14E has substantial environmental and community benefits that have only been fully assessed for C14E. The FEIS does not contain full environmental comparison data for B7R, but if so, it should be vastly superior to B2M in light of the substantial benefits for the environment and traffic flow resulting from closure of the SBP&R lot and the avoidance of serious impacts on the four residential communities along Bellevue Way and 112<sup>th</sup> Avenue SE. And finally, the costs for the B7R/C14E combo are considerably more controllable than other alternatives due to the generally lower construction risks and much lower amounts of utility and traffic interference.

**11. Overall conclusion**

ELFEIS019-16

Summarizing comments 1 thru 10 above, the FEIS does not recognize the traffic forecast underestimate that exists in the Bellevue Way corridor and consequently does not identify the substantial mitigation needed to accommodate the appropriate forecast. The FEIS also does not address the mitigation along 112<sup>th</sup> Avenue SE that is currently being negotiated between ST and the City. These mitigations being negotiated and/or needed for the B2M/C9T alignment are very costly and result in more residential neighborhood impacts and takings. These revisions represent a substantial change in the proposal and introduce significant adverse impacts to residents, flora, fauna and parks along the west sides of Bellevue Way and 112<sup>th</sup> Ave SE; and these should be analyzed per SEPA rules.

ELFEIS019-17

It should be recognized that with the new B2M costs versus the cost reductions associated with East Main Station elimination in B7R/C9T, and the favorable ridership for B7R, the principle stated obstacles to the ST acceptance of B7R/C9T are eliminated. It should also be recognized that new information regarding the potential SBP&R conversion to park and wetland as well as misinformation due to erroneous data used in the EIS studies have technically reopened the discussion for a potential change in the selection of the preferred alignment.

And in that context, the parties involved in the final alignment decision should also acknowledge and deliberate the potentially immense cost savings, plus environmental, residential and business community benefits that could accrue to all by implementation of C14E with B7R.

Sincerely,

William Popp, Sr., P.E.  
[billsr@wmpoppassoc.com](mailto:billsr@wmpoppassoc.com)

***Response to comment ELFEIS019-15***

Your support for B7R and C14E has been noted.

***Response to comment ELFEIS019-16***

Responses to these concerns are addressed in the previous responses. If at any time, Sound Transit finds that the mitigation measures, which include refining design of the alignment, should result in environmental impacts not within the range of those already disclosed in the Final EIS, then Sound Transit would consider conducting additional environmental review as appropriate.

***Response to comment ELFEIS019-17***

Responses to your concerns on the environmental review and cost estimating are addressed in responses to comments ELFEIS019-01 through -14 above. Your support for the B7R/C9T and B7R/C14E has been noted.



# Letter ELFEIS020

Coalition for Effective Transportation Alternatives

Page 1

**CETA** Coalition for Effective Transportation Alternatives

August 22, 2011

Hon. Ray LaHood,  
Secretary of Transportation  
U.S. Department of Transportation  
Washington, DC

RE: July 2011 Final Environmental Impact Statement for East Link Light Rail in Seattle (FEIS), and May 2011 draft Final Interchange Justification Report (IJR) for the Sound Transit I-90 East Link Project.

Dear Secretary LaHood:

Sound Transit is proposing to make vast changes in an important segment of Interstate 90 with a new light rail line. Both the final FEIS and the draft IJR for this project attempt unsuccessfully to justify these changes.

We are writing to ask you to require FHWA and FTA to exercise their due diligence before issuance of the U.S. Government's pending dual Records of Decision on I-90 light rail between Seattle and the Eastside suburbs. We believe that analysis of an additional highway-based transit alternative is mandatory under regulations, and important to accomplish before proceeding with America's first light rail takeover of Interstate highway lanes. Insisting that Sound Transit comply with established Federal policy and procedure can only advance USDOT's adopted policy objectives. **The Interchange Justification Report is the key document here.**

CETA is an all-volunteer, pro-transit, non-partisan, non-profit citizen organization. Our mission is to support and advocate for accountable public transportation governance and investments that grow transit, vanpool, and carpool ridership throughout the Puget Sound region in the most cost-effective way.

Based on findings from research funded by FTA and others, we are convinced that retaining, expanding, and strengthening express bus service on the I-90 floating bridge between Bellevue and Seattle will work better than Sound Transit's proposed light rail service. Driven by ideology rather than sound analysis for over two decades, light rail must be able to withstand an objective alternatives analysis as required by Federal law.

In 2006, Sound Transit took the all-bus option for East Link off the table, and won't conduct alternatives analysis for this mode despite the clear regulatory requirement from NEPA and the *Interstate Access Guidelines* documented in this letter.

The East Link proposal is the first time in America that local government has requested U.S. DOT's permission to take over existing, well-used Interstate Highway and HOV/Bus lanes with light rail tracks. There may well be other projects across the country that will seek to emulate this kind of freeway lane repurposing. For this reason,

CETA c/o 4005 20<sup>th</sup> Ave West, Seattle, Washington 98199 206-781-4475

## Response to comment ELFEIS020-1

FHWA has granted the East Link project a preliminary engineering and operational acceptability approval through the Interchange Justification Report (IJR) Process, pending the EIS Record of Decision (ROD), which is included in the Final EIS as Appendix H to the Transportation Technical Report (Appendix H1 of the FEIS). The IJR process is not the FHWA ROD or an approval of the project, but rather documentation of the technical analysis to conclude if there are any engineering or operational concerns by FHWA on the proposal.

## Response to comment ELFEIS020-2

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]. For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR

Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at:

<http://environment.fhwa.dot.gov/integ/related.asp>

Honorable Ray LaHood, August 22, 2011, Page 2

CETA urges that the alternatives analysis in the FEIS or the IJR, or both, be exceptionally strong and complete. So far they are not.

**Bus-based Alternative**

Despite pleas from CETA and others, Sound Transit has ignored the potential of expanding and improving its existing Regional Express bus network to provide frequent service on multiple lines converging on the I-90 corridor. Sound Transit's short response to CETA and others making this request is,

*BRT, as an alternative for East Link, was eliminated during the ST Long Range Planning and ST 2 process. Please see Final EIS Section 1.3 - History of East Corridor. As stated in the project Purpose and Need, Section 1.1 of the Draft EIS, the purpose of the East Link Project is to expand the Sound Transit Link light rail system from Seattle to Mercer Island, Bellevue and Redmond via Interstate 90 and to provide a reliable and efficient alternative for moving people throughout the region. Light rail provides the highest level of ridership and the shortest travel times of all technologies evaluated in the corridor.*

However, a bus-based alternative would serve far more urban territory than the single light rail line that the agency is proposing, and preserve the existing functionality of I-90 at the same time. Evidence of the strength of the bus mode is seen in the MPO forecast that bus travelers originating in the Eastside suburbs in weekday morning peaks will outnumber rail travelers in 2040 by a ratio of almost two to one. This suggests the viability of strengthening the bus mode as an alternative to adding a new cross-Lake rail mode.

The no-build alternative has been weighed down with unfavorable assumptions and does not come close to representing the performance of an even moderately well designed BRT/TSM alternative. With all that is at stake on this vital Interstate Highway it is especially important for FTA and FHWA to insist on a comparison of realistic alternatives. **Rubber-stamping another comparison of an optimistic rail alternative with a straw man bus alternative would obscure more than it reveals. Too often we have seen that same type of unrealistic comparison used to hide the very trade-offs Federal requirements are designed to illuminate. This time around let's get it right.**

**Background**

Sound Transit, Central Puget Sound Regional Transit Authority, and Washington State Department of Transportation (WSDOT) are collaborating on a plan to utilize existing reversible HOV lanes of the Interstate 90 between Seattle and Bellevue, Washington for a new light rail line between Seattle, Bellevue, and Redmond. See Attachment 1 for pictures illustrating the plan.

Specifically, the proposed lane conversion requires eliminating seven connections between the Center Roadway and either the local streets or the I-90 westbound and eastbound mainline roadways. In addition, the Sound Transit plan requires a change in

**Response to comment ELFEIS020-3**

The East Link Project would close access to and from the reversible center roadway as indicated in Table 5-3 of Appendix H1 of the Final EIS. The center roadway's access locations limit the facility's vehicle capacity and throughput as these access locations are either to or from a congested freeway mainline lane or arterial traffic signals. Because of these connections, the center roadway is predicted to operate under capacity in the future. East Link, which would overall carry up to 50,000 systemwide riders per day, provides bi-directional light rail service in the center roadway.

Please see Response to comment ELFEIS008-1 for a discussion of the additional lane capacity that will be provided on the I-90 bridge by the "R-8A" project.

Sound Transit ST Express bus services as well as King County routes were analyzed for the level of service and operations. As shown in Table 3-7 of Chapter 3, transit service along I-90 operates at about 50 percent on-time for level of service (LOS) of either E or F. Future light rail service across I-90 is expected to have a reliability of LOS A.

Sound Transit's Central Link ridership has consistently increased since service implementation, and it is now much closer to predicted forecasts. The economic recession and unemployment have depressed transit ridership during the first years of Central Link ridership.

ELFEIS020-2

ELFEIS020-3



Honorable Ray LaHood, August 22, 2011, Page 3

the use of a dedicated all-bus roadway to allow joint operation with light rail, as well as relocation of an HOV direct-access off ramp.

ELFEIS020-3

The two center lanes of I-90 – called the Center Roadway -- now carry 15,000 vehicles per day, a combination of cars and buses providing approximately 21,000 person trips per day. Sound Transit wants to install train tracks that will displace all of these vehicles to other lanes of the bridge. This is a change that impacts 26% of the I-90 right-of-way width. The general-purpose lanes of this bridge are forecast to become more congested in peak periods with or without light rail.

Sound Transit generously forecasts light rail to carry 36,000 customers per day in 2030 on the I-90 segment of East Link. However, most of these customers will come from today's high quality bus service. At most 10,000 light rail customers system-wide are forecast to be new riders. That's the equivalent of two new bus routes.

The I-90 performance outlook is poor even if these numbers are accurate. And to date, Sound Transit ridership forecasts have not materialized on its rail lines.

ELFEIS020-4

Not only does the environmental analysis of the light rail alternative lack transparency, it is based on an existing WSDOT simulation model that yielded substantially different results when run by WSDOT. No attempt was made to specify and analyze a solution keeping all bridge lanes as they are now and investing instead in an express bus system combined with other transportation system management (TSM) components.

ELFEIS020-5

How can Sound Transit claims its light rail is good deal for the Seattle-Bellevue region when:

ELFEIS020-6

- There will be five miles or more of headway space between light rail cars?
- The remaining lanes of I-90 become more and more congested?
- It attracts so few new riders?
- The cost is over three billion dollars?

The public is demanding more accountability for its tax dollars. The Federal government should not accept statements about outcomes without scrutinizing the methods used to achieve those outcomes. For instance, Sound Transit makes the following claims on page 3-41 of its FEIS:

ELFEIS020-7

*By 2030, the transit mode share percentage across Lake Washington (SR 520 and I-90) would increase by up to 33 percent from the No Build Alternative. People would readjust their mode choices and choose to ride light rail because of faster travel times when compared to bus or auto modes. The overall transit mode share (combined eastbound and westbound) on I-90 alone would more than double from about a 10 and 7 percent share (AM and PM conditions) without the project to slightly over a 20 percent share with the project in both AM and PM conditions.*

**Response to comment ELFEIS020-4**

While the 2006 WSDOT I-90 Center Roadway Study and the 2011 East Link Final EIS were conducted with appropriate transportation analysis methods, the two analyses use different modeling approaches. Refer to Appendix H of Appendix H1 of the East Link Final EIS for a description and overview of the recent I-90 Transportation Studies, including the differences in modeling parameters and assumptions used in the 2006 Center Roadway Study. The East Link Project assumed a set of reasonable assumptions and methodologies that were based on decisions and agreements since the Center Roadway Study was published. Some of these differences include: the East Link analysis assuming tolling on SR 520; utilizing the latest release of the Puget Sound Regional Council's regional travel demand model at the time of analysis; incorporating Sound Transit's ridership transit forecasts into the PSRC forecasts; and assuming a different usage in the I-90 HOV lanes. Additionally, the Center Roadway Study deferred some technical efforts that the East Link project conducted in greater detail. Therefore the East Link analysis better reflects the current understanding of future travel conditions along I-90 when compared to the 2006 Center Roadway Study. Further, the Center Roadway Study confirmed the utility of the center roadway as an HCT facility with no center roadway access for vehicles. WSDOT is a co-lead for the East Link Final EIS, and the transportation analysis provided in the 2011 Final EIS was reviewed and approved by WSDOT.

**Response to comment ELFEIS020-5**

See response to Comment #ELFEIS020-2 above.

**Response to comment ELFEIS020-6**

East Link has a planned headway in the horizon year (year 2030) of trains every 7 minutes, although 4 minutes headways would be the maximum. Refer to Section 3.5 of the Final EIS for the I-90 transportation analysis that concludes more people, with similar to faster travel times, are able to cross I-90 with the East Link project compared to the No-Build

ELFEIS020-7

Honorable Ray LaHood, August 22, 2011, Page 4

When no strong feasible alternatives are allowed to be on the table, like BRT/TSM, of course their numbers sound good.

**NEPA Requirement**

CETA has been demanding analysis of a strong bus alternative while participating in the East Link NEPA process since 2005. We asked for this in the 2006 East Link environmental scoping process, in comments on the 2008 draft EIS, and in comments on a 2009 supplemental draft EIS. In response, Sound Transit has refused to include an enhanced bus and TSM program in their alternatives analysis. The last response from Sound Transit to CETA in the Final EIS (Response to our comment EL663-1) is

*As no agency has adopted a policy, developed a plan, or identified funding for a high-performance express bus service for the same markets that East Link light rail is designed to serve, the described service is not reasonable and foreseeable and has not been included in the Final EIS.*

**There has never been a side-by-side analysis of a light rail system with an enhanced bus system that builds on a type of funded service that Sound Transit already operates. This fallacious argument must end now.**

The failure to analyze a competitive bus alternative to light rail in the East Link draft EIS is a breach of the National Environmental Policy Act (NEPA). The NEPA process Section 1502.14 requires that project proponents:

*Rigorously explore and objectively evaluate all reasonable alternatives. Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. Include reasonable alternatives not within the jurisdiction of the lead agency.*

.FEIS020-8

As documented in CETA's previous correspondence in the environmental process, there is ample reason to believe that a bus and HOV alternative – a form of TSM, or transportation system management—would perform better than the preferred light rail alternative. The existing I-90 HOV lanes in the Center Roadway could potentially be used to meet the East Link project's mobility goals. If the preferred light rail alternative is such a good one, then Sound Transit should welcome a true alternatives analysis.

Council on Environmental Quality's (CEQ) comments explaining NEPA indicate that Sound Transit is out of compliance in its FEIS for East Link:

*Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is 'reasonable' rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.*

alternative. The East Link project will carry up to 50,000 daily riders of which 10,000 of them are considered to be new transit riders.

**Response to comment ELFEIS020-7**

Please refer to Table 7-1, Chapter 7 of the Final EIS, Response to Common Comment CC1a regarding why BRT was not evaluated in the East Link EIS. Please also refer to response to comment #ELFEIS020-2 above.

**Response to comment ELFEIS020-8**

In comments on the Draft EIS and SDEIS, CETA requested that an enhanced bus system be analyzed as part of the No Build alternative. As discussed in Section 2.3.1 of the Final EIS, the “No Build Alternative includes a variety of project, funding packages, and proposals in the central Puget Sound region. The projects primarily consist of funded or committed roadway and transit actions by state, regional and local agencies combined with other projects that that are likely to be implemented based on approval and committed funding.” Since no plans have been developed for an enhanced bus system as suggested, it is not appropriate to include such a system in the No Build analysis. This is consistent with NEPA requirements.

As described in the response to comment ELFEIS020-2 above, while an enhanced bus or BRT alternatives to light rail technology was not included in the “no-build” alternative review in the FEIS, TSM and enhanced bus/BRT were evaluated during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled “East Corridor High Capacity Transit Mode Analysis History” (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]]. For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). Please also refer to Table 7-1, Chapter 7 of the Final EIS, Response to Common Comment CC1a regarding why BRT was not evaluated in the East Link EIS. For the extensive reasons discussed in this

planning history of the project, these alternatives were not brought forward into the EIS process.

As part of the Interchange Justification Report (IJR) Process, the technical team of engineers and planners that evaluated the merits of the East Link IJR was provided the alternatives considered but rejected through Sound Transit's long-range planning process. This included a BRT/TSM alternative and is documented in Policy Point 2 (Alternatives) of the East Link IJR.

Honorable Ray LaHood, August 22, 2011, Page 5

The no-build alternative that has been analyzed by the light rail proponents in the East Link Final EIS includes only a weak bus transit configuration, an extrapolation of the present public transit system.

The public transit aspects of the current no-build alternative are deliberately constrained to be non-competitive with the performance of Sound Transit's light rail. The present no-build alternative is not the strong all-bus alternative that transit-planning professionals at Sound Transit and King County Metro could create if they were ordered to do so. The lack of a strong bus alternative using the present I-90 bridge center roadway and the other segments of this corridor violates common sense in light of the challenges of constructing a new passenger railroad on a floating bridge and through residential neighborhoods.

**IJR Requirement Even Stronger**

*FHWA Interstate Access Guidelines* posted on the Internet are also clear that a physical change of this magnitude in the use of an Interstate highway requires analysis of a transportation system management (TSM) alternative at the level of detail of the preferred light rail alternative.

*Interstate System Access Change Requests need to address the appropriate issues and provide the information necessary to allow the FHWA to make an informed decision considering the potential consequences of a change in access.*

A TSM alternative would use enhanced bus service, other high occupancy vehicles, tolling, signal priority, and queue jumper lanes on the existing right of way and adjacent arterials without the considerable construction and disruption needed for installing light rail tracks.

The *FHWA Interstate Access Guidelines* call for eight policy points to be addressed. Point number two requires documenting that

***The need being addressed by the request cannot be adequately satisfied by reasonable transportation system management (such as ramp metering, mass transit, and HOV facilities), geometric design, and alternative improvements to the Interstate without the proposed change(s) in access (23 CFR 625.2(a)).***

The draft Interchange Justification Report for this proposed change to I-90 does not include an analysis of a transportation system management option. Instead, the East Link draft IJR from Sound Transit states clearly,

***Analysis of alternatives and options is included in Draft Environmental Impact Statement (EIS), and this document supports only the preferred alternative identified by the Sound Transit Board in June 2010.***

Of course the problem, Mr. Secretary, is that the Sound Transit Final EIS also fails to evaluate a TSM alternative, as we indicated earlier.

*No comments*

- n/a -

.FE15020-B



Honorable Ray LaHood, August 22, 2011, Page 6

**Apparent Conflict of Interest**

The record is clear that justifying light rail was a predetermined outcome of the IJR process, not only from Sound Transit, but also WSDOT and FHWA. CETA holds an electronic copy of an existing project management plan from the East Link IJR government-consultant team that states:

*This project Management Plan covers the work conducted for the Interstate 90 Interchange Justification Report (IJR) related to changes in access along I-90... necessitated by the extension of light rail from Seattle to the eastside via I-90.... The IJR Core Team will work collaboratively to develop an Interchange Justification Report for Sound Transit's East Link project that will provide the necessary analysis and documentation to support a Finding of Engineering & Operational Acceptability. This effort will enable the project to move forward with confidence into its next phase.... Consistent with the guidance provided in WSDOT Design Manual Section 1425 governing Interchange Justification Reports, the project will be facilitated through analysis to a finding of engineering and operational acceptability using a 'Core' team of technical staff from stakeholder agencies [in this case Sound Transit, WSDOT, FTA, & FHWA].*

The letter from the FHWA Region 10 Administrator to the Washington Secretary of Transportation on June 22 (Attachment 2) finding the draft IJR acceptable is theatrical because the FHWA signature is from one of the IJR core team just described.

The private sector consultants on the IJR, CH2MHill, are the same consultants that provided analysis of traffic for the East Link Light Rail EIS, and in fact the analysis of the EIS and IJR overlap.

This cooperation between the project advocates at Sound Transit and the stewards of Washington State's main east-west highway at WSDOT and FHWA showed a significant conflict of interest in reversing earlier contradictory results. IJR modeling results claim improved general-purpose traffic speeds with light rail compared to the No Build alternative. This claim is in conflict with the 2006 WSDOT I-90 Center Roadway report. That study indicated a 13% increase in general-purpose travel times with the "exclusive" (light rail) use of the center roadway. Using the same model but with different assumptions, Sound Transit claims the opposite: with light rail, general-purpose travel times decreased by 15%.

The same Sound Transit undocumented revisions of the 2006 WSDOT model has also led to the improbable conclusion that trucks on I-90 will find traffic conditions improved compared with light rail compared to no build. But even if true, this conclusion is not compared to the results on trucking for a transit alternative that does not require removing 26% of the highway right-of-way.

**Conclusion**

Federal as well as regional policy goals call for actually improving transportation system performance, not just building expensive rail projects. A careful review of all the

**Response to comment ELFEIS020-9**

WSDOT's Design Manual Chapter 550 includes the procedures and organization of the Interchange Justification Report (IJR) team. The East Link Project followed these steps in conducting the IJR process.

As part of the IJR Policy Points, it is considered appropriate to have a similar analysis conducted for the project's EIS and IJR. Both of these documents rely on a similar analysis and methodology, therefore if the EIS and IJR are being conducted within a similar timeframe they are usually based on the same set of reasonable and acceptable assumptions.

Similar to responses to earlier comments, the 2006 WSDOT I-90 Center Roadway Study and the 2011 East Link Final EIS were conducted with appropriate transportation methods. The two studies use different modeling approaches and methodologies. These are documented in Appendix H of Appendix H1. This Appendix provides a description and overview of the recent I-90 transportation studies, including the differences in modeling parameters and assumptions used in the 2006 Center Roadway Study. The Center Roadway Study confirmed the utility of the center roadway as an HCT facility with no center roadway access for vehicles.

**Response to comment ELFEIS020-10**

See response to Comment #ELFEIS020-2 above. The project has complied with NEPA and other appropriate regulations.

ELFEIS020-9

ELFEIS020-10

Honorable Ray LaHood, August 22, 2011, Page 7

prior studies (including their erroneous assumptions and omissions) leads to the inescapable conclusion that conversion of the center roadway of I-90 to light rail is a very poor choice.

The system capacity for all modes on I-90 lost to light rail would be far more effectively used by other transit modes, in particular, high quality, higher frequency bus service with TSM improvements in other parts of the corridor. A bus/TSM alternative would have the additional advantages of much lower risk, lower cost, and swifter implementation.

If conformity to USDOT policy and achievement of regional goals are compatible objectives of East Link, there is no justification for approving light rail while failing to perform the required comparison with a credible alternative.

**In summary, compliance with Federal regulations will result in a superior outcome.**

Given the serious problems Sound Transit has had with prior planning work, why isn't USDOT insisting on compliance with planning requirements for this phase of the program?


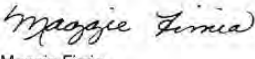
Every one of the characteristics of East Link light rail that stem from criticism of the existing bus system could be met sufficiently, more cost-effectively, and sooner than the proposed timeframe for East Link light rail construction by an upgraded, well-designed express bus system operating on actively-managed HOV lanes on arterials and expressways, with road user fees as needed. Such an alternative should be thoroughly covered in both East Link Records of Decision, the one from FHWA, and the one from FTA.

The Public is expecting their government to do the right thing, to follow its own rules. Ignoring established process and allowing unjustified outcomes fuels public dissent and discontent.

We implore you and your agency to refrain from being boosters of local projects that cost so much and do so little for public transit. Please order FHWA and FTA to include an independent, strong bus/TSM alternative in the East Link ROD. It should be well described, transparent and a truly objective quantitative analysis.

The Public asks for this requirement and deserves no less.

Respectfully yours,


  
 John Niles                      Maggie Fimia  
 CETA Technical Co-Chairman      CETA Co-Chair

*No comments*

- n/a -

LFELIS020-10



Honorable Ray LaHood, August 22, 2011, Page 8

*No comments*

- n/a -

Attachments:

Graphics depicting project  
Letter from FHWA Region X to WSDOT tentatively accepting the IJR

Cc.

Hon. Patty Murray, U.S. Senate	Hon. Maria Cantwell, U.S. Senate
Hon. Jim McDermott, U.S. House of Representatives	Hon. Dave Reichert, U.S. House of Representatives
Hon. Curtis King, Washington State Senate	Hon. Don Davidson, City of Bellevue
Hon. Don Gerend, City of Sammamish	Hon. Steve Buri, City of Newcastle
Federal Transit Administrator	Federal Highways Administrator
FTA Region X Administrator	FHWA Region X Administrator
Washington State Secretary of Transportation	Sound Transit Chief Executive Officer

Honorable Ray LaHood, August 22, 2011, Attachment 1

Map of I-90 corridor location for light rail from the East Link Final EIS

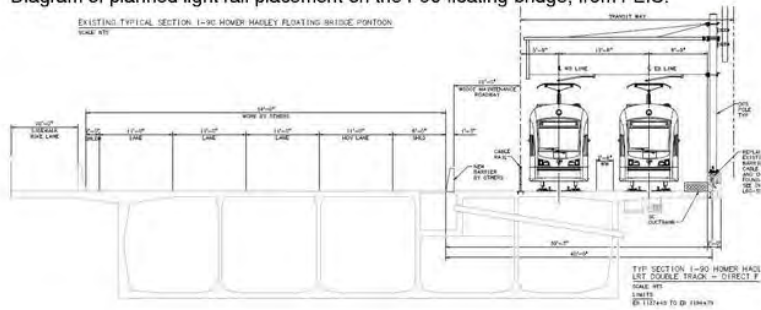


FIGURE 2-5  
East Link Project - Segment A

WSDOT photograph of I-90 floating bridges from Seattle perspective looking toward Bellevue



Diagram of planned light rail placement on the I-90 floating bridge, from FEIS:



No comments

- n/a -

Honorable Ray LaHood, August 22, 2011, Attachment 1

*No comments*

- n/a -

Sound Transit photo simulation of light rail operating on the I-90 floating bridge





Honorable Ray LaHood, August 22, 2011, Attachment 2

U.S. Department of Transportation  
Federal Highway Administration

Washington Division

Suite 501 Evergreen Plaza  
711 South Capitol Way  
Olympia, Washington 98501-1284  
(360) 753-9480  
(360) 753-9889 (FAX)  
<http://www.fhwa.dot.gov/wadiv>

June 22, 2011

HDE-WA/560/WA 624

Ms. Paula J. Hammond  
Secretary of Transportation  
Department of Transportation  
Olympia, Washington

Attention: Barb De Ste Croix

**Sound Transit – I-90 East Link Project  
Final Interchange Justification Report**

Dear Ms. Hammond:

This letter is in response to your June 20, 2011, request for a finding of engineering and operational acceptability for the Sound Transit I-90 East Link Interchange Justification Report (IJR). The project, in part, incorporates interchange modifications and closures within the I-90 center roadway to allow Sound Transit's East Link light rail project to use the I-90 reversible express lanes from MP 1.99 to MP 9.44. In addition, part of this project, incorporates comprehensive changes to I-90, including HOV access and lane modifications resulting from the I-90 Two-Way Transit and HOV Operations Project that form the ultimate configuration of I-90 between the cities of Seattle and Bellevue. We have compared the final IJR to previous drafts and find that it satisfies the requirements of the FHWA Interstate Added Access Policy.

Based on an engineering and operations review, the access request is considered acceptable. However, the general purpose left-hand on ramp connecting Island Crest Way to the WB I-90 HOV lane is a safety issue. The AASHTO Greenbook, *A Policy on Geometric Design of Highways and Streets*, discourages the use of left-hand on and off ramps. This access point should be monitored and closed to single occupant vehicles use if significant collision frequency and severity begin to occur. In addition, ramp metering must continue at this location.

If there are no major changes in the design of the proposal, final approval may be given upon the completion of the environmental process. Please submit a request for final IJR approval at the completion of the NEPA process.

Sincerely,

DANIEL M. MATIUS, P.E.  
Division Administrator

By: Donald A. Peterson  
Division Safety/Design Engineer

Enclosure

cc: Ed Barry, MS TB-85, LeRoy Paterson, MS 47336

No comments

- n/a -

# Letter ELFEIS021

Alfred Cecil

Page 1

**From:** Alfred Cecil [<mailto:awcecil@yahoo.com>]  
**Sent:** Monday, August 15, 2011 11:37 AM  
**To:** Witmer, John (FTA)  
**Subject:** Sound Transit FEIS comments

**From:** Alfred Cecil <[awcecil@yahoo.com](mailto:awcecil@yahoo.com)>  
**To:**  
**Sent:**  
**Subject:**

Summary of my comments on the FEIS and related issues.

## ISSUES REQUIRING RESOLUTION BEFORE FTA APPROVAL.

- ELFEIS021-1 1) Explanation why no alternative was considered for segment A
  - ELFEIS021-2 2) Certification that rails can be placed across floating bridge expansion joints by recognized independent engineering consulting firm.
  - ELFEIS021-2 3) Full disclosure of all costs on the chosen B segment (B2M) including noise mitigation, guideway support through the wetland portion east of Bellevue and 112th SE and ground water control to be verified by an independent auditing agency.
  - ELFEIS021-3 4) Certification that Winters house structural integrity will not be compromised from vibration due to close proximity (30') to railbed.
  - ELFEIS021-4 5) Certification that traffic congestion can be mitigated during construction by closure of one lane of Bellevue Way with traffic flow analysis done using a recognized prediction model such as the BKR model.
  - ELFEIS021-5 6) Description of transit parking alternative due to closure of the South Bellevue Park and Ride lot.
  - ELFEIS021-6 7) Identification of property to be exchanged to compensate for the taking of parkland East of Bellevue Way.
  - ELFEIS021-7 8) Certification that Sound Transit has the financial resources to complete entire phase 2 project. (segments A thru D).  
If not and the line has to be terminated prematurely does the truncated line have sufficient ridership to be economically viable. A plan should be presented explaining how the uncompleted portion will be funded and an estimation of the delay in completion.
  - ELFEIS021-8 9) Noise and vibration mitigation:
    - a) A plan is needed to properly mitigate the residences affected consistent the city of Bellevue's noise ordinance.
    - b) A more effective and permanent solution to wheel squeal other the rail lubrication such as train drive mechanism modification needs to be identified and implemented.
- Respectively submitted  
Alfred Cecil, Bellevue Washington

## Response to comment ELFEIS021-1

The purpose of the East Link project is to expand Sound Transit's Link Light Rail system from Seattle to Mercer Island, Bellevue, and Redmond via I-90 and to provide a reliable and efficient alternative for moving people throughout the region. Alternatives to light rail technology, including TSM and enhanced bus/BRT, were evaluated and eliminated from further review during the Sound Transit Long-Range Planning and ST2 development process. The history of this planning process is documented in the report titled "East Corridor High Capacity Transit Mode Analysis History" (August 2006) and discussed in Section 1.3 of the Final EIS [Purpose and Need]). For example, as described on page 21 of the Mode Analysis History report, the 1993 the Regional Transit System Plan Final EIS evaluated eastside alternatives that included converting the I-90 center roadway to a two-way busway (the TSM alternative). During the scoping process for the East Link EIS in 2006, the Mode Analysis History report was available for review and public comment was invited on the draft Purpose and Need Statement for the East Link EIS. FTA considered the mode analysis planning history and comments received during the scoping process before finalizing the East Link Purpose and Need. FTA, as lead federal agency, determined that planning level decisions regarding mode (LRT) and corridor (I-90) would be incorporated into the purpose and need, consistent with federal rules and guidance for linking the transportation planning and NEPA processes (see 23 CFR Sections 450.212 and 450.318 and Appendix A to Part 450 – Linking the Transportation Planning and NEPA Processes, Final Rule (Federal Register: February 14, 2007, Vol. 72, Number 30) and guidance found at: <http://environment.fhwa.dot.gov/integ/related.asp>

The technical issues associated with the I-90 floating bridge are discussed on pages 2-22 and 2-23 of the Final EIS, including the finding by the independent review team commissioned by the Washington State Legislature Joint Transportation Committee that "all issues identified as



potentially affecting feasibility can be addressed through proper design measures.”

***Response to comment ELFEIS021-2***

Your comment has been noted. Costs to implement mitigation measures were included as part of the cost estimates prepared for the Final EIS as described in Section 2.6.2.

***Response to comment ELFEIS021-3***

Please see page 6-20 of Appendix H2 to the Final EIS for a detailed discussion of vibration impacts at the Winters House during operation of *Preferred Alternative B2M*. The operational vibration levels at this location are projected to be 76 VdB, which would be below the FTA detailed impact criteria of 78 VdB for human annoyance and well below the 94 VdB criteria for structural damage.

***Response to comment ELFEIS021-4***

Please see Section 3.6.4.2 of the Final EIS for a discussion of Roadway and Parking impacts during construction. The transportation analysis methodology and assumptions, specifically the modeling approach for this project, is described in detail in Appendix A of Appendix H1 of the Final EIS. In summary, as the East Link project is a regional project spanning many jurisdictions, the adopted regional PSRC model (with detailed transportation network refinements from the Bellevue-Kirkland-Redmond [BKR] model) was utilized for the travel demand forecasting. Construction period impacts, that were determined using this model, are discussed in Section 3.6.4 of the Final EIS. Mitigation measures for the Preferred Alternative are also in Appendix I of the Final EIS and in Attachment C to this Record of Decision.

***Response to comment ELFEIS021-5***

Mitigation details for temporary closure of the South Bellevue Park and Ride have not yet been identified, but will be during the final design process. The Section 6(f) analysis in the Final EIS considers replacement property of lands that have been funded for acquisition or improvement through Land Water Conservation Fund grants, such as the Mercer Slough Nature Park. Please see Section D.8 of Appendix D to the Final EIS for a discussion of Section 6(f) impacts.

***Response to comment ELFEIS021-6***

As described in Section 4.17 of the Final EIS, mitigation for parkland impacts would be through financial compensation or replacement property. Mitigation commitments will be implemented during final design, construction, and/or operation of the East Link project.

***Response to comment ELFEIS021-7***

Funding resources for the East Link Project (Seattle to Overlake Transit Center – Segments A through D) is described in Section 2.6.1 of the Final EIS. Depending on funding resources, the extensions beyond Overlake Transit Center may have to be incorporated into future funding packages which would require a public vote.

***Response to comment ELFEIS021-8***

Section 4.7 and Appendix H2 of the Final EIS address wheel squeal and provide the noise and vibration analysis and appropriate mitigation. The methodology for impact analysis is from the Transit Noise and Vibration Impact Assessment Manual (Federal Transit Administration [FTA], revised May 2006). These criteria are used for all federally funded high-capacity transit projects. Construction noise, parking facilities and maintenance facilities would be required to meet the noise regulations of local jurisdictions.

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**Cc:** [alain@schwabe.com](mailto:alain@schwabe.com); Bill, Sr ; Bill, Sr ; Brooks Beaupain; [geoffreybidwell@yahoo.com](mailto:geoffreybidwell@yahoo.com); Joe Rosmann; Liz Baxter; Renay Bennett; Stacie LeBlanc; Wendy Jones  
**Subject:** Noise Mitigation Commentary

ADDITIONAL COMMENTARY ON SOUND TRANSIT'S EASTLINK FIES

Analysis of Sound Transits assessment of noise mitigation required for the B2M/ C11A and B7 alternative as presented in appendix H shows the following comparison between the two alternatives using FTA criteria.

remaining to mitigated	Total Units	Units requiring mitigation	Units currently mitigated	Units be
B2M/ C11A	159	81	0	81
B7	201	172	156*	16

ELFEIS021-9

It is also noted that B7 is unnecessarily penalized by the placement of a crossover near the Emerald Rodge Condominiums. This is not appropriate and can be located elsewhere to minimize impacts to the residential units along the corridor.

\* The condos and apartments adjacent to the BNSF railway are understood to have been mitigated because of proximity to 1405.

Respectfully submitted  
 Alfred Cecil

*Response to comment ELFEIS021-9*

The location of the crossover on Alternative B7 was evaluated during conceptual design and it was determined that the proposed location was the most appropriate because of topographical constraints and design criteria. The locations of all cross-overs, including this one, have been reviewed by the designers to minimize potential noise exposure at residential properties, while accommodating the operational needs of the system.