



November 12, 2010

Dear Recipient:

The U.S. Department of Transportation Federal Transit Administration (FTA), Sound Transit (the Central Puget Sound Regional Transit Authority), and Washington State Department of Transportation (WSDOT) have prepared this Supplemental Draft Environmental Impact Statement (SDEIS) on the proposed East Link light rail transit project. This project is part of Sound Transit 2, the Regional Transit System Plan for Central Puget Sound. Sound Transit is the project proponent.

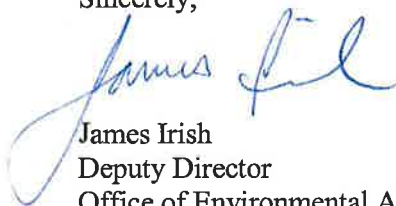
The SDEIS has been prepared pursuant to the National Environmental Policy Act (42 U.S.C. 4321 to 4370e) and the State Environmental Policy Act (Ch. 43.21C RCW). It has been prepared to inform the public, agencies and decision makers about the environmental consequences of building and operating the East Link extension of the light rail system from downtown Seattle to Mercer Island, Bellevue, and Redmond via Interstate 90.

The SDEIS evaluates new alternatives and project refinements that have been developed since publication of the 2008 Draft EIS. This SDEIS will be combined with the 2008 Draft EIS. FTA, Sound Transit and WSDOT will then prepare the East Link Final EIS. The Sound Transit Board will consider the Final EIS, public comment, and other information before selecting the route and station locations. After completion of the Final EIS, the Sound Transit Board will select the project to be built. The FTA is then expected to issue a Record of Decision, which will state FTA's decision on the project and list Sound Transit's mitigation commitments to reduce or avoid impacts.

In addition to this SDEIS, a separately bound appendix with conceptual engineering drawings of the new and modified alternatives is also available. Please see the Fact Sheet for information on how to obtain copies of this document, the public meeting and hearing and how to comment on this document.

For additional information about this SDEIS, please contact Kent Hale, Senior Environmental Planner at (206) 398-5103 or [kent.hale@soundtransit.org](mailto:kent.hale@soundtransit.org).

Sincerely,



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EAST LINK LIGHT RAIL TRANSIT PROJECT  
SEATTLE, WASHINGTON

SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

Submitted pursuant to  
The National Environmental Policy Act (NEPA) (42 U.S.C. 4322 (2)(c))  
and the State Environmental Policy Act (SEPA) (Ch. 43.21 C RCW)  
by the

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION  
and

CENTRAL PUGET SOUND REGIONAL TRANSIT AUTHORITY (SOUND TRANSIT)

and

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION  
(For SEPA)

In cooperation with

FEDERAL HIGHWAY ADMINISTRATION  
CITY OF SEATTLE  
CITY OF MERCER ISLAND  
CITY OF BELLEVUE  
CITY OF REDMOND  
KING COUNTY  
U.S. ARMY CORPS OF ENGINEERS  
U.S. COAST GUARD

10/18/2010  
Date of approval

*for* Sinda M. Gehlke

R. F. Krochalis, Regional Administrator  
For Federal Transit Administration, Region 10

10/18/2010  
Date of approval

Perry Weinberg

Perry Weinberg, Director, Office of Environmental Affairs and Sustainability  
For Central Puget Sound Regional Transit Authority

10/18/2010  
Date of approval

Megan White

Megan White, Director of Environmental Services  
For Washington State Department of Transportation



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Perry Weinberg

Perry Weinberg, Director, Office of Environmental Affairs and Sustainability  
For Central Puget Sound Regional Transit Authority

10/18/2010  
Date of approval

Megan White

Megan White, Director of Environmental Services  
For Washington State Department of Transportation

## Abstract

The Central Puget Sound Regional Transit Authority (Sound Transit) proposes to construct and operate the East Link Light Rail Transit Project (East Link Project), an eastern extension of the Central Link light rail system. The East Link Project would serve the regional destinations of Downtown Seattle, Mercer Island, Downtown Bellevue, Overlake, and Downtown Redmond.

This Supplemental Draft Environmental Impact Statement (SDEIS) supplements the 2008 Draft EIS. In July 2010, the Sound Transit Board identified the preferred alternative for the Final EIS. The new alternatives evaluated in this SDEIS include the following:

- *Preferred 112th SE Modified Alternative (B2M)*
- *Preferred 108th NE At-Grade Alternative (C11A)*
- *Preferred 110th NE Tunnel Alternative (C9T)*
- 110th NE At-Grade Alternative (C9A)
- 114th NE Elevated Alternative (C14E)

Design modifications evaluated in this SDEIS include:

- Alternative B3 - 114th Extension Design Option (B3 114th Design Option)
- BNSF Alternative (B7)
- *Preferred NE 16th At-Grade Alternative (D2A)*, which includes two new design options: 120th Station At-Grade Design Option and NE 24th Design Option
- *Preferred Marymoor Alternative (E2)*, modified to include a relocated station in downtown Redmond

The analysis in this SDEIS on the new alternatives and design modifications focuses on those elements of the environment where project changes resulted in an increase in impacts beyond the impacts evaluated in the 2008 Draft EIS or in major changes in impacts and/or benefits from those analyzed in the 2008 Draft EIS. This SDEIS evaluates potential long-term and short-term impacts related to Transportation; Acquisition, Displacements, and Relocations; Economics; Visual and Aesthetics; Noise and Vibration; Ecosystems; Geology and Soils; Historic Resources; and Parkland and Open Space. Information and analysis presented in this SDEIS will be incorporated into the Final EIS. In addition, this SDEIS evaluates changes to the project regarding the historical nature of the Interstate 90 (I-90) Floating Bridge.

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# Acronyms and Abbreviations

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APE	Area of Potential Effect
ARMTP	Archaeological Resources Monitoring and Treatment Plan
CFR	Code of Federal Regulations
DAHP	Washington Department of Archaeology and Historic Preservation
dB	decibel
dBA	A-weighted decibel
Draft EIS	Draft Environmental Impact Statement
East Link Project	East Link Light Rail Transit Project
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
Final EIS	Final Environmental Impact Statement
FTA	Federal Transit Administration
GIS	geographic information system
HCT	high-capacity transit
HOV	high-occupancy vehicle
I-405	Interstate 405
I-90	Interstate 90
KOP	key observation point
Ldn	24-hour, time-averaged, A-weighted sound level (day-night)
Leq	equivalent continuous sound level
Lmax	maximum noise level
LOS	Level of Service
MOA	Memorandum of Agreement
mph	miles per hour
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
PSRC	Puget Sound Regional Council
RCO	Washington State Recreation and Conservation Office
RCW	Revised Code of Washington
ROD	Record of Decision
RTA	Regional Transit Authority
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users
SDEIS	Supplemental Draft Environmental Impact Statement
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Officer
Sound Transit	Central Puget Sound Regional Transit Authority
SR	state route
ST2	Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound
TPSS	traction power substation
U.S.C.	United States Code
USDOT	United States Department of Transportation
VdB	vibration decibel
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation



# Fact Sheet

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## Proposed Action

The Central Puget Sound Regional Transit Authority (Sound Transit) proposes to construct and operate an extension of its electric light rail transit system that would improve transportation connectivity between Seattle, Mercer Island, and the east side of Lake Washington to Bellevue and Redmond. The proposed light rail extension, known as the East Link Light Rail Transit Project (East Link Project), would cross Lake Washington in the center lanes of Interstate 90 (I-90) and would operate in a dedicated right-of-way between Seattle and Redmond. The East Link Project is included in Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound (ST2 plan), also known as the Mass Transit Expansion proposal, which was approved by the voters in November 2008.

The East Link Project corridor is approximately 18 miles long and has been divided into five segments along distinct geographic boundaries: Segment A, Interstate 90 (Seattle to Mercer Island and Bellevue via I-90); Segment B, South Bellevue (I-90 to Downtown Bellevue); Segment C, Downtown Bellevue; Segment D, Bel-Red/Overlake (Downtown Bellevue to Overlake Transit Center); and Segment E, Downtown Redmond (Overlake Transit Center to Downtown Redmond). Alternatives considered include 24 build alternatives (one in Segment A, six

in Segment B, ten in Segment C, four in Segment D, and three in Segment E), the No Build Alternative, and four maintenance facility alternatives (three in Segment D and one in Segment E). Each alternative route includes one to four stations; a total of 29 station options exist in the five segments. The segment alternatives would be linked to create a complete, operable light rail system that would connect with the Central Link light rail system at the Chinatown/International District Station in Downtown Seattle. The East Link Project is included in the ST2 plan, which was adopted by the Sound Transit Board in July 2008 and approved by the voters in November 2008. The ST2 plan funds construction and operation of the portion of the East Link Project from Seattle to the Overlake Transit Center Station (Segments A through D). The East Link Project may be constructed in phases, depending on available funding or other factors. Sound Transit anticipates that any station including and beyond the last station in Segment C could be considered an interim station. The minimum planned project would be to open East Link from Seattle to the Hospital Station (Segments A through C). This Supplemental Draft Environmental Impact Statement (SDEIS) reviews project changes to what was evaluated in the 2008 East Link Project Draft Environmental Impact Statement (Draft EIS).

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## Project Proponent

Sound Transit (Central Puget Sound Regional Transit Authority)  
Union Station  
401 South Jackson Street  
Seattle, Washington 98104  
[www.soundtransit.org](http://www.soundtransit.org)

## Dates of Construction and Opening

Sound Transit plans to begin construction of East Link by 2013-2014. The project may be constructed in phases, with the segment to Bellevue planned for opening by 2020 and to Overlake Transit Center planned for 2021. Segment E to Downtown Redmond is planned to be constructed after 2021.

## State Environmental Policy Act (SEPA) Lead Agencies

Sound Transit: Nominal Lead Agency  
Union Station  
401 South Jackson Street  
Seattle, Washington 98104  
[www.soundtransit.org](http://www.soundtransit.org)

Washington State Department of Transportation (WSDOT): Co-Lead Agency  
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[www.wsdot.wa.gov](http://www.wsdot.wa.gov)

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**Anticipated Permits and Approvals**

Permit or Approval	Issuing Agency
<b>Federal</b>	
Section 106 Review	Federal Transit Administration
Section 4(f)/6(f) Reviews	Federal Transit Administration, U.S. Department of Transportation, U.S. Department of the Interior
Clean Water Act, Section 404 and Section 10	U.S. Army Corps of Engineers
Federal Endangered Species Act Review	U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries Service
Interchange Justification Report	Federal Highway Administration
Franchise for Use of Interstate Right-of-Way	Washington State Department of Transportation
<b>State and County</b>	
Hydraulic Project Approval	Washington Department of Fish and Wildlife
Aquatic Use Authorization: Aquatic Lease	Washington Department of Natural Resources
Public Utility Commission Permits	Washington Public Utility Commission

Permit or Approval	Issuing Agency
Section 106 Review	Washington State Department of Archaeology and Historic Preservation
National Pollutant Discharge Elimination System Construction Stormwater General Permit	Washington State Department of Ecology
Coastal Zone Management Consistency Certification	Washington State Department of Ecology
Temporary Modification of Water Quality Criteria	Washington State Department of Ecology
Underground Storage Tank Notification Requirement	Washington State Department of Ecology
Water Quality Certification: Section 401	Washington State Department of Ecology
Air Space Lease: Interstate or State Routes	Washington State Department of Transportation
<b>Cities</b>	
Clearing and Grading Permits	Cities of Seattle, Mercer Island, Bellevue, and Redmond
Shoreline Permits	Cities of Seattle, Mercer Island, Bellevue, and Redmond
Street Use Permits	Cities of Seattle, Mercer Island, Bellevue and Redmond
Construction Permits	Cities of Seattle, Mercer Island, Bellevue, and Redmond
Right-of-Way Permits or Franchise for Use of City Right-of-Way	Cities of Bellevue and Redmond
Environmental Critical Areas/Sensitive Areas Review	Cities of Bellevue and Redmond
Development Permits	Cities of Bellevue and Redmond
Noise Variance	Cities of Seattle, Mercer Island, Bellevue, and Redmond
Street Vacations	Cities of Bellevue and Redmond
Certificates of Approval	Cities of Seattle and Redmond Landmark Preservation Boards
<b>Other</b>	
Various Approvals: Planning, Design Review, and Arts Commissions	Cities of Bellevue, Redmond, Seattle, and Mercer Island
Notification of Intent to Perform Demolition or Asbestos Removal	Puget Sound Clean Air Agency
Pipeline and Utility Crossing: Permits	Utility Providers
Utility Approvals: Easements and Use Agreements	Utility Providers

## Principal Contributors

See 2008 Draft EIS, Appendix A, List of Preparers.

## Date of Issue of the SDEIS

November 12, 2010

## Commenting on the SDEIS

The comment period of 60 days will begin November 12, 2010. Comments on the SDEIS can be submitted in writing, by e-mail, or at the public hearing. All comments are due by close of business on January 10 2011. Send written comments to the following address:

Attention: East Link SDEIS Comments  
Sound Transit  
Union Station  
401 South Jackson Street  
Seattle, Washington 98104

E-mail comments should be sent to [eastlink.sdeis@soundtransit.org](mailto:eastlink.sdeis@soundtransit.org). Both written and e-mail comments should include an addressee and return address. In addition, you can attend the public hearing and open house event and offer your comments at the hearing:

**Tuesday, November 30, 2010**

Open House: 4:00 to 7:00 p.m.  
Public Hearing starts at 5:00 p.m.  
Bellevue City Hall  
450 110th Avenue NE  
Bellevue, WA 98009

## Next Actions

After the SDEIS is published, a public hearing will be held and comments will be taken on the proposed action. Comments on the 2008 Draft EIS and the SDEIS

will be addressed in the Final EIS. A Final EIS will then be published identifying a Preferred Alternative. After the Final EIS is published, the Sound Transit Board of Directors will make a final decision on the route, station, and maintenance facility locations to be built for the project. In addition, after the Final EIS is published, FTA is expected to issue its Record of Decision (ROD) on the project.

## Related Environmental Documents

Following are other important project-related environmental documents:

- *112th Avenue Light Rail Options Concept Design Report* (Sound Transit, June 2010)
- *Segment C – Evaluation of Hospital Station Options* (Sound Transit, June 2010)
- *Downtown Bellevue Light Rail Alternatives Concept Design Report* (Sound Transit, February 2010)
- *East Link Project Draft Environmental Impact Statement* (Sound Transit, December 2008)
- *East Link Project Environmental Scoping Information Report Seattle to Bellevue to Redmond* (Sound Transit, August 2006)
- *North Link Final Supplemental Environmental Impact Statement* (Sound Transit, April 7, 2006)
- *Regional Transit Long Range Plan Final Supplemental Environmental Impact Statement* (Sound Transit, June 2005)
- *Airport Link Environmental Assessment/State Environmental Policy Act Addendum (Environmental Assessment)* (Sound Transit, May 26, 2005)
- *I-90 Two Way Transit and High-Occupancy Vehicle Operations (HOV) Project Final Environmental Impact Statement/Record of Decision* (WSDOT and Sound Transit, May 2004)
- *Central Link Light Rail Transit Project Environmental Assessment Initial Segment* (Sound Transit, February 5, 2002)
- *Central Link Light Rail Transit Project Final Supplemental Environmental Impact Statement, Tukwila Freeway Route* (Sound Transit, November 16, 2001)
- *Central Link Light Rail Transit Project Final Environmental Impact Statement Addendum Initial Segment* (Sound Transit, November 16, 2001)
- *Final Environmental Impact Statement, Destination 2030: Metropolitan Transportation Plan for the Central Puget Sound Region* (Puget Sound Regional Council, May 2001)
- *Central Link Light Rail Transit Project Final Environmental Impact Statement* (Sound Transit, November 5, 1999)
- *Regional Transit Project Final Environmental Impact Statement* (Sound Transit, 1994)

## Cost and Availability

The SDEIS is available for public review in a variety of formats and locations. The SDEIS is available on the Sound Transit website ([www.soundtransit.org/eastlink](http://www.soundtransit.org/eastlink)) and on CD at no cost. Paper copies of the SDEIS are available for review at a number of public places.

The SDEIS is available for review at the following locations:

- Bellevue College Library
- King County Library System
  - Bellevue Regional Library
  - Mercer Island Public Library
  - Newport Way Library
  - Redmond Regional Library
- Seattle Public Library Branches
  - Downtown Branch
  - International District/Chinatown Branch Library
  - Douglass-Truth Branch Library
- University of Washington Library
- Washington State Department of Transportation Library
- Washington State Library
- Sound Transit Library, Union Station. Please call the librarian at (206) 398-5344 to arrange an appointment. All of the related environmental documents listed above are also available from the Sound Transit Library. Many are also available on the Sound Transit website ([www.soundtransit.org](http://www.soundtransit.org)).

Paper copies of the SDEIS are available for purchase at \$20 each and engineering drawings at \$10 each at Sound Transit, Union Station, 401 South Jackson Street, Seattle, Washington 98104 or contacting Elma Borbe at [elma.borbe@soundtransit.org](mailto:elma.borbe@soundtransit.org). Paper copies will be available for purchase at the November 30, 2010 Public Hearing.



# Executive Summary

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Central Puget Sound Regional Transit Authority (Sound Transit), the Washington State Department of Transportation (WSDOT), and the Federal Transit Administration (FTA) have prepared this Supplemental Draft Environmental Impact Statement (SDEIS) to supplement the 2008 Draft Environmental Impact Statement (Draft EIS) and address new information, new alternatives, and design modifications for the East Link Light Rail Transit Project (East Link Project). The new alternatives and design modifications were developed and evaluated in response to comments received on the 2008 Draft EIS, discussions with partner agencies and community members, and direction received from the Sound Transit Board.

In May 2009, the Sound Transit Board identified the preferred alternative for the Final EIS, and it directed that alternatives with other design modifications be considered. Following additional work and evaluation of those design modifications, the Sound Transit Board modified the preferred alternative in April and July 2010.

A preferred alternative must be identified in the Final EIS for projects, like this one, undergoing review under the National Environmental Policy Act (NEPA). A preferred alternative is a statement of the Sound Transit Board's current intent, but it is not a final decision. The Sound Transit Board will not make a final decision on the route and station locations to be built until after the Final EIS is published.

The *Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound* (ST2 plan) provides funding for an at-grade or elevated alternative in downtown Bellevue (Segment C). The Sound Transit Board would require additional funding sources in order to select a tunnel alternative in this segment. The Sound Transit Board identified two preferred alternatives in Segment C in April 2010; *Preferred 108th NE At-Grade Alternative (C11A)* and *Preferred 110th NE Tunnel Alternative (C9T)*. *Preferred Alternative C9T* is preferred based on a term sheet (a preliminary agreement) executed between Sound Transit and the City of Bellevue related to finding additional funding sources and scope reductions that would reduce the affordability gap for this tunnel alternative. *Preferred Alternative C11A* is preferred in

the event additional funding and scope reductions cannot be found to afford the tunnel.

Sound Transit has prepared this SDEIS because some of the alternatives being evaluated are new or have changed substantially since the 2008 Draft EIS and because of new information regarding the proposal's environmental impacts. The analysis in this SDEIS focuses on those elements of the environment where project changes or new information resulted in an increase in impacts beyond the impacts evaluated in the 2008 Draft EIS or in major changes in impacts and/or benefits from those analyzed in the 2008 Draft EIS.

For example, in December 2009 and January 2010, the *Downtown Bellevue Concept Design Report* was prepared to explore new alternatives in Downtown Bellevue. The report evaluated six alternatives, including two alternatives that had been analyzed in the 2008 Draft EIS, and four new alternatives. All additional downtown alternatives studied are included in this SDEIS. Following the downtown study, the Hospital Station and the 112th Avenue Light Rail Options were explored with extensive public involvement from the community and interested stakeholders. This process looked at four locations for the Hospital Station relative to NE 8th Street and at optional access points to the hospital district. Along 112th Avenue SE, the East Link team examined at-grade and retained-cut profiles traveling in the center and on the east and west sides of 112th Avenue SE. Based on input from the community, the Sound Transit Board identified the preferred alternative for a west side-running alignment along 112th Avenue SE north of SE 6th Street. Those alternatives are evaluated in this SDEIS.

This SDEIS also updates certain data and addresses new information not previously available when the 2008 Draft EIS was prepared. This SDEIS provides an opportunity for public and agency comment on the new information before the East Link Final EIS is published in 2011.

## ES.1 Purpose and Need

The purpose and need for the project has not changed. As described in the 2008 Draft EIS, the purpose is to expand the Sound Transit Link light rail system 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 urban centers of Bellevue and Redmond.

## ES.2 Project Description

The new alternatives evaluated in this SDEIS are listed in Table ES-1 and illustrated in Exhibit ES-1. The design modifications evaluated in this SDEIS are also listed in Table ES-1. The maintenance facilities evaluated in the 2008 Draft EIS remain a potential part of the East Link Project, but there have been no changes, modifications, or new locations identified; therefore, they are not addressed in this SDEIS.

The East Link Project may be constructed in phases, depending on available funding or other factors. Sound Transit anticipates that any station from the Hospital Station east, could be considered an interim station. The minimum planned project would be to open East Link from Seattle to the Hospital Station in Bellevue (Segments A through C) with a planned opening by 2020. The Overlake Transit Center is planned for opening in 2021, and Segment E to Downtown Redmond is not currently funded for construction. Subsequent to the preparation of the 2008 Draft EIS, Sound Transit updated revenue forecasts to reflect the effects of the recession. The new revenue forecasts lower available funds over the life of the ST2 plan period by an estimated 25-percent. The Sound Transit Board could adjust the ST2 plan targeted opening dates for East Link in response to the updated revenue forecasts.

## ES.3 Summary Comparison of Environmental Consequences

The following sections summarize the differences between the new alternatives and the design modifications within each segment. Environmental effects on Land Use, Air Quality and Greenhouse Gases, Water Resources, Energy Impacts, Hazardous Materials, Electromagnetic Fields, Public Services, and Utilities are within the range of impacts – for both operation and construction – analyzed in the 2008 Draft EIS and are, therefore, not discussed in this SDEIS.

For all of the alternatives, transit ridership and travel demand forecasts were updated for this SDEIS to account for the voter-approved ST2 plan, recent long-range land use plans, and updates to background project schedules.

In addition, this SDEIS evaluates new information regarding the historical nature of Interstate 90 (I-90). Other updated information included in this SDEIS is described in more detail below.

**TABLE ES-1**  
New Alternatives and Modified Alternatives Evaluated in the SDEIS

Segment	New Alternatives Evaluated	Modifications to Existing Alternatives
Segment B	<i>Preferred 112th SE Modified Alternative (B2M)</i> , which varies when connecting to C9T versus C11A	112th Bypass Alternative (B3)-114th Extension Design Option BNSF Alternative (B7)
Segment C	<i>Preferred 108th NE At-Grade Alternative (C11A)</i> <i>Preferred 110th NE Tunnel Alternative (C9T)</i> 110th NE At-Grade Alternative (C9A) 114th NE Elevated Alternative (C14E)	No modifications to existing alternatives
Segment D	No new alternatives	<i>Preferred NE 16th At-Grade Alternative (D2A)</i> -120th Station Design Option - NE 24th Design Option
Segment E	No new alternatives	<i>Preferred Marymoor Alternative (E2)</i> -Relocated station in Downtown Redmond

Note: There are no changes in Segment A or in the No Build Alternative.

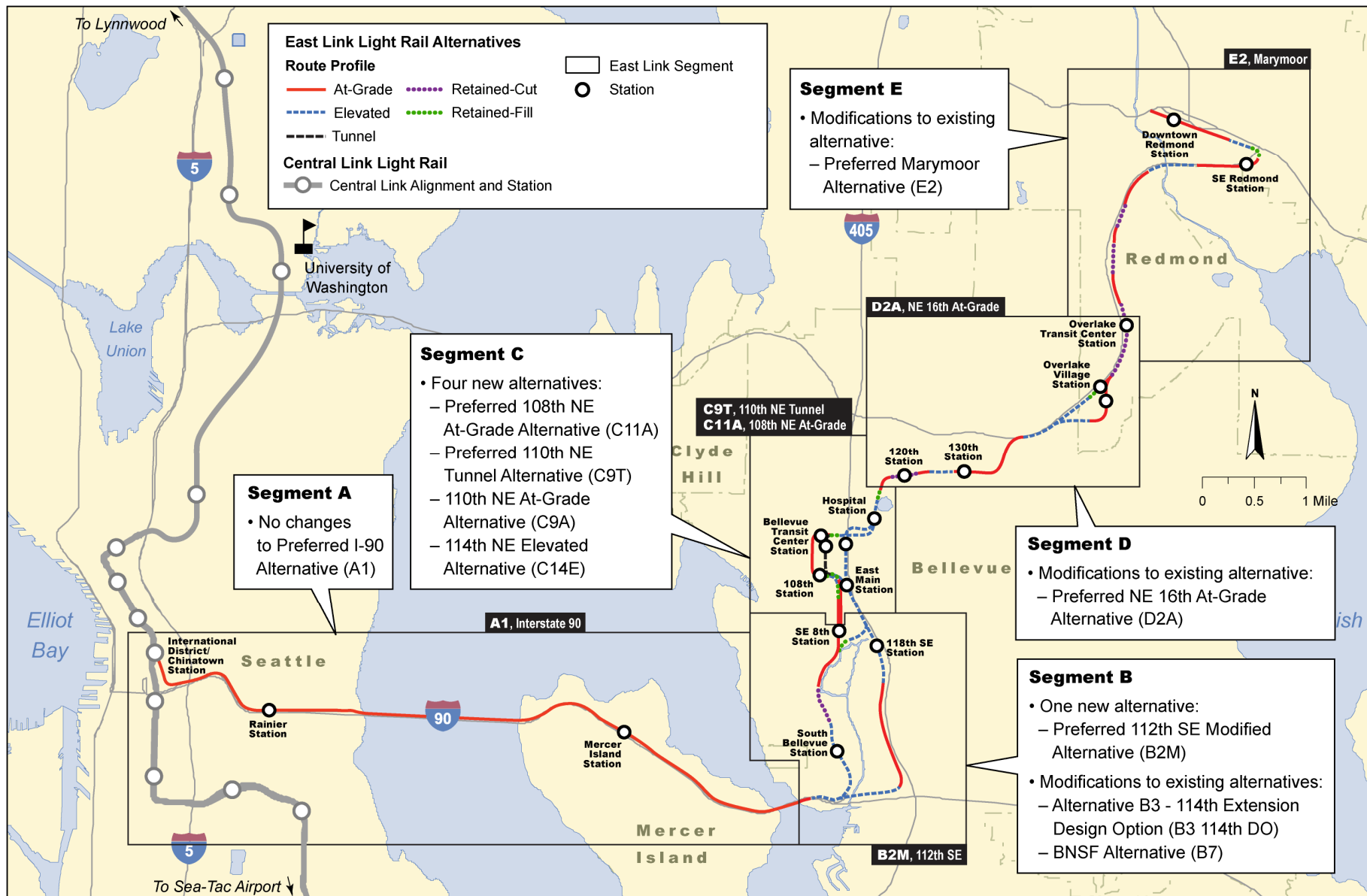


EXHIBIT ES-1  
Alternatives Evaluated in the SDEIS



# Segment A

Segment A begins in the Downtown Seattle Transit Tunnel at the International District/Chinatown Station. The alternative then travels eastward on I-90 across north Beacon Hill and Rainier Valley, which encompass a mix of residential and commercial uses. The route then travels on the I-90 floating bridge across Lake Washington to Mercer Island. The Mercer Island Town Center is located immediately south of I-90 and has a mixture of multifamily residential, commercial, and offices. The 6.9 mile route remains on I-90 across Mercer Island and Lake Washington to south Bellevue.

There are no substantial changes associated with Segment A and the Preferred Interstate 90 Alternative (A1). Since the 2008 Draft EIS was published, however, WSDOT, on behalf of the Federal Highway Administration (FHWA) determined that the segment of I-90 between mileposts (MP) 3.4 and 8.9, from the west end of the Martin Luther King, Jr. Way Lid to the east end of the East Channel Lake Washington Bridges, as eligible for the National Register of Historic Places (NRHP). Sound Transit continues to coordinate with the State Historic Preservation Office (SHPO). Preferred Alternative A1 would not alter the integrity of the resource and would not affect its significance as a key piece of transportation history with innovative engineering and planning for rapid transit. Additionally, WSDOT and Sound Transit have agreed to include in the preferred alternative the joint use of the D2 roadway by bus and rail.

## Components

**Rainier Station:** The station is located between 23rd and Rainier Avenues South.



Simulation of light rail on I-90

**Mercer Island Station:** This station is located on Mercer Island adjacent to the existing park-and-ride garage between 77th and 80th Avenues SE.

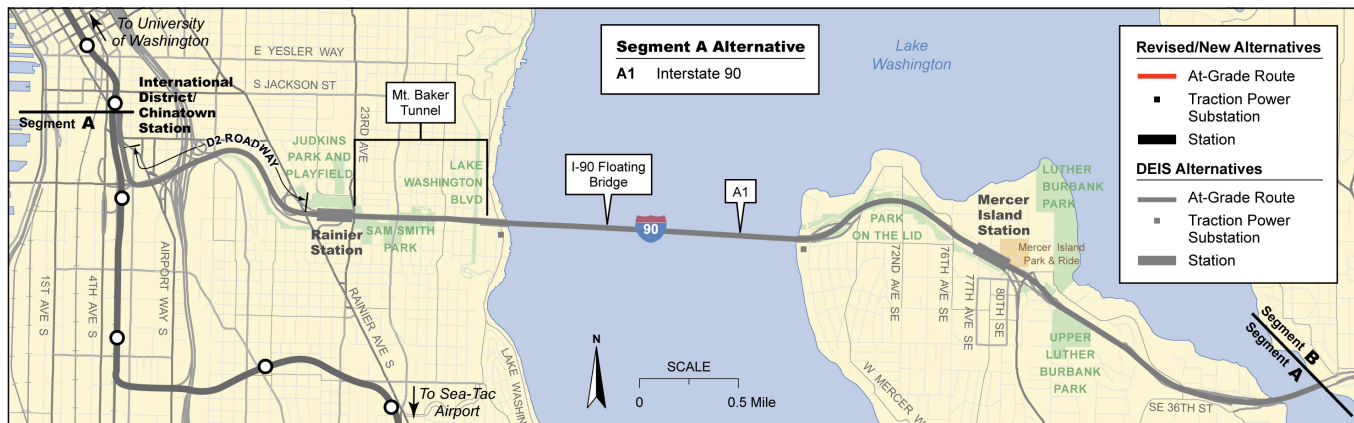
**Optional pedestrian bridge:** There is an optional new bridge over I-90 from Town Center to the Mercer Island Station.

**Markets served by stations:** Preferred Alternative A1 would serve Downtown Seattle, North Rainier Valley Urban Village, Central Area neighborhood, and Mercer Island.

**Estimated cost:** \$650 to \$750 million

**Stations:** Rainier and Mercer Island

**Ridership:** Forecasts predict 5,500 daily boardings at the stations in this segment in 2030.





## Segment B: South Bellevue

Segment B travels from the I-90 center roadway northward to approximately SE 6th Street. The south portion of Segment B is adjacent to the Mercer Slough Nature Park and the residential communities of south Bellevue. To the north, along 112th Avenue SE, the west side is mostly residential uses and the east side mostly office parks. A strip of multifamily residential and office uses and a small pocket of industrial uses are located immediately east of 118th Avenue SE and west of I-405 and the BNSF Railway, and west of 118th Avenue SE near SE 8th Street.

### Alternatives

There is one new alternative in Segment B: *Preferred 112th SE Modified Alternative (B2M)*. *Preferred Alternative B2M* leaves the I-90 center roadway at Bellevue Way SE and continues north adjacent to Bellevue Way SE and then along 112th Avenue SE. There are two variations of *Preferred Alternative B2M* (B2M to C11A and B2M to C9T), depending on the build alternative chosen for Segment C to the north. The difference occurs along 112th Avenue SE where *Preferred Alternative B2M* to C9T remains at-grade adjacent to the east side of roadway until SE 6th Street, whereas *Preferred Alternative B2M* to C11A moves from the east side to the center median at approximately SE 15th Street near the entrance to the Bellefield Office Park. Along Bellevue Way SE, there is a lidded trench in front of the Winters House for approximately 170 feet under either variation.

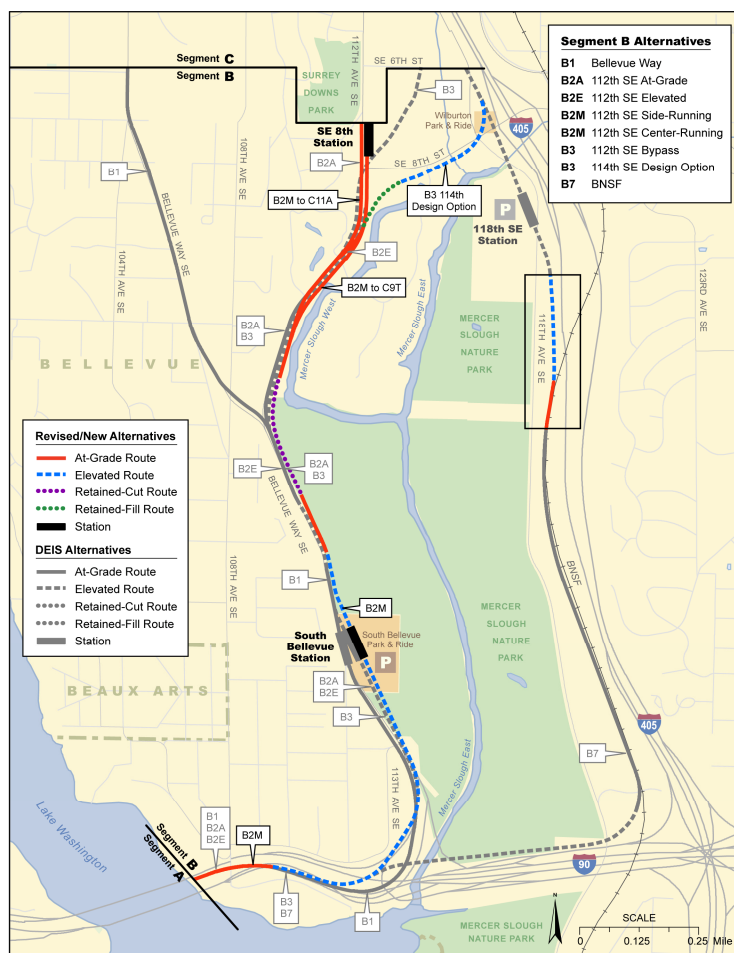
There are also two design modifications to the Segment B alternatives described in the 2008 Draft EIS as follows:

- 112th Bypass Alternative (B3) – 114th Extension Design Option (B3 114th Design Option)
- BNSF Alternative (B7)

B3 114th Design Option connects to alternatives in Segment C farther to the east than the original 112th SE Bypass Alternative (B3). Alternative B7 has been modified from its original version to accommodate land topography changes resulting from the recent widening of I-405 by WSDOT.

### Components

**South Bellevue Station:** This station is elevated and includes a parking structure at the existing South Bellevue Park-and-Ride Lot with up to five levels of parking, with 1,400 parking spaces.



**SE 8th Station:** One of the two variations of *Preferred Alternative B2M* (B2M to C9T) constructs an at-grade station at SE 8th Street and 112th Avenue SE. The other variation (B2M to C11A) does not construct this station.

### Connectors from Segment A

*Preferred Alternative A1* connects to *Preferred Alternative B2M* initially at-grade with I-90 and then transitions to an elevated profile over the westbound I-90 lanes.

### Comparison of Segment B Alternatives

Table ES-2 compares impacts expected from the Segment B alternatives. The impacts of the two variations of the *Preferred 112th SE Modified Alternative (B2M)* would differ in a few ways for a short section along 112th Avenue SE north of SE 15th Street. In response to public comments on the 2008 Draft EIS, *Preferred Alternative B2M* was developed to reduce effects on Bellevue Way SE and 112th Avenue SE during construction. As with the other Bellevue Way alternatives, *Preferred Alternative B2M* would result in lowering the visual quality

from high to medium along Bellevue Way. *Preferred Alternative B2M* is located in front of the Winters House in a 170-foot lidded trench to avoid adversely affecting the historic resource, which is listed on the NRHP. As compared with other Segment B alternatives, *Preferred Alternative B2M* would result in the greatest area of permanent and temporary park impacts as well as permanent wetland buffer impacts, but it would have low permanent wetland impacts and the fewest full property acquisitions. *Preferred Alternative B2M* would likely result in fewer impacts on transportation during construction due to construction activities primarily occurring east of the road instead of within the full roadway as with most other Bellevue Way alternatives. Constructing *Preferred Alternative B2M* would change the access to the blueberry farm, portions of the Mercer Slough Nature Park, and the Winters House.

The B3 114th Design Option would reduce Sturtevant Creek wetland impacts compared with Alternative B3 and would displace the most businesses and the second highest number of employees for the Segment B alternatives.

Alternative B7 would have light rail noise impacts partly mitigated by the WSDOT sound wall constructed as part of an I-405 project, which would mitigate noise from the light rail operations for some residences. Residences to the north and south of the sound wall would be impacted, but after mitigation there are no noise impacts. Additionally, a parcel that was previously identified as a partial acquisition would now be a full acquisition, increasing the number of businesses displaced to 5 and the number of employees affected to 180.

TABLE ES-2

Comparison of Segment B Alternatives

Features		Range of 2008 Draft EIS Alternatives	Alternative			
			B2M to C11A	B2M to C9T	B3 - 114th Design Option <sup>a</sup>	B7 <sup>b</sup>
<b>Number of Stations</b>		1 to 2	1	2	1	1
<b>Estimated Cost</b> (millions, 2007 \$)		\$365 to 550	\$470 - \$540	\$480 - \$550	\$500 - \$575	\$515 - \$595
<b>2030 Daily Ridership</b>	Segment boardings	1,000 to 4,500	4,500	5,500	4,500	1,500
	Total East Link ridership	43,500 to 46,000 <sup>f</sup>	49,000 to 51,500 <sup>d</sup>	50,000	49,500	48,000
<b>Travel Time through Segment</b> (minutes)		5	5	5	5	5
<b>Length</b> (miles)		2.1 to 2.6	2.2	2.2	2.4	2.6
<b>Construction Risk<sup>c</sup></b>		Low	Moderate	Moderate	Low	Moderate
<b>Environmental Impacts</b>						
Residential Displacements (# of housing units)		0 to 14	1	1	1	0
Economics: Business Displacements (# of employees)		0 (0) to 4 (130)	0 (0)	0 (0)	12 (170)	5 (180)
Full/Partial Property Acquisitions		3/9 to 21/173	1/10	1/15	4/15	7/8
Decrease in Visual Quality		No – Yes	Yes	Yes	Yes	No
Noise-Impacted Receptors: number of living units (number after mitigation)	Traffic-related	0 (0) to 80 (0)	0	0	20 (0)	0
	Light Rail-related	0 (0) to 98 (0)	72 (0) <sup>e</sup>	68 (0) <sup>e</sup>	81 (0)	150 (0)
Vibration-Impacted Buildings with Vibration Impacts (number after mitigation)		0 (0) to 1 (0)	1(0)	1(0)	1(0)	0
Wetland: permanent/temporary (acres)		0 to 1.8/0.1 to 2.7	<0.1/1.4	<0.1/1.4	0.2/0.6	1.8/2.9
Wetland buffer: permanent/temporary (acres)		0.8 to 3.7/0.7 to 1.8	3.0/5.6	3.7/6.7	3.6/4.8	0.4/0.7
High-Value Nonwetland Habitat Loss (acres)		0.4 to 3.0	0.4	0.6	0.5	3.0
Parks: Permanent (area in acres before mitigation)		0.4 to 1.7	2.4	2.5	1.7	0.9
Parks: Temporary		1.1 to 2.0	4.2	4.2	2.6	1.6
Historic Properties (number of properties evaluated)		0-1	1	1	0	0

<sup>a</sup> Alternative B3 - 114th Extension Design Option only addresses Transportation; Acquisitions, Displacements, and Relocations; Noise and Vibration; Visual and Aesthetics; and Ecosystem resources. Other resources reflect impacts previously analyzed for the 112th SE Bypass Alternative (B3) in the 2008 Draft EIS.

<sup>b</sup> Alternative B7 only address Acquisitions, Displacements, and Relocations; Noise; Geology and Soils; and Ecosystems. Other resources reflect impacts previously analyzed with the Alternative B7 in the 2008 Draft EIS.

<sup>c</sup> Construction Risk relates to the average risk of geologic and utilities constraints relative to the other alternatives for the East Link Project. Refer to Chapter 6 in 2008 Draft EIS for a description of criteria

<sup>d</sup> Higher ridership forecasts indicate signal priority for the light rail through Downtown Bellevue.

<sup>e</sup> Some impacts would be mitigated with building sound insulation which does not reduce exterior noise levels.

<sup>f</sup> Range shown for the Draft EIS alternatives has not been updated to be consistent with the SDEIS alternatives. Updated information will be provided in the Final EIS.



## Preferred 112th Avenue SE Modified Alternative (B2M) to C11A

*Preferred Alternative B2M* is elevated in the I-90 center roadway, crosses over westbound I-90, and continues elevated on the east side of Bellevue Way SE to the South Bellevue Station, located at the current South Bellevue Park-and-Ride Lot; this alternative also maintains the westbound and eastbound I-90 high-occupancy vehicle (HOV) ramp connections to Bellevue Way. After leaving the station, the route transitions to a retained cut on the east side of Bellevue Way within Mercer Slough Nature Park to the intersection of Bellevue Way SE and 112th Avenue SE. There is a 170-foot lidded trench in front of the Winters House.

When connecting to *Preferred 108th NE At-Grade Alternative (C11A)*, *Preferred Alternative B2M* transitions from a retained cut to at-grade on the east side of 112th Avenue SE. South of SE 15th Street, *Preferred Alternative B2M* crosses the northbound lanes of 112th Avenue SE at a gated crossing and continues north in the center of 112th Avenue SE at-grade until reaching Segment C at SE 6th Street. This variation does not have a SE 8th Station.

### Evaluation Summary

**Markets served by stations:** The stations would serve the regional South Bellevue Park-and-Ride Lot, and the south Bellevue residential neighborhoods.

**Estimated cost:** \$470 million to \$540 million

**Ridership:** Forecasts predict 4,500 daily boardings for *Preferred Alternative B2M* connecting to C11A in 2030.

**Transportation impacts:** *Preferred Alternative B2M* would improve existing station and neighborhood access by installing signals and converting the center two-way left-turn lane from the South Bellevue Station to I-90 into a southbound HOV lane. A gate would be used when the train crosses the northbound lanes of 112th Avenue SE just south of SE 15th Street, and a signalized crossing would be provided at the SE 8th Street intersection.

**Potential environmental impacts during operation:** *Preferred Alternative B2M* would permanently impact 2.4 acres of parkland, <0.1 acre of wetlands, and 3.0 acres of wetland buffers. Some noise impacts would be mitigated by using building sound insulation; however, this does not reduce exterior noise levels.



**Temporary impacts during construction:** Modifying Bellevue Way SE and 112th Avenue SE would temporarily result in traffic detours, lane closures, and signal modifications. The South Bellevue Park-and-Ride Lot would be closed during construction; bus stops would be retained but might be relocated. As with the other Segment B alternatives that travel along Bellevue Way, constructing *Preferred Alternative B2M* would temporarily impact the Periphery Trail along Bellevue Way SE, and to keep the trail open during construction might require temporary relocation. Construction would temporarily use 4.2 acres along the west side of Mercer Slough Nature Park and would also result in 1.4 acres and 5.6 acres of temporary impacts on wetlands and wetland buffers. Construction noise would occur during site preparation and project construction.

**Construction risks:** Construction risks would generally be low but would be moderate in the retained cut portions of this alternative. Due to the proximity of *Preferred Alternative B2M* to the Winters House, (listed on the NRHP), the project would include measures to protect the building from damage during construction.

## Preferred 112th Avenue SE Modified Alternative (B2M) to C9T

*Preferred Alternative B2M* is elevated in the I-90 center roadway, crosses over westbound I-90, and continues elevated on the east side of Bellevue Way SE to the South Bellevue Station, located at the current South Bellevue Park-and-Ride Lot; this alternative also maintains the westbound and eastbound I-90 HOV ramps. After leaving the station, the route transitions to a retained cut on the east side of Bellevue Way within Mercer Slough Nature Park to the intersection of Bellevue Way SE and 112th Avenue SE. There is a 170-foot lidded trench in front of the Winters House.

When connecting to *Preferred 110th NE Tunnel Alternative (C9T)*, *Preferred Alternative B2M* transitions to at-grade on the east side of 112th Avenue SE, entering the at-grade SE 8th Station north of SE 8th Street. From there, *Preferred Alternative B2M* remains at-grade until reaching Segment C at SE 6th Street.

### Evaluation Summary

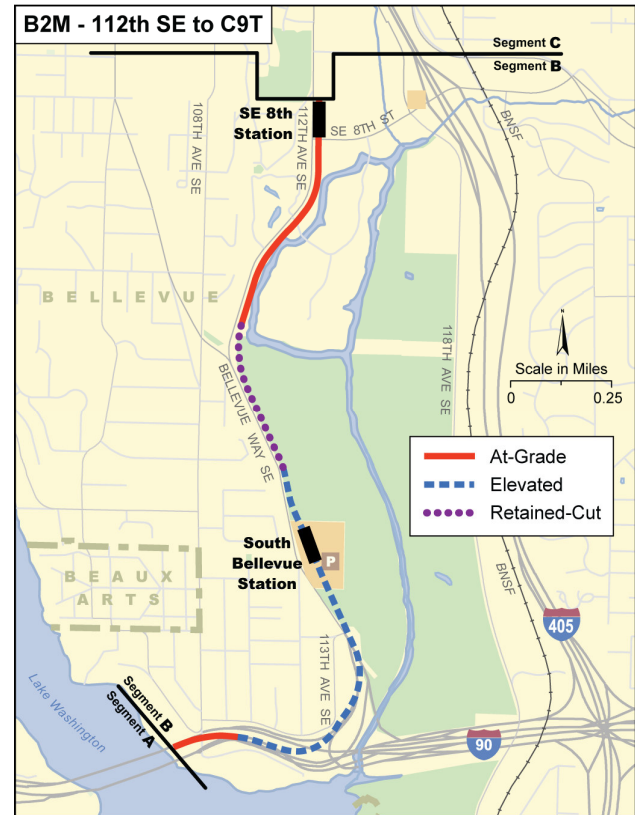
**Markets served by stations:** The stations would serve the regional South Bellevue Park-and-Ride Lot, the south Bellevue residential neighborhoods, and the commercial area east of 112th Avenue SE.

**Estimated cost:** \$480 million to \$550 million

**Ridership:** Forecasts predict 5,500 daily boardings for *Preferred Alternative B2M* connecting to C9T in 2030.

**Transportation impacts:** *Preferred Alternative B2M* would improve station and neighborhood access by installing signals and converting the center two-way left-turn lane from the South Bellevue Station to I-90 into a southbound HOV lane. There is an option to close SE 15th access to Bellefield Office Park, which would eliminate conflicts and require vehicles to access the business park from SE 8th Street; this would maintain intersections LOS standards. A maintenance driveway would need to be closed to Lincoln Plaza, but access from SE 6th Street would be maintained.

**Potential environmental impacts during operation:** *Preferred Alternative B2M* would permanently impact 2.5 acres of parkland and would result in a greater level of permanent impacts on wetland buffers (3.7 acres) when compared with the other Segment B alternatives. Some noise impacts would be mitigated by using building sound insulation; however, this does not reduce exterior noise levels.



**Temporary impacts during construction:** As with the other Segment B alternatives that travel along Bellevue Way, constructing *Preferred Alternative B2M* would temporarily impact the Periphery Trail along Bellevue Way SE, requiring mitigation to keep the trail open during construction. Modifying Bellevue Way SE and 112th Avenue SE would also temporarily result in traffic detours, lane closures, and signal modifications. The South Bellevue Park-and-Ride Lot would be closed during construction; bus stops would be retained but may be relocated. Construction would temporarily impact 4.2 acres of park along the west side of Mercer Slough Nature Park and would also result in 1.4 acres of temporary wetland impacts and 6.7 acres of temporary impacts on wetland buffers. Construction noise would occur during site preparation and project construction.

**Construction risks:** Construction risks would generally be low but would be moderate in the retained cut portions of this alternative. Due to the proximity of *Preferred Alternative B2M* to the Winters House, (listed on the NRHP), the project includes measures to protect the building from damage during construction.

## Alternative B3 – 114th Extension Design Option (B3 114th Design Option)

Alternative B3 – 114th Extension Design Option is a design option to the 2008 Draft EIS 112th SE Bypass Alternative (B3) that crosses Bellefield Office Park at-grade and extends the route at SE 8th Street farther east to 114th Avenue SE, then north along the east side of 114th Avenue SE. The extension travels through the Wilburton Park-and-Ride Lot and then crosses 114th Avenue SE to connect to Segment C.

### Evaluation Summary

**Markets served by station:** The station would serve the regional South Bellevue Park-and-Ride Lot and south Bellevue residential neighborhoods.

**Estimated cost:** \$500 million to \$575 million

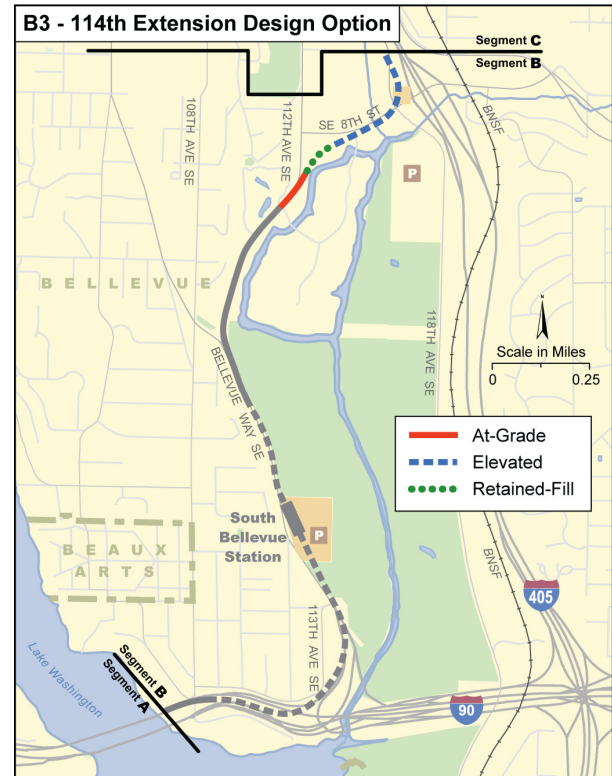
**Ridership:** Forecasts predict 4,500 daily boardings at the station in this alternative in 2030.

**Transportation impacts:** Alternative B3 - 114th Extension Design Option would include a gate crossing over the northbound lanes of 112th Avenue SE south of SE 8th Street; this gate crossing would not impact intersection operations.

**Potential environmental impacts during operation:** Alternative B3 - 114th Extension Design Option would not result in any wetland impacts associated with the Sturtevant Creek wetlands as compared with Alternative B3. The B3 114th Design Option would displace 12 businesses, affecting 170 employees within the Bellefield Office Park. Noise impacts would be mitigated.

**Temporary impacts during construction:** Construction activities would not occur in Sturtevant Creek or the Sturtevant Creek wetland, therefore there are no temporary wetland or wetland buffer impacts. Construction activities under the guideway would temporarily disturb vegetation. After construction, appropriate vegetation would be planted. Other construction impacts would be similar to those identified for Alternative B3.

**Construction risks:** Construction risk for B3 114th Design Option would be low.



## BNSF Alternative (B7)

After the 2008 Draft EIS was published, the WSDOT I-405 South Bellevue Widening Project was completed, which included removing the Wilburton Tunnel over I-405 and widening I-405 to the west near the route of BNSF Alternative (B7). This widening changed the topography near the route for approximately 500 feet, which also changed this part of the route from at-grade to elevated. Neither the profile elevation nor the route's horizontal alignment changed. Sound walls were constructed by WSDOT, as part of the project, between I-405 and some residences along 118th Avenue SE.

### Evaluation Summary

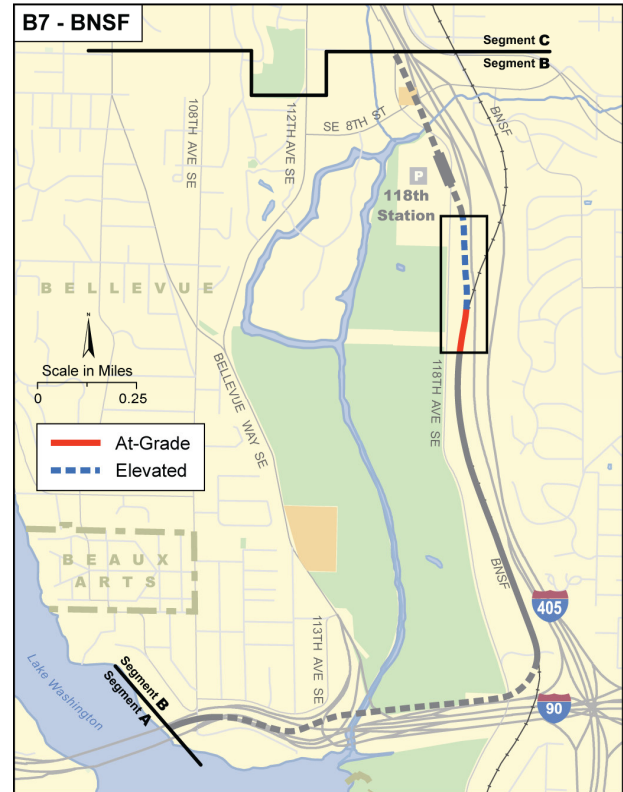
**Markets served by station:** The 118th Station would serve primarily as a park-and-ride lot, as well as serving nearby commercial uses.

**Estimated cost:** \$515 to \$595 million

**Ridership:** Forecasts predict 1,500 daily boardings at the station in this alternative in 2030.

**Transportation impacts:** Transportation impacts would be consistent with the 2008 Draft EIS.

**Potential environmental impacts during operation:** WSDOT's recent construction of a sound wall as part of an I-405 project resulted in a change in the noise impacts for some residences along 118th Avenue SE. These residences would not be impacted by noise impacts as a result of light rail, but residences to the north and south of the new sound wall would be impacted. With mitigation measures there would be no noise impacts. A parcel that was previously identified as a partial acquisition would now be a full acquisition due to construction of a new building on the parcel since the 2008 Draft EIS was published. This full acquisition would increase the number of businesses displaced to 5 and increase the number of employees affected to 180. Wetland delineations conducted after the 2008 Draft EIS was published indicate the same level of wetland impact, but the wetland buffer impact would be reduced by 0.4 acres. Light rail operations could be impacted due to the soil conditions along Mercer Slough. Recent WSDOT studies find that unplanned peat movements due to annual increases and decreases in the level of Lake Washington cause ongoing movement of the I-90 bridge structures. The movement has resulted in WSDOT needing to implement special bridge repairs. These unplanned



movements could also affect the light rail bridge across the Mercer Slough.

#### Temporary impacts during construction:

Construction impacts would be consistent with the 2008 Draft EIS. Construction noise would occur during site preparation and project construction. The construction easement has been updated since the 2008 Draft EIS resulting in additional wetland impacts. Construction would increase the wetland impact to 2.9 acres and increase of 0.5 acres. The total wetland buffer impact would be the same as the 2008 Draft EIS analysis.

**Construction risks:** Overall, construction risk would be moderate but the crossing of the Mercer Slough would be high due to the unplanned peat movements which could be made worse by light rail construction.

## Segment C: Downtown Bellevue

Segment C would travel between approximately SE 6th and NE 12th Streets. The segment transitions from the primarily suburban single-family residential and commercial area of south Bellevue to the dense, urban central business district of downtown Bellevue, a major regional urban center. Key destinations in Segment C are Bellevue's downtown core and transit center and, on the east side of I-405, the Overlake Hospital and Group Health medical centers. The City of Bellevue's downtown plan anticipates adding 14,000 housing units and 38,000 jobs between 2000 and 2030. The Hospital Station could be an interim terminus.

### Alternatives

The four new Segment C build alternatives are:

- Preferred 108th NE At-Grade Alternative (C11A)
- Preferred 110th NE Tunnel Alternative (C9T)
- 110th NE At-Grade Alternative (C9A)
- 114th NE Elevated Alternative (C14E)

There are two preferred alternatives in Segment C, one with an at-grade profile (Preferred Alternative C11A) and one with a tunnel profile (Preferred Alternative C9T). The ST2 plan provides funding for an at-grade or elevated alternative in Segment C. Additional funding sources would be required for the Sound Transit Board to select a tunnel alternative in this segment.

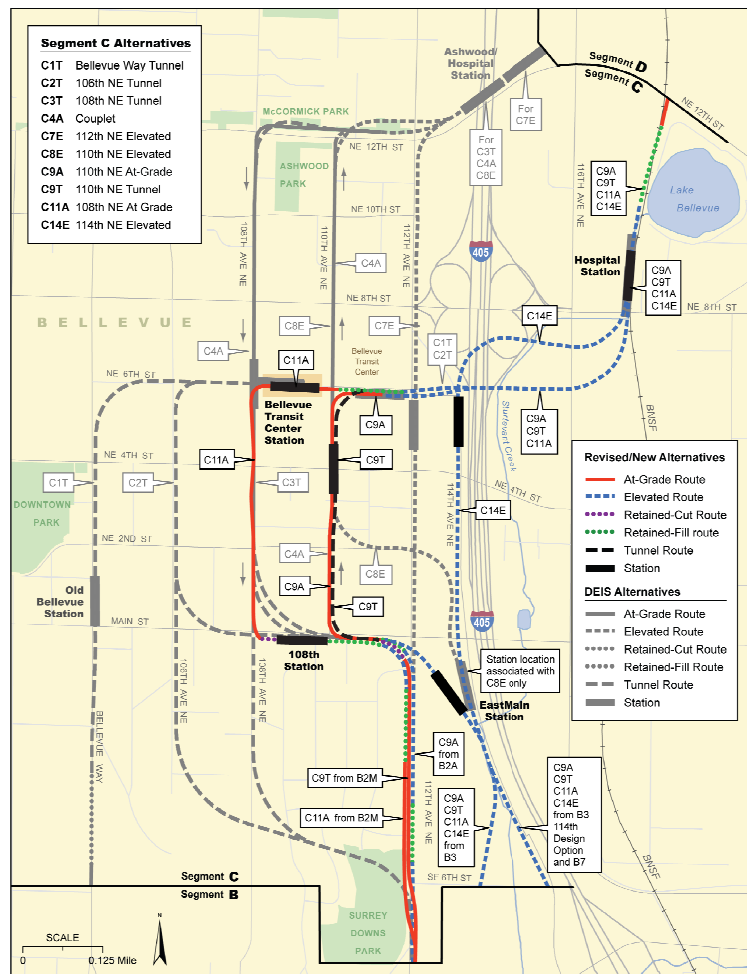
### Components

**108th Station:** This station serves Preferred Alternative C11A only and is located on Main Street between 108th and 110th Avenues.

**Bellevue Transit Center Station:** The four new build alternatives each have a Bellevue Transit Center Station; the exact station location and profile vary by alternative.

**East Main Station:** This station serves Preferred Alternative C9T and Alternative C9A, if the connection is from Alternatives B3, B3 114th Design Option, or B7, and it is located southeast of the intersection of Main Street and 112th Avenue SE.

**Hospital Station:** The four new build alternatives each have a Hospital Station, which is an elevated



facility just north of the intersection of NE 8th Street and the BNSF Railway right-of-way. The Hospital Station for all Segment C alternatives could include development of a pedestrian or trail connection over NE 8th Street that would be designed and constructed by others.

### Connectors from Segment B

**From Preferred Alternative B2M:** Preferred Alternative B2M connects to Preferred Alternative C9T and to Preferred Alternative C11A.

**From Alternative B2A:** Alternative B2A connects to Alternative C9A.

**From the 112th Alternatives B3 (as described in the 2008 DEIS), B3 114th Design Option, and B7:** These Segment B alternatives connect to Preferred Alternative C11A, Preferred Alternative C9T, Alternative C9A, and Alternative C14E.

### Comparison of Segment C Alternatives

Table ES-3 compares impacts that would be expected from the Segment C Alternatives.

*Preferred Alternatives C11A and C9T* would result in the highest residential and park impacts among the new alternatives. The acquisition of properties along 112th Avenue SE and Main Street with *Preferred Alternatives C11A and C9T* would not result in impacts on the potential Surrey Downs Historic District. None of the alternatives result in permanent wetland impacts; wetland buffer impacts would only occur if the connection is from alternative B3, B3 114th Design Option or B7. Of the

new alternatives Alternative C14E would displace the highest number of employees and have the lowest projected ridership. *Preferred Alternative C9T* is the most expensive of the SDEIS alternatives, but it is the least expensive tunnel option considered to date. *Preferred Alternative C11A* would cause the most traffic impacts at intersections since it travels at-grade along 108th Avenue NE, but would have the highest ridership if provided with traffic signal priority.

**TABLE ES-3**  
Comparison of Segment C Alternatives

Features		Range of 2008 Draft EIS Alternatives	Alternative			
			C11A	C9T	C9A	C14E
<b>Number of Stations</b>		1 to 2	3	2-3	2-3	2
<b>Estimated Cost</b> (millions, 2007 \$)		\$435 to 1,615	\$555 to \$690	\$790 to \$1,025	\$465 to \$640	\$495 to \$575
<b>2030 Daily Ridership</b>	Segment boardings <sup>b</sup>	5,500 to 8,000	8,000 to 9,000 (8,500 to 9,500)	7,000 (9,000)	7,500 to 8,000 (8,500 to 9,000)	5,500 (5,500)
	Total East Link ridership <sup>b</sup>	43,500 to 46,000 <sup>c</sup>	49,000 to 51,500 (48,000 to 49,500) <sup>e</sup>	50,000 (49,000)	48,500 to 50,500 (46,500 to 48,500) <sup>e</sup>	48,500 (46,000)
<b>Travel Time through Segment</b> (minutes)		4 to 7	7 to 10	7	7 to 9	4
<b>Length</b> (miles)		2.1 to 2.6	1.9 to 2.8	1.7 to 2.5	1.7	1.3
<b>Construction Risk<sup>a</sup></b>		Low to High	Moderate	High	Moderate	Low
<b>Environmental Impacts</b>						
Residential Displacements (# of housing units)		0 to 93	47	47	0 to 1	0
Business Displacements (# of employees)		8 (210) to 61 (830)	33 (285)	17 (200)	18 (230)	22 (485)
Full/Partial Property Acquisitions		3/9 to 21/173	23 /35	20/12	14/14 to 18	12 /15
Decrease in Visual Quality		No to Yes	No	No	Yes	No
Noise-Impacted Receptors: (number after mitigation)	Traffic-related	0	0	0	0	0
	Light Rail-related	0 (0) to 87 (0)	169 to 187 (0) <sup>d</sup>	69 to 84 (0)	178 to 195 (0) <sup>d</sup>	88 (0)
Vibration-Impacted Buildings with Vibration Impacts (number after mitigation)		0 (0) to 1 (0)	1 (0)	2 (0)	3 (0)	0
Wetlands: permanent/temporary (acres)		0	0/0 to <0.1	0/0 to <0.1	0/0 to <0.1	0/0 to <0.1
Wetlands Buffer: permanent/temporary (acres)		0	0 to 0.1/0 to 0.1	0 to 0.1/0 to 0.1	0 to 0.1/0 to 0.1	0 to 0.1/0 to 0.1
High-Value Non-wetland Habitat Loss (acres)		0.1 to 0.5	0	0	0	0
Parks: permanent acres before mitigation		0.4 to 1.7	0.5	0.6	<0.1	0
Parks: Temporary		1.1 to 2.0	0.6	0.6	<0.1	0
Historic Properties (number of properties evaluated)		0-1	1	1	0	0
Intersections Operating Worse than No Build Alternative before mitigation		0 to 1	3	1	2	0

<sup>a</sup> Construction Risk relates to the average risk of geologic and utilities constraints relative to the other alternatives for the East Link Project. Refer to Chapter 6 in 2008 Draft EIS for a description of criteria  
<sup>b</sup> Ridership forecasts for Segment C Alternatives connected to either: 1) *Preferred Alternative B2M* (with *Preferred Alternative C11A* and *Preferred Alternative C9T*) or 2) Alternative B3 (with alternatives C9A and C14E) are shown outside of the parentheses and forecasts shown inside the parentheses are with the connection to Alternative B7.  
<sup>c</sup> Range shown for the Draft EIS alternatives has not been updated to be consistent with the SDEIS alternatives. Updated information will be provided in the Final EIS.  
<sup>d</sup> Some impacts mitigated with building sound insulation which does not reduce exterior noise levels. Impacts include living and hotel units.  
<sup>e</sup> Range of ridership for *Preferred Alternative C11A* and Alternative C9A based on level of transit signal priority provided in downtown Bellevue.

## Preferred 108th Avenue NE At-Grade Alternative (C11A)

From Segment B, *Preferred Alternative C11A* connects with *Preferred Alternative B2M* or *Alternative B3*, *B3 114th Design Option*, or *B7*. North from SE 6th Street with the connection from *Preferred Alternative B2M*, *Preferred Alternative C11A* crosses to the west side of 112th Avenue NE, transitions from at-grade to retained fill to elevated profile to turn west onto Main Street. *Preferred Alternative C11A* then travels on the south side of Main Street in a retained fill to the 108th Station between 108th and 110th Avenues NE. *Preferred Alternative C11A* turns north at-grade over Main Street to the center of 108th Avenue NE. At NE 6th Street turns east in the center of NE 6th Street to the at-grade Bellevue Transit Center Station. *Preferred Alternative C11A* then crosses 110th Avenue NE at-grade, transitioning to a retained fill and then to an elevated profile between 110th and 112th Avenues NE before crossing 112th Avenue NE, I-405, and 116th Avenue NE. *Preferred Alternative C11A* then turns north along the BNSF Railway right-of-way to cross NE 8th Street and reach the elevated Hospital Station and connects with Segment D alternatives from the BNSF Railway right-of-way.

### Evaluation Summary

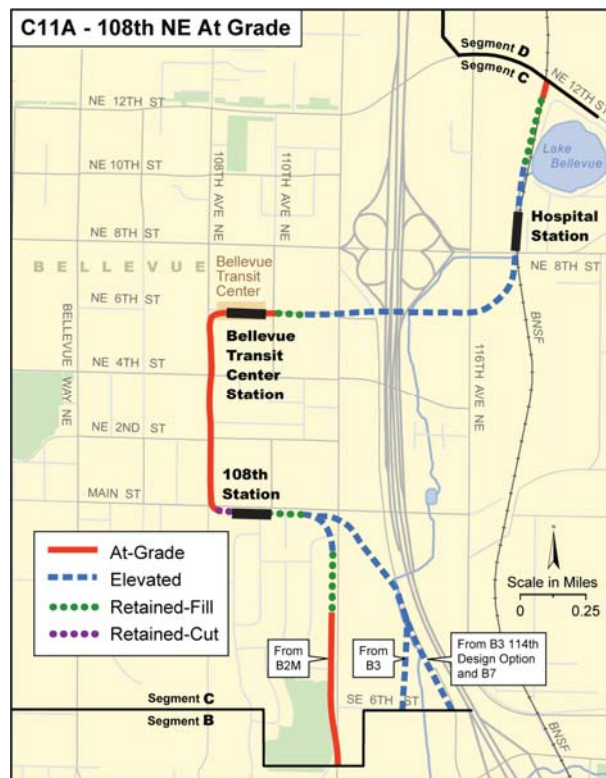
**Markets served by stations:** The stations would serve the city center, Bellevue City Hall, Bellevue Transit Center, Meydenbauer Center, NE 6th Street pedestrian corridor, Overlake and Group Health medical centers east of I-405, south downtown, Old Bellevue, and Surrey Downs.

**Estimated cost:** \$555 million to \$690 million

**Ridership:** Forecasts predict 8,000 to 9,000 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** *Preferred Alternative C11A* includes a new station—the 108th Station—not previously analyzed. Because of the residential parking zone in the Surrey Downs neighborhood, no impacts associated with hide-and-ride parking would be anticipated. SE 4th Street would no longer have direct access to 112th Avenue SE, but access would remain at SE 1st Street. The access from 110th Avenue SE and 110th Place SE would be closed to Main Street. In 2030, three intersections failing to meet operation standards in the No Build Alternative would have increased delay under *Preferred Alternative C11A*.

**Potential environmental impacts during operation:** *Preferred Alternative C11A* would result in 23 full and 35 partial property acquisitions,



including 47 residential impacts (6 single family and 41 multifamily units), and displace 33 businesses with 285 employees. *Preferred Alternative C11A* would remove 0.5 acre of landscaping and parking from Surrey Downs Park without impairing the recreational areas or degrading visual quality and would also result in a landscape buffer between Surrey Downs neighborhood and the light rail along 112th Avenue SE and Main Street. While properties adjacent to 112th Avenue SE and Main Street would be removed, none would be contributing properties to the potential Surrey Downs Historic District. Noise impacts would be mitigated with the exception of exterior areas of some multifamily units located outside of the potential historic district.

**Temporary impacts during construction:** Impacts during construction could include short-term and long-term lane closures, the loss of on-street parking, and bus route impacts. Partial road closures would likely occur on 112th Avenue SE, Main Street, 108th Avenue NE, and NE 6th Street. Construction noise also would be experienced. During construction, the Bellevue Transit Center would be closed and transit service modifications would be necessary.

**Construction risks:** Construction risk would be moderate.

## Preferred 110th Avenue NE Tunnel Alternative (C9T)

From Segment B, *Preferred Alternative C9T* connects with *Preferred Alternative B2M*, and can connect from Alternatives B3, B3 114th Design Option, or B7 which would include the East Main Station. From *Preferred Alternative B2M*, *Preferred Alternative C9T* begins on the east side of 112th Avenue SE, then transitions to the west side at SE 6th Street intersection before turning west into a tunnel portal on Main Street. The tunnel continues on the south side of Main Street before turning north under 110th Avenue NE. *Preferred Alternative C9T* has an underground Bellevue Transit Center Station at NE 4th Street. From this station, *Preferred Alternative C9T* continues north to NE 6th Street, turns east where it exits the tunnel portal, transitions to an elevated profile in the center of NE 6th Street, and then crosses to the north side of NE 6th Street to pass over 112th Avenue NE, I-405, and 116th Avenue NE. *Preferred Alternative C9T* then turns north along the BNSF Railway right-of-way to cross NE 8th Street and reach the elevated Hospital Station. *Preferred Alternative C9T* then connects with Segment D alternatives from the BNSF Railway right-of-way.

### Evaluation Summary

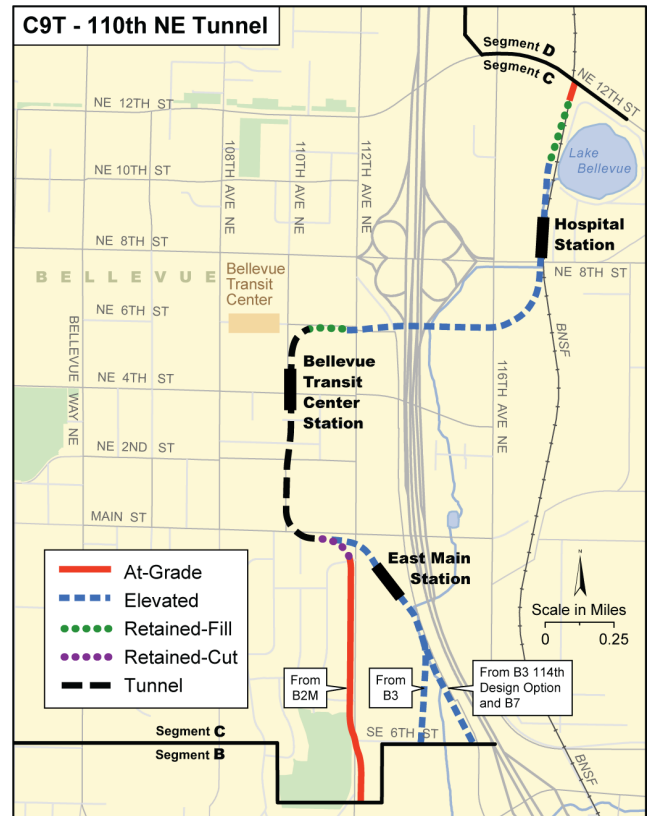
**Markets served by stations:** The stations would serve the city center, Bellevue City Hall, Bellevue Transit Center, Meydenbauer Center, NE 6th Street pedestrian corridor, and the Overlake and Group Health medical centers east of I-405.

**Estimated cost:** \$790 million to \$1,025 million

**Ridership:** Forecasts predict 7,000 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** *Preferred Alternative C9T* includes an at-grade crossing at 112th Avenue SE and SE 6th Street. In addition, SE 1st Street would be closed and not have access to 112th Avenue SE. SE 4th Street would be realigned to the intersection of 112th Avenue SE and SE 6th Street to maintain access to the neighborhood. One intersection, NE 4th Street and 108th Avenue NE, would not meet intersection operation standards, with greater delay than the No Build Alternative.

**Potential environmental impacts during operation:** *Preferred Alternative C9T* would result in 47 residential and 17 business displacements, affecting 200 employees. Realigning SE 4th Street would permanently acquire 0.6 acre of Surrey Downs Park, and a station entrance for the Bellevue Transit Center Station would permanently acquire a portion of the NE 2nd Street Pocket Park; however, it would remain



usable as open space. *Preferred Alternative C9T* would relocate businesses along Main Street for the tunnel portal, but there would be no effects on the potential Surrey Downs Historic District. Property acquisitions along 112th Avenue SE do not result in impacts to the potential Surrey Downs Historic District. Noise impacts to residences and hotels would be mitigated. *Preferred Alternative C9T* would also result in a landscape buffer between Surrey Downs neighborhood along 112th Avenue NE and Main Street.

**Temporary impacts during construction:** Cut-and-cover tunnel construction would affect residents and businesses along 110th Avenue NE between Main and NE 6th Streets; however, traffic and access would be maintained to the extent possible. Other impacts could include detours and lane and roadway closures. Construction noise would occur during site preparation and project construction.

**Construction risks:** Construction risk would be high due to cut-and-cover tunneling.



## 110th Avenue NE At-Grade Alternative (C9A)

From Segment B, Alternative C9A could connect with Alternative B3 - 114th Extension Design Option, Alternative B7, or 2008 Draft EIS Alternatives B2A or B3. Alternative C9A has an East Main Station if connecting to Alternatives B3, B3 114th Design Option, or B7. From B2A, Alternative C9A begins at-grade in the center of 112th Avenue SE and transitions to an elevated profile and shifts to the east side of 112th Avenue SE before crossing west over 112th Avenue NE and becoming at-grade along the south side of Main Street. Alternative C9A turns north in the center of 110th Avenue NE and travels at-grade in the center of the street to NE 6th Street, where it turns east to a Bellevue Transit Center Station located between 110th and 112th Avenues NE. From the station, this alternative travels east in an elevated profile over 112th Avenue NE, I-405, and 116th Avenue NE. Alternative C9A then turns north along the BNSF Railway right-of-way to cross NE 8th Street and reach the elevated Hospital Station and then connects with Segment D alternatives from the BNSF Railway right-of-way.

### Evaluation Summary

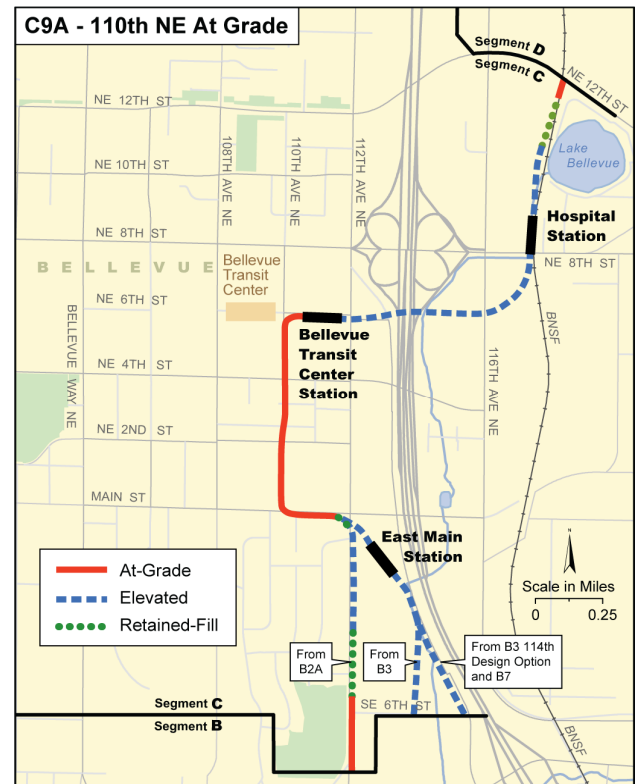
**Markets served by stations:** The stations would serve the city center, Bellevue City Hall, Bellevue Transit Center, Meydenbauer Center, NE 6th Street pedestrian corridor, the Overlake and Group Health medical centers east of I-405, southeast downtown, and Surrey Downs.

**Estimated cost:** \$465 million to \$640 million

**Ridership:** Forecasts predict 7,500 to 8,000 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** Along 110th Avenue NE in the center median, property access and circulation would be limited to right-in/right-out. Alternative C9A would impact the intersections of NE 4th Street and 108th Avenue NE and NE 8th and 110th Avenue NE. Alternative C9A includes widening 112th Avenue SE to the east for northbound traffic where the alignment is at-grade and transitioning to elevated; further, the transition to elevated would result in the loss of access to SE 4th Street for northbound traffic.

**Potential environmental impacts during operation:** Alternative C9A would acquire up to 1 residence and 18 businesses and would displace 230 employees. Alternative C9A would permanently acquire less than 0.1 acre of the NE 2nd Street Pocket Park.



There would be no impacts to Surrey Downs Park. The ecosystem impacts identified in Table ES-3 are related to the connectors from alternatives B3, B3 114th Design Option or B7 on Sturtevant Creek. Removing trees along 112th Avenue NE along with the presence of the elevated guideway would change the visual setting and would reduce the medium visual quality category to low. None of the connectors or the portion of Alternative C9A along Main Street would adversely affect the Surrey Downs neighborhood or potential historic district. Noise impacts would be mitigated with the exception of exterior areas of some multifamily units located along 112th Avenue SE and 110th Avenue NE.

**Temporary impacts during construction:** At-grade construction activities would include detour routes, short-term and long-term lane closures, loss of on-street parking, and bus route impacts. The limited and/or restricted access would affect businesses during construction. Construction noise would occur during the site preparation and project construction.

**Construction risks:** Construction risk would be moderate.

## 114th Avenue NE Elevated Alternative (C14E)

Alternative C14E connects to Alternatives B3, B3 – 114th Extension Design Option, and B7 and follows 114th Avenue SE/NE to the south side of the I-405 and NE 8th Street interchange. This alternative is elevated the entire distance and crosses over I-405 beginning at NE 6th Street. The Bellevue Transit Center Station is located on an elevated structure above 114th Avenue NE, between NE 4th and 6th Streets, east of the existing Bellevue Transit Center. Access from the existing Bellevue Transit Center to the station would be provided via an elevated moving sidewalk from the station to City Hall Plaza, located across the street from the Bellevue Transit Center. After crossing I-405, Alternative C14E crosses 116th Avenue NE in an elevated profile and then turns north in the BNSF Railway right-of-way to an elevated Hospital Station. Alternative C14E does not include the East Main Station.

### Evaluation Summary

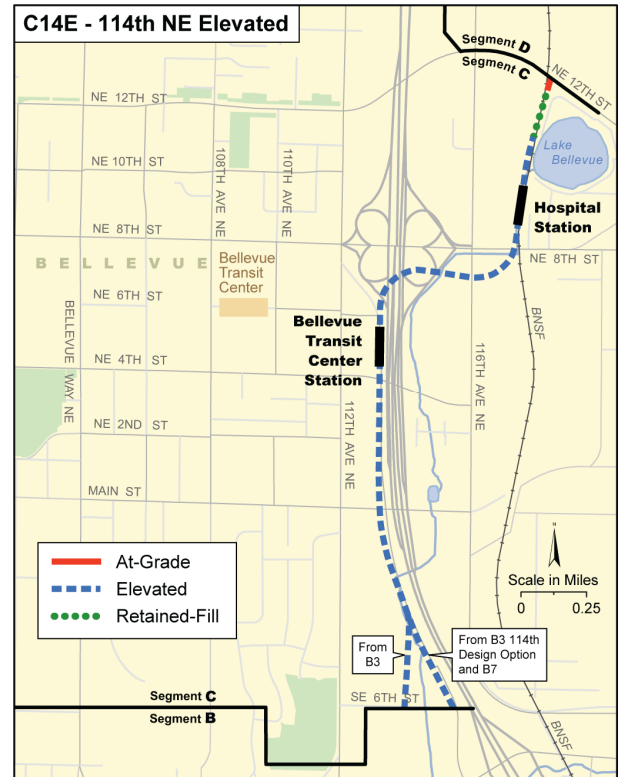
**Markets served by stations:** The stations would serve the eastern side of Downtown Bellevue, Bellevue City Hall, Meydenbauer Center, and the Overlake and Group Health medical centers east of I-405.

**Estimated cost:** \$495 million to \$575 million

**Ridership:** Forecasts predict 5,500 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** Alternative C14E is grade-separated throughout Segment C; there would be no signalized crossings or access and circulation impacts.

**Potential environmental impacts during operation:** Alternative C14E would displace 22 businesses and affect 485 employees but would not acquire any residences. Ecosystem impacts with Alternative C14E would be related to the connectors from Alternatives B3, B3 114th Design Option, or B7 on Sturtevant Creek and would be less than 0.1 acre. Alternative C14E's elevated profile would be seen from areas near it and along 114th Avenue NE, and the elevated walkway to the Bellevue Transit Center would block views of the Cascade Mountains from east-west running streets or areas along 110th Avenue NE (such as the City Hall Plaza or the Bellevue Transit Center Station). All noise impacts would be mitigated. No parkland or historic properties would be affected by Alternative C14E.



### Temporary impacts during construction:

Constructing Alternative C14E along 114th Avenue NE would likely reduce the road to one lane of traffic between Main and NE 6th Streets but business and emergency access would be maintained. Construction noise would occur during the site preparation and project construction.

**Construction risks:** Construction risk would be low.



Simulation of Bellevue Transit Center Station on Alternative C14E

## Segment D: Bel-Red/Overlake

Segment D is located within the Bel-Red subarea of Bellevue and the Overlake neighborhood of Redmond. This area is currently dominated by light industrial and commercial uses, including several office parks. The recently adopted Bel-Red Subarea Plan will accommodate 4.5 million square feet of office and commercial space and about 5,000 dwelling units. In Redmond, the newly adopted Overlake Neighborhood Plan update and implementation project anticipates approximately 5,800 dwellings and up to 4.5 million square feet of new commercial space. Any Segment D station could be an interim terminus, and the Overlake Transit Center Station is identified as an interim terminus in the ST2 plan. Within Segment D, a potential tail track could extend past the Overlake Transit Center or within the BNSF Railway corridor near the Segment C/D connection. The maintenance facilities within Segment D remain a potential part of the East Link Project but have not changed since the 2008 Draft EIS; therefore, they are not addressed in this SDEIS.

### Alternatives

*Preferred Alternative D2A* has been modified from the 2008 DEIS Alternative D2A by shifting the route in the 120th Station area to the north, remaining adjacent to SR 520 north of NE 24th Street and moving the Overlake Village Station along SR 520. There are also two design options associated with this alternative: Alternative D2A - 120th Station Design Option, which involves changes in vertical profile at the 120th Station, and Alternative D2A - NE 24th Street Design Option, which involves a route change along NE 24th Street and 152nd Avenue NE and a different location for the Overlake Village Station.

### Components

**120th Station:** This station is located between 120th and 124th Avenues NE north of a new roadway, 15th/16th Streets NE. The preferred station is a retained-cut profile, but the project includes an at-grade station design option.

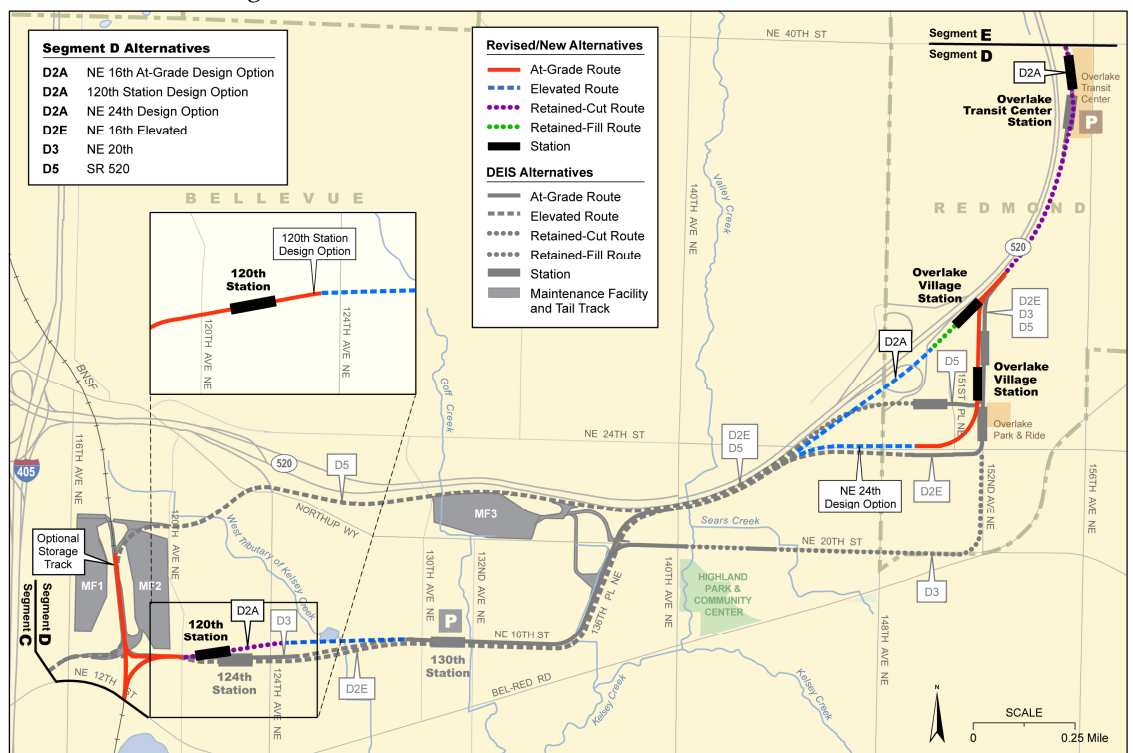
**130th Station:** This station is located on NE 16th Street between 130th and 132nd Avenues NE and includes a park-and-ride lot with 300 parking spaces.

**Overlake Village Station:** There are two versions of this station: one is associated with *Preferred Alternative D2A* adjacent to the SR 520 roadway, and a second is on 152nd Avenue NE north of NE 24th Street, associated with the D2A NE 24th Design Option.

**Overlake Transit Center Station:** This station is located at the existing Overlake Transit Center, which is reconfigured to accommodate the new station and up to 320 parking spaces.

### Connectors from Segment C

**BNSF:** From *Preferred Alternatives C11A* and *C9T* or Alternatives *C9A* and *C14E*.



## Comparison of Segment D Alternatives

Table ES-4 compares impacts expected from the Segment D Alternatives. *Preferred Alternative D2A* was modified in response to development plans in both the Bellevue and Redmond portions of Segment D. *Preferred Alternative D2A* would result in a greater level of permanent impacts on wetlands and wetland buffers compared with the other Segment D alternatives. *Preferred Alternative D2A* includes property acquisitions around the 120th Station near the proposed NE 15th/16th Street and at the intersection of NE 24th Street and 152nd

Avenue NE. *Preferred Alternative D2A* would minimize impacts related to redevelopment potential near the Overlake Village Station by reducing acquisitions on the surrounding properties. D2A 120th Station Design Option would result in the same level of impacts as *Preferred Alternative D2A*. D2A NE 24th Design Option shifts the route at NE 24th Street and 152nd Avenue NE and locates the Overlake Village Station central to a planned transit-oriented development. This design option would, however, result in higher office and commercial relocations.

**TABLE ES-4**  
Comparison of Segment D Alternatives

Feature	Range of 2008 Draft EIS Alternatives	Alternatives	
		D2A <sup>b</sup>	D2A - NE 24th Design Option
<b>Number of Stations</b>	2 to 4	4	4
<b>Estimated Cost</b> (millions, 2007 \$)	\$460 to \$870	\$665 to \$770	\$710 to \$820
<b>2030 Daily Ridership</b>	Segment boardings	6,000 to 6,500	6,000
	Total East Link ridership	45,500 to 46,000 <sup>c</sup>	49,500
<b>Travel Time through Segment</b> (minutes)	7 to 10	8	10
<b>Length</b> (miles)	3.4 to 3.6	3.3	3.5
<b>Construction Risk<sup>a</sup></b>	Low to Moderate	Low	Low
<b>Environmental Impacts</b>			
Business Displacements (number of employees)	41(430) to 72(1,480)	29 (775)	67 (1,900)
Full/Partial Property Acquisition	3/32 to 19/97	7/47	10/56
Decrease in Visual Quality	No	No	No
Wetlands: permanent/temporary (acres)	0.1 to 0.5/0	0.6/0.8	0.6/0.8
Wetlands buffer: permanent/temporary (acres)	0.1 to 0.4/0	0.6/1.4	0.6/1.4
High-Value Nonwetland Habitat Loss (acres)	0.1 to 1.3	0.8	0.8
Intersections Operating Worse than No Build Alternative before mitigation	0 to 2	1-2	2

<sup>a</sup> Construction Risk relates to the average risk of geologic and utilities constraints relative to the other alternatives for the East Link Project. Refer to Chapter 6 in 2008 Draft EIS for a description of criteria.

<sup>b</sup> Range includes *Preferred Alternative D2A* – 120th Station Design Option

<sup>c</sup> Range shown for the Draft EIS alternatives has not been updated to be consistent with the SDEIS alternatives. Updated information will be provided in the Final EIS.

## Preferred NE 16th At-Grade Alternative (D2A)

*Preferred Alternative D2A* travels parallel to and north of a new NE 15th /16th Street corridor. From Segment C, *Preferred Alternative D2A* travels from the BNSF Railway corridor in a retained cut under 120th Avenue NE into the 120th Station and then under 124th Avenue NE. The profile rises on an elevated structure to an at-grade 130th Station, which includes a new park-and-ride lot with 300 parking spaces. *Preferred Alternative D2A* continues at-grade on NE 16th Street, turns north at 136th Place NE, and crosses NE 20th Street, transitioning to an elevated structure along the south side of SR 520.

*Preferred Alternative D2A* remains adjacent to SR 520 north of NE 24th Street, transitioning to an at-grade Overlake Village Station. *Preferred Alternative D2A* transitions to a retained-cut profile after the station and continues along SR 520 until reaching Overlake Transit Center Station, which includes a proposed four-story parking structure with 320 parking spaces, and then crosses under NE 40th Street before connecting with all Segment E alternatives. As an interim terminus, the tracks north of NE 40th Street would serve as a tail track for storage and turnback operations; or alternatively, the storage tracks could be located in the BNSF Railway corridor near the Segment C boundary.

*Preferred Alternative D2A* also includes two design options. The D2A 120th Station Design Option is at-grade instead of a retained cut between 120th and 124th Avenues NE. The D2A NE 24th Design Option leaves the SR 520 corridor and runs elevated along the north side of NE 24th Street, becomes at-grade after 148th Street and turns north along the west side of 152nd Avenue NE to the Overlake Village Station and then along SR 520.

### Evaluation Summary

**Markets served by stations:** The stations would serve the Bel-Red corridor, Overlake Village, and Microsoft headquarters.

**Estimated cost:** \$665 million to \$820 million

**Ridership:** Forecasts predict 7,000 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** Crossing gates would be included for the D2A 120th Station Design Option, in contrast to the retained-cut

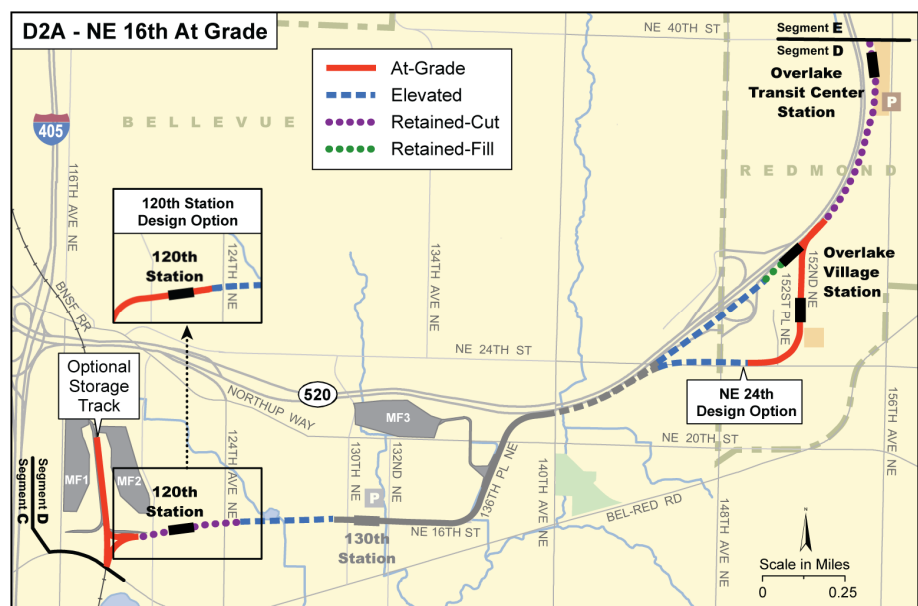
120th Station, which would minimize impacts with circulation. At-grade crossings at 130th Avenue NE, 132nd Avenue NE, NE 16th Street, and NE 20th Street would be signalized, and remaining cross streets (i.e., 134th Avenue NE) and driveways would be restricted to right-in/right-out access. The D2A NE 24th Street Design Option, remaining along SR 520 would improve transportation circulation compared with the 2008 Draft EIS version of Alternative D2A. The D2A NE 24th Design Option would have gates at the 152nd Avenue NE at-grade crossing.

### Potential environmental impacts during operation:

The D2A NE 24th Design Option would displace 67 businesses affecting 1,900 employees, as compared with 29 business displacements affecting 775 employees for the *Preferred Alternative D2A*. *Preferred Alternative D2A* would result in 0.6 acre of wetland impacts and 0.6 acre of wetland buffer impacts. The D2A NE 24th Design Option would remove large trees along NE 24th Street and 152nd Avenue NE, but would not lower the medium visual quality category for this area.

**Temporary impacts during construction:** Impacts during construction could include short-term and long-term lane closures, the loss of on-street parking, and bus route impacts. The entire Overlake Transit Center and Park and Ride will be closed in its entirety during construction of the light rail station, transit loop, and multi-level parking garage.

**Construction risks:** Construction risks would be low.





## Segment E: Downtown Redmond

Segment E travels parallel to SR 520 north and east into Downtown Redmond. Land uses consist of office campuses of three- to four-story buildings between NE 40th and NE 51st Streets then transition to suburban, low-density, single-family residential and then to multifamily residential before West Lake Sammamish Parkway NE, where the segment enters downtown Redmond. Downtown Redmond is an urban center with mostly one- to four-story commercial structures, while southeast of downtown Redmond the land uses change considerably to include light industrial and/or manufacturing. Downtown Redmond includes a substantial amount of land designated for park and open space uses along the Sammamish River and Bear Creek. Any Segment E station could be an interim terminus. The maintenance facilities within Segment E remain part of the project, but have not changed since the 2008 Draft EIS; they are not addressed in this SDEIS.

### Alternatives

*Preferred Alternative E2* has been modified from the original version of Alternative E2 described in the 2008 Draft EIS by replacing the Town Center Station and the Transit Center Station with one Downtown Redmond Station located midway between the two original stations, adding a tail track, and discontinuing the alignment up 161st Avenue NE.

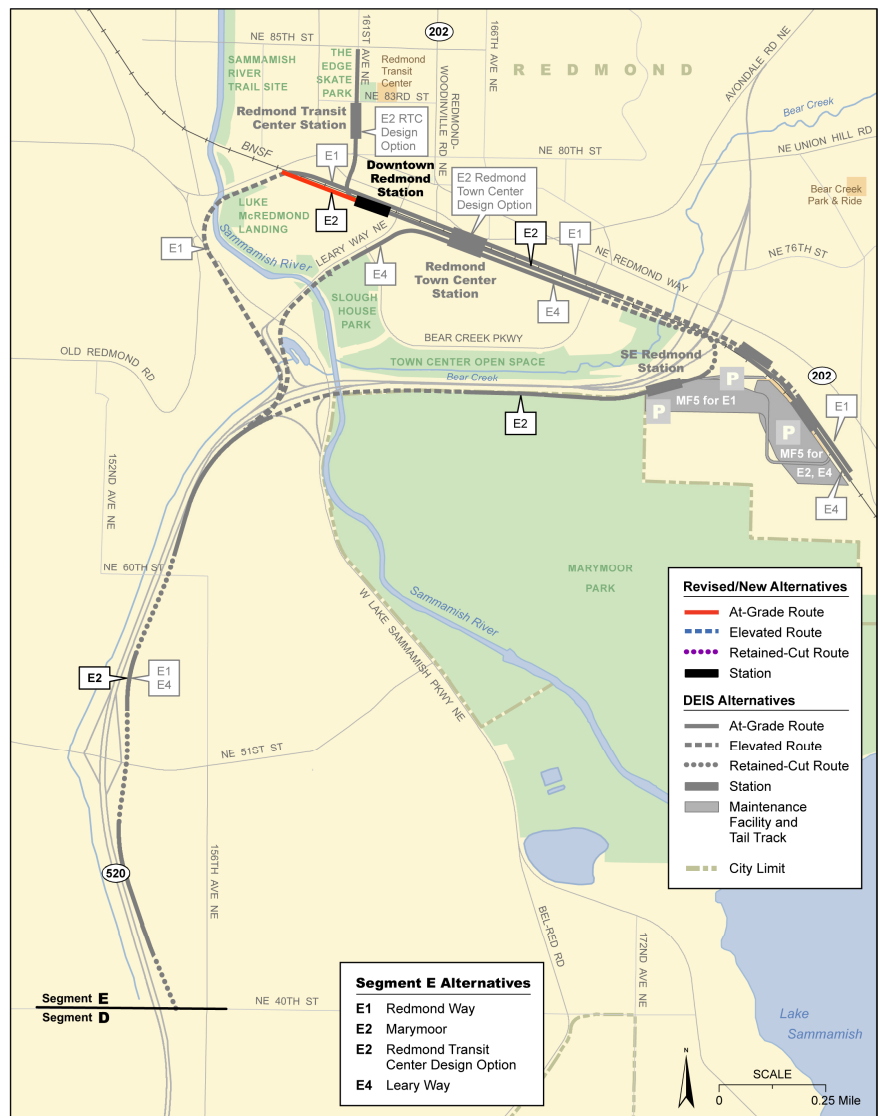
### Components

**SE Redmond Station:** This station is located at the northeast end of Marymoor Park on the south side of the SR 520 and SR 202 interchange and includes a five-story parking structure with 1,400 parking spaces.

**Downtown Redmond Station:** This station serves *Preferred Alternative E2* only and is located west of Leary Way NE.

### Connectors from Segment D

**Overlake Transit Center:** From *Preferred Alternative D2A* and 2008 Draft EIS Alternatives D2A, D2E, D3, and D5.



### Comparison of Segment E Alternatives

Table ES-5 compares impacts expected from the Segment E Alternatives. By changing the station location to the Downtown Redmond Station and eliminating the part of the route along 161st Street NE, there are reduced property impacts by avoiding relocating 124 housing units and 16 businesses.

Although revised *Preferred Alternative E2* would not change potential park impacts, it would be adjacent to a section of the East Lake Sammamish Trail not addressed in the 2008 Draft EIS because the trail extension by King County was in the planning stages when the 2008 Draft EIS was being prepared.

**TABLE ES-5**  
Comparison of Segment E Alternatives

Feature		Range of 2008 Draft EIS Alternatives	Alternative E2
Number of Stations		2 to 3	2
Estimated Cost (millions, 2007 \$)		\$495 to \$790	\$540 to \$625
2030 Daily Ridership	Segment boardings	3,000	3,500
	Total East Link ridership	45,500 to 46,000 <sup>a</sup>	49,500
Travel Time through Segment (minutes)		7 to 10	6
Length (miles)		3.4 to 3.6	3.7
Construction risk <sup>b</sup>		Low to Moderate	Low
<b>Environmental Impacts</b>			
Residential Displacements: number of housing units		2 to 126	2
Business Displacements (number of employees)		7 to 24 (120 to 380)	8 (200)
Full/Partial Property Acquisition		8 to 19/34 to 44	10/34
Parkland and Open Space		0.3 to 2.2	2.0
Historic properties (number of properties evaluated)		1-2	2
Intersections Operating Worse than No Build Alternative before mitigation		2 to 4	2

<sup>a</sup> Range shown for the DEIS alternatives has not been updated to be consistent with the SDEIS alternatives. Updated information will be provided in the Final EIS.

<sup>b</sup> Construction Risk relates to the average risk of geologic and utilities constraints relative to the other alternatives for the East Link Project. Refer to Chapter 6 in 2008 Draft EIS for a description of criteria.



## Preferred Marymoor Alternative (E2)

*Preferred Alternative E2* travels north, parallel to, and east of SR 520 in a combination of retained-cut and at-grade profiles and then transitions to an elevated profile on the south side of SR 520 in a new bridge structure over the Sammamish River. The route then descends down to the south side of SR 520 along Marymoor Park property lines. The proposed SE Redmond Station, parking structure, and park-and-ride lot are located on the south side of the SR 520 and SR 202 interchange. After the station, *Preferred Alternative E2* turns west going under the SR 520 and SR 202 interchange and enters the BNSF Railway right-of-way elevated over Bear Creek. *Preferred Alternative E2* then becomes at-grade to cross 170th Avenue NE and continues in the BNSF Railway corridor to the Downtown Redmond Station and terminus northwest of Leary Way. An 800-foot-long tail track extends past the station for train layover and turnback operations.

### Evaluation Summary

**Markets served by stations:** The stations serve areas of downtown Redmond and communities northeast and southeast of Redmond with a large park-and-ride station.

**Estimated cost:** \$540 million to \$625 million

**Ridership:** Forecasts predict 3,500 daily boardings at the stations in this alternative in 2030.

**Transportation impacts:** Transportation impacts would be consistent with the 2008 Draft EIS. The preferred alternative would avoid transportation impacts on 161st Avenue NE.

**Potential environmental impacts during operation:** Changes to the *Preferred Marymoor Alternative (E2)* would displace two residences and eight businesses, affecting approximately 200 employees. *Preferred Alternative E2* would impact 2.0 acres of Marymoor Park, but without affecting nearby recreational activity areas, and would include realigning a planned section of the East Lake Sammamish Trail. By changing the station location to the Downtown Redmond Station and avoiding the portion of the route along 161st Avenue NE, *Preferred Alternative E2* would result in reduced property impacts by avoiding relocating 124 housing units and 16 businesses. *Preferred Alternative E2* would not affect the Justice White House.



### Temporary impacts during construction:

Construction impacts would be slightly less than those in the 2008 Draft EIS. *Preferred Alternative E2* would include a temporary construction easement in Marymoor Park, but construction would not affect park use. Also, temporary trail closures and detours would be included for work near the Sammamish River, Bear Creek, and East Lake Sammamish and Bridle Creek trails. Some BNSF Railway corridor roadway crossings would need to be temporarily closed during station and track construction. Construction noise would occur during the site preparation and project construction.

**Construction risks:** Construction risks would be low.

## ES.4 Avoidance, Minimization, and Mitigation Measures

Sound Transit is committed to satisfying applicable federal, state, and local environmental regulations and applying reasonable mitigation measures to reduce significant adverse impacts. The SDEIS identifies measures to mitigate impacts of the new alternatives in addition to the measures identified in the 2008 Draft EIS. Avoidance and minimization measures committed to as part of the project are identified along with other potential measures that would reduce or eliminate impacts. These measures would be refined through final design and permitting. The NEPA Record of Decision (ROD) would be issued after the Final EIS and would include a list of all committed mitigation measures for the project to be built.

The following summarizes select mitigation measures that could be implemented for impacts that the project alternatives may not be able to fully minimize or avoid:

**Wetlands:** Sound Transit is committed to no net loss of wetland function and area on a project-wide basis. To the extent possible, compensatory mitigation would be identified close to impacts that would compensate for lost values in-kind. Mitigation would meet the requirements of local critical area ordinances.

**Noise:** Noise impacts would be mitigated by installing sound walls, building insulation, or other measures.

**Vibration:** Sound Transit would install ballast mats, resilient rail fasteners, or other specialized track work.

**Visual Quality:** Sound Transit would incorporate visual enhancement measures into the project where practical and include the following measures to address adverse impacts where they occur: provide landscaping or visual screening, implement aesthetic treatment of walls, implement pedestrian improvements, and minimize bulk of elevated structure.

**Parks:** Mitigation measures may include purchasing replacement land, enhancing or restoring existing parks, or providing financial compensation.

**Transportation:** Mitigation of changes in intersection level of service on surface streets may include restriping, adding right- or left-turn

pockets, allowing U-turn movements at intersections, or signalization.

## ES.5 Significant and Unavoidable Adverse Impacts

With the avoidance, minimization, and mitigation measures described in Chapter 3 of the SDEIS, significant adverse impacts would be avoided for most alternatives. Operational impacts that could not be fully mitigated include the following:

- Removing vegetation along with the addition of other project components, such as retaining walls or an overhead guideway, would have a visual impact along Bellevue Way for *Preferred Alternative B2M*.
- Three intersections in downtown Bellevue would operate worse than the No Build Alternative for *Preferred Alternative C11A* and one for *Preferred Alternative C9T*. Due to the developed nature of downtown Bellevue, these impacts may not be able to be fully mitigated.

Temporary construction impacts may not be avoidable and could be significant and adverse in some locations. These impacts could include temporary longer-term lane or roadway closures, loss of parking, and noise and vibration along portions of the new alternatives. Detour routes, when available, would reduce the impact of roadway closures, although delays, congestion, and inconvenience would still occur. There could be adverse impacts on businesses adjacent to the alternative corridors that depend on drive-by traffic to attract business.

## ES.6 Other Environmental Issues

### ES4.1 Section 4(f)/6(f)

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966, as amended, and codified at 49 United States Code (U.S.C.) §303, states the following:

*“is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”*

Title 23 Code of Federal Regulations (CFR), Part 774 as amended March 2008, states the following:

*The Administration may not approve the use, as defined in §774.17, of Section 4(f) property*

*unless a determination is made under paragraph (a) or (b) of this section. (a) The Administration determines that: (1) There is no feasible and prudent avoidance alternative, as defined in §774.17, to the use of land from the property; and (2) The action includes all possible planning, as defined in §774.17, to minimize harm to the property resulting from such use; or (b) The Administration determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact, as defined in §774.17, on the property.*

In Segment B, Preferred Alternative B2M would impact one park property, Mercer Slough Nature Park. In Segment C, Preferred Alternative C9T would affect Surrey Downs Park and the NE 2nd Street Pocket Park, Preferred Alternative C11A would affect Surrey Downs Park, and Alternative C9A would affect NE 2nd Street Pocket Park.

Several historic properties are within the Area of Potential Effect (APE) for the SDEIS alternatives. Properties evaluated include I-90 in Segment A; the Winters House in Segment B, the potential Surrey Downs Historic District in Segment C; and the Justice William Whitehouse and Bill Brown Saloon in Segment E.

FTA and Sound Transit initiated consultation with DAHP and the tribes in an August 2006 letter. Consultation continues with DAHP with meetings and correspondence regarding concurrence determinations. Meetings were also held in 2006 with the Muckleshoot and Snoqualmie tribes regarding cultural resources. Sound Transit initiated consultation with the cities of Seattle, Bellevue, Mercer Island, and Redmond and King County in its August 2006 letter inviting the jurisdictions to participate as cooperating agencies under NEPA. FTA and Sound Transit also invited the National Park Service to participate as a participating agency. Consultation continues through meetings with the cities, King County, and the National Park Service regarding potential project impacts.

FTA determinations of effect and findings of Section 4(f) use, including, if appropriate, findings of *de minimis* use and/or other evaluations as may be required under Section 4(f), will be made after concluding the consultation with affected agencies

and jurisdictions and review of public comment after publication of the SDEIS

Section 6(f)(3) of the Land and Water Conservation Fund Act of 1965 states the following:

*"...no property acquired or developed with assistance under this section shall, without the approval of the Secretary [of the Interior], be converted to other than public outdoor recreation uses. The Secretary shall approve such conversion only if he finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he deems necessary to assure the substitution of other recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location."*

Mercer Slough Nature Park is the only Section 6(f) resource within East Link project area. Preferred Alternative B2M would acquire a small portion (0.3 acre) of this property, resulting in a conversion of Section 6(f) property and acquisition of replacement property would be required.

Section 4(f) and Section 6(f) are addressed in Appendix A, Section 4(f)/6(f) Supplemental Evaluation.

## **ES6.2 Environmental Justice**

To comply with Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, Sound Transit analyzed the potential for the East Link Project to result in disproportionately high and adverse effects on minority and low-income populations. The analysis conducted in the 2008 Draft EIS concluded that the East Link Project would not result in any effects that would be considered high and adverse. For the most part, project impacts would be limited in scope, and others would be mitigated by implementing effective mitigation measures. Because the project would not result in disproportionately high and adverse effects, further analysis of the minority and income characteristics of effected populations is not warranted. There is no change in the impacts to minority and low-income populations with the new alternatives and the design modifications and, therefore, no change in the environmental justice effects.

## ES.7 Areas of Controversy and Issues to be Resolved

Many areas of controversy from the 2008 Draft EIS have been resolved. There are two primary issues related to the SDEIS alternatives. In Segment B the concern is choosing between the BNSF Railway corridor and alternatives along Bellevue Way. The City of Bellevue has indicated a preference for the BNSF Alternative (B7) and the Sound Transit Board's *Preferred Alternative B2M* follows Bellevue Way. In Segment C the City of Bellevue and Sound Transit are coordinating to find funding to build the higher cost preferred tunnel alternative (*Preferred Alternative C9T*) instead of the lower cost at-grade preferred alternative (*Preferred Alternative C11A*). This issue may affect when the project opens to Bellevue. Additionally, since publication of the 2008 Draft EIS, a lawsuit was filed challenging the State's constitutional authority to approve transition of the I-90 floating bridge center roadway to light rail transit use. The suit has been heard by the Washington State Supreme Court and a ruling is expected in 2011.

## ES.8 Next Steps

Table ES-6 shows anticipated project milestones for the East Link Project. Once the public and agency comment period, including public hearing, for this SDEIS is complete, Sound Transit, WSDOT, and FTA will prepare and issue the Final EIS. The Final EIS will respond to comments received on the 2008 Draft EIS and this SDEIS. As noted above, the Final EIS will include the preferred alternative identified by the Sound Transit Board. After the Final EIS is published, the Sound Transit Board will select the project to be built. The Board's final decision may amend or confirm the preferred alternative identified in the Final EIS.

The preferred alternative identified in the Final EIS is called a "locally preferred alternative" by FTA to make clear that the federal government has not made a decision on the project until it issues a ROD after the Final EIS is completed. The ROD states FTA's decision on the project, identifies the alternatives considered by FTA in reaching its decision, and itemizes Sound Transit's commitments to mitigate project impacts. After the ROD has been issued the project will complete final design and is expected to start construction in 2013.

TABLE ES-6  
Project Milestones

Preliminary Design and Environmental Review	
Draft EIS published	December 2008
Draft EIS comment period	75 days
Sound Transit Board identifies preferred alternative	Spring 2009/ Spring 2010
SDEIS published	Fall 2010
SDEIS comment period	60 days
Final EIS published	Spring 2011
Sound Transit Board selects project to be built	Summer 2011
Federal Record of Decision	Summer 2011
Final Design, Construction, and Operation — ST2 Plan Targets	
Final Design	2011 - 2014
Construction	
<ul style="list-style-type: none"> <li>Seattle to Bellevue</li> <li>Bellevue to Overlake</li> </ul>	2013 - 2019 2014 - 2020
Start of Service	
<ul style="list-style-type: none"> <li>Seattle to Bellevue</li> <li>Bellevue to Overlake</li> </ul>	2020 2021