# LINK LIGHT RAIL OPERATIONS AND MAINTENANCE SATELLITE FACILITY

DRAFT ENVIRONMENTAL IMPACT STATEMENT SUMMARY



**May 2014** 



U.S. Department of Transportation Federal Transit Administration



May 9, 2014

#### Dear Recipient:

The U.S. Department of Transportation Federal Transit Administration (FTA) and Sound Transit (the Central Puget Sound Regional Transit Authority) have prepared this Draft Environmental Impact Statement (Draft EIS) on the proposed Link Light Rail Operations and Maintenance Satellite Facility. Sound Transit is the project proponent.

The Draft EIS 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 Link light rail Operations and Maintenance Satellite Facility in the cities of Lynnwood and Bellevue. The Draft EIS examines the project alternatives identified by the Sound Transit Board in December 2012.

The major choices for the project involve the location of a light rail operations and maintenance satellite facility. The Sound Transit Board will consider the Draft EIS, public and agency comments, and other information before identifying a preferred facility location. FTA and Sound Transit will prepare a Final EIS which will respond to comments on the Draft EIS and include an evaluation of impacts and mitigation for the preferred alternative and other alternatives considered. After completion of the Final EIS the Sound Transit Board will select the project to be built. FTA will also 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.

The attached is an Executive Summary of the Draft EIS. Also available are a separately bound Draft EIS and four technical reports. These documents are included on the enclosed CD. Please see the Fact Sheet of this Draft EIS regarding document availability and who to contact for further information about the Draft EIS.

Sincerely,

Kent Hale

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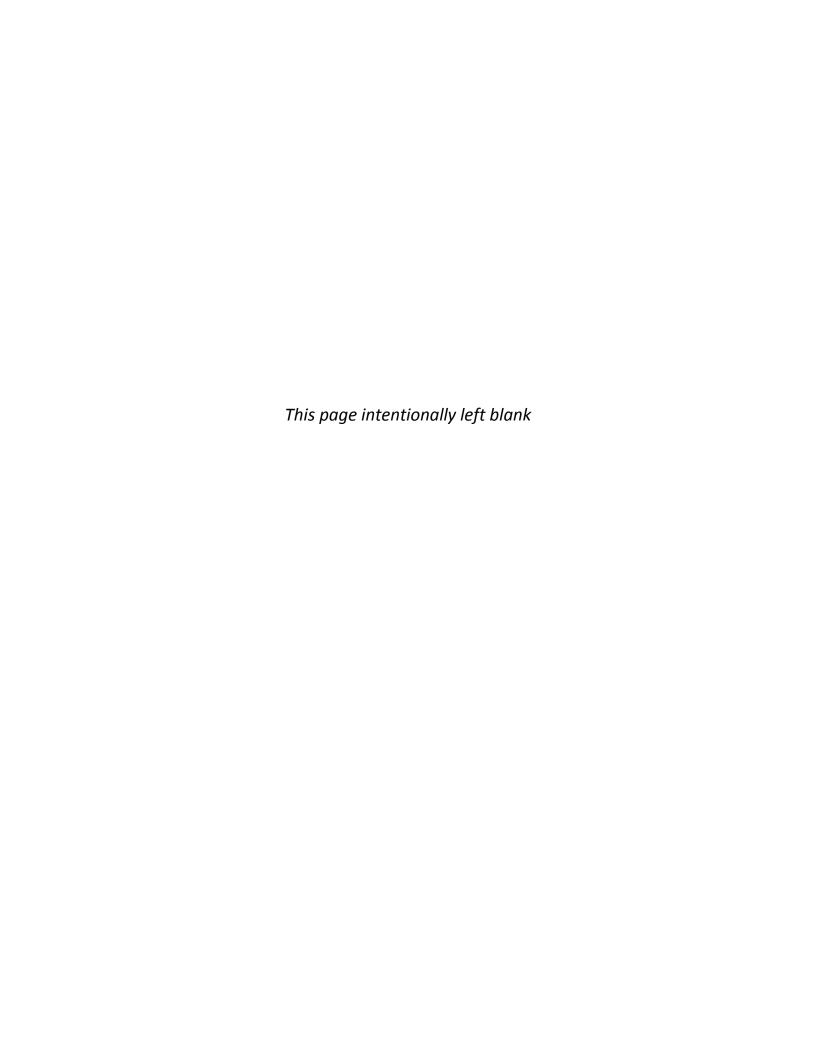
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# LINK LIGHT RAIL OPERATIONS AND MAINTENANCE SATELLITE FACILITY KING AND SNOHOMISH COUNTIES, WASHINGTON DRAFT ENVIRONMENTAL IMPACT STATEMENT

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

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL TRANSIT ADMINISTRATION

and

#### CENTRAL PUGET SOUND REGIONAL TRANSIT AUTHORITY

(Sound Transit)
In cooperation with
CITY OF BELLEVUE
CITY OF LYNNWOOD
KING COUNTY
SNOHOMISH COUNTY
U.S. ARMY CORPS OF ENGINEERS

Date of Approval

Regional Administrator

For Federal Transit Administration, Region 10

Date of Approval

SEPA Responsible Official

For Central Puget Sound Regional Transit Authority

# State Environmental Policy Act (SEPA) Fact Sheet

#### **Project Title**

Link Light Rail Operations and Maintenance Satellite Facility

#### **Proposed Action**

The Link Light Rail Operations and Maintenance Satellite Facility (OMSF) project (proposed project) proposes to construct and operate an OMSF to meet the needs of the expanded fleet of light rail vehicles (LRVs) identified in *Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound* (ST2). The OMSF would be used to store, maintain, and dispatch LRVs for daily service by providing vehicle storage, preventative maintenance inspections, light maintenance, emergency maintenance, interior vehicle cleaning, and exterior vehicle washing. The facility would also be used to accommodate administrative and operational functions, such as serving as a report base for LRV operators. Additional facility elements would include employee parking, operations staff offices, maintenance staff offices, dispatcher work stations, an employee report room, and areas with lockers, showers, and restrooms for both operators and maintenance personnel. Four build alternative sites for the proposed project are evaluated: one in Lynnwood and three in Bellevue, Washington.

#### **Project Proponent and State Environmental Policy Act Lead Agency**

Sound Transit Union Station 401 South Jackson Street Seattle, Washington 98104 www.soundtransit.org

# **Dates of Construction and Opening**

Sound Transit plans to begin construction of the proposed project by 2017, and expects it to be ready for operations in 2020.

# National Environmental Policy Act Lead Agency

Federal Transit Administration (FTA) 915 Second Avenue, Suite 3142 Seattle, Washington 98174

#### **State Environmental Policy Act Responsible Official**

Perry Weinberg, Director, Office of Environmental Affairs and Sustainability Sound Transit Union Station 401 South Jackson Street Seattle, Washington 98104

#### **Contacts**

#### **Sound Transit**

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#### **Federal Transit Administration**

J. Steve Saxton, Transportation Program Specialist, FTA Region 10915 Second Avenue, Suite 3142Seattle, Washington 98174(206) 220-4311

# **Potential Permits and Approvals**

The list below pertains to permits that may be required based on the range of alternatives in this Draft Environmental Impact Statement (Draft EIS).

Permit or Approval	Issuing Agency		
Federal			
Section 106 Review	Federal Transit Administration		
Section 4(f) Review	Federal Transit Administration		
Clean Water Act, Section 404	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		
State and County			
Hydraulic Project Approval	Washington Department of Fish and Wildlife		
Public Utility Commission Permits	Washington Public Utility Commission		
Section 106 Review	Washington State Department of Archaeology and Historic Preservation		
National Pollution Discharge Elimination System Stormwater Discharge Permit	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		
Cities			
Street Use Permits	Cities of Bellevue and Lynnwood		
Construction Permits	Cities of Bellevue and Lynnwood		
Right-of-Way Permits or Franchise for Use of City Right-of-Way	Cities of Bellevue and Lynnwood		
Environmental Critical Areas/Sensitive Areas Review	Cities of Bellevue and Lynnwood		
Development Permits	Cities of Bellevue and Lynnwood		
Noise Variance	Cities of Bellevue and Lynnwood		
Street Vacations	Cities of Bellevue and Lynnwood		
Certificates of Approval	Cities of Bellevue and Lynnwood		
Other			
Various Approvals: Planning, Design Review, and Arts Commissions	Cities of Bellevue and Lynnwood		
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**

This Draft EIS was prepared by consultants at the following firms: ICF International, Huitt-Zollars, Heffron Transportation, Inc., Hart Crowser, and Michael Minor and Associates. See Appendix A, *Document Support Information*, Section A.2, for a detailed list of preparers and the nature of their contributions.

#### **Date Draft Environmental Impact Statement Issued**

May 9, 2014

#### **Commenting on the Draft Environmental Impact Statement**

A comment period of 45 days will begin May 9, 2014. Comments on the Draft EIS can be made in writing, by email, or at the public hearings. All comments are due by close of business on June 23, 2014. Please send written comments to the following address:

Attention: Sound Transit Link Light Rail OMSF Draft EIS Comments Sound Transit Union Station 401 South Jackson Street Seattle, Washington 98104

Email comments should be sent to OMSF@soundtransit.org. Both written and email comments should include an addressee and return address.

Or please attend one of the following public hearings with open house events and offer your comments at the hearing.

#### June 3, 2014—Lynnwood

5:00 p.m. to 7:30 p.m. Lynnwood Convention Center 3711 196th Street SW Lynnwood, WA 98036

#### June 5, 2014—Bellevue

5:00 p.m. to 7:30 p.m. Coast Bellevue Hotel 625 116th Avenue NE Bellevue, WA 98004

#### **Next Actions**

Following publication of the Draft EIS, public hearings will be held and comments will be taken on the proposed project. A Final EIS will be published in mid to late 2015, identifying a preferred alternative and responding to public and agency comments received. Following publication of the Final EIS, the Sound Transit Board of Directors will make a final decision on the OMSF alternative to be built. After publication of the Final EIS, FTA is expected to issue a Record of Decision (ROD) on the proposed project.

#### **Related Documents**

#### **Environmental Documents**

East Link Project Final Environmental Impact Statement (Sound Transit 2011)

Lynnwood Link Extension Draft Environmental Impact Statement (Sound Transit 2013)

Final Supplemental Environmental Impact Statement on the Regional Transit Long-Range Plan (Sound Transit 2005)

#### **Other Documents**

Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound (Sound Transit 2008).

#### Cost and Availability of Draft Environmental Impact Statement

This Draft EIS is available for public review in a variety of formats and locations. The Draft EIS is available on the Sound Transit website (http://www.soundtransit.org/omsf); the document is also available on CD at no cost from Sound Transit. Paper copies of the Draft EIS are available for the cost listed below.

- Executive Summary-FREE
- Draft EIS \$25.00
- Technical Background Reports \$11.00-\$15.00 each

Copies of the Draft EIS and related documents listed above are available for review or purchase at the office of Sound Transit, Union Station, 401 South Jackson Street, Seattle, Washington 98104. To request any of the documents, please contact Erin Green at (206) 398-5464. To review these documents, please call the Sound Transit librarian at (206) 398-5344 during normal business hours (weekdays from 8:00 a.m. to 5:00 p.m.) to arrange an appointment.

Paper copies of the Draft EIS documents are also available for review at the following public places:

- Bellevue Regional Library
- Lynnwood Library
- Washington State Library

#### **Preface**

Sound Transit plans, builds, and operates the regional mass transit system for the central Puget Sound region. The system includes light rail, heavy rail commuter trains, and express buses. In 2005, Sound Transit updated the *Sound Transit Regional Transit Long-Range Plan* (Long-Range Plan) using public input to refine the long-term vision of mass transit for the region. The Long Range Plan informed the development of the ST2 program, which provides the foundation for expanding the regional transit system. Since voter financing approval in 2008, Sound Transit has been integrating the new ST2 program with the ongoing light rail, commuter rail, and regional express bus service operations. In addition to added commuter rail and bus service, implementation of ST2 will add approximately 36 miles to the light rail system and increase the existing LRV fleet to approximately 180 vehicles.

Currently, the Link light rail system includes the Forest Street Operations and Maintenance Facility (Forest Street OMF), located at 3407 Airport Way South in the City of Seattle. The Forest Street OMF is configured to serve a maximum of 104 LRVs. The new OMSF is proposed to accommodate the added vehicles required by the ST2 light rail expansion.

Sound Transit, together with FTA, has prepared this Draft EIS for the proposed project in compliance with the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA). This Draft EIS achieves the following:

- Provides environmental information to assist decision makers in selecting the project alternative to be built.
- Describes the alternatives and their potential environmental impacts.
- Identifies measures to avoid and minimize impacts and, when necessary, mitigate for adverse impact.
- Considers cumulative impacts as part of the environmental review process.
- Provides information for other environmental processes, including compliance with
  - o The Endangered Species Act
  - Section 106 of the National Historic Preservation Act of 1966
  - Section 4(f) of the Department of Transportation Act of 1966, 49 United States Code (U.S.C.) 303
  - Section 6(f) of the Land and Water Conservation Funds Act
  - Executive Order 12898 Environmental Justice

The scope of environmental review and range of alternatives evaluated in this Draft EIS respond to public and agency comments received during the public scoping process that began in September 2012. Two public scoping meetings and one agency meeting were held during the scoping period.

To comply with NEPA and SEPA and to enhance readability, this Draft EIS focuses on the most relevant information regarding project definition, potential adverse impacts, and trade-offs among the alternatives. The study area for this Draft EIS varies by resource and is described within each resource section of the document, as appropriate.

The Draft EIS is organized as follows.

The **Executive Summary** is a separately bound, condensed version of the overall document. It briefly describes the purpose and need for the proposed project, the proposed project's goals and objectives, and the alternatives being considered. It presents the impacts for each alternative and potential mitigation, and briefly evaluates and compares the different alternatives. The Executive Summary concludes by identifying areas of uncertainty and the proposed project's next steps.

**Chapter 1. Purpose and Need for the Project,** describes the proposed project's purpose and need, provides a brief background of the proposed project, and outlines the proposed project's goals and objectives.

**Chapter 2. Alternatives Considered,** describes the alternatives evaluated and how they were identified and developed for study in this Draft EIS. A No Build Alternative is also evaluated to serve as a baseline for comparing the potential effects of the build alternatives. This chapter also provides an overview of the construction approach and a comparison of cost estimates by alternative. It concludes by explaining the proposed project's planning and decision-making context, including the major steps in the environmental evaluation and project development process.

**Chapter 3. Affected Environment and Environmental Consequences,** describes the built and natural environment in the study areas, explains the impacts from construction and operation of the proposed project alternatives, and describes potential avoidance and minimization measures. In the case that adverse impacts cannot be avoided, compensatory mitigation is identified, as appropriate. This chapter includes the following environmental topics.

- 3.1 Transportation
- 3.2 Acquisitions, Displacements, and Relocations
- 3.3 Land Use
- 3.4 Economics
- 3.5 Social Impacts, Community Facilities, and Neighborhoods
- 3.6 Visual and Aesthetic Resources
- 3.7 Air Quality and Greenhouse Gases
- 3.8 Noise and Vibration

- 3.9 Ecosystems
- 3.10 Water Resources
- 3.11 Energy
- 3.12 Geology and Soils
- 3.13 Hazardous Materials
- 3.14 Electromagnetic Fields
- 3.15 Public Services
- 3.16 Utilities
- 3.17 Historic and Archaeological Resources
- 3.18 Parklands and Open Space

**Chapter 4. Alternatives Analysis,** compares the project alternatives in terms of affected environment and how effectively they meet the project's goals and objectives.

Appendices A through G provide additional details on the project and Draft EIS process. Appendix A includes document support information (references, lists of preparers and recipients, and acronyms), Appendix B provides a summary of public involvement and agency coordination and a list of regulatory information used to prepare this Draft EIS. Appendices C and D provide federally required reports on environmental justice and Section 4(f) and 6(f) resources (park and recreation areas, wildlife refuges, and any facilities that have received Land and Water Conservation Act funding). Appendix E contains the detailed technical reports prepared for the Transportation, Noise and Vibration, Historic and Archaeological Resources, and Ecosystems sections of Chapter 3, Affected Environment and Environmental Consequences. Appendix F contains additional technical data that support the resource analysis sections of Chapter 3. Appendix G provides conceptual plans of the proposed project.

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# Summary

#### Introduction

This draft environmental impact statement (Draft EIS) evaluates the impacts of implementing the Sound Transit Link Light Rail Operations and Maintenance Satellite Facility (OMSF) Project (proposed project). The proposed project consists of the development and operation of a new OMSF to support the expansion of the Central Puget Sound Regional Transit Authority's (Sound Transit) Link light rail transit system. This system-wide expansion is part of *Sound Transit 2: A Mass Transit Guide, The Regional Transit System Plan for Central Puget Sound* (ST2) for transit investments, financing for which was approved by voters in November 2008.

Expanded maintenance base capacity is critical to the system-wide expansion in ST2. This environmental impact statement (EIS) is being prepared to evaluate operations and maintenance needs across the Sound Transit district and is not focused on a specific corridor. The environmental process includes evaluation and screening of sites in all corridors and ultimately advances four build alternatives located in the north and the east. Separate EISs are being prepared to support the alignment and station location decisions for the proposed light rail extension to the north, the Lynnwood Link Extension EIS, and to the south, the Federal Way Link Extension EIS. The alignment and station locations for the light rail extension to the east are addressed in the East Link Final EIS, which was completed in July 2011.

The Draft EIS evaluates four build alternatives that meet the purpose and need for the proposed project and a No Build Alternative, which considers how the transportation system would operate if the proposed project were not built. The No Build Alternative also provides a baseline against which to measure the impacts of the build alternatives.

The discussion that follows states the proposed project's purpose and need, including the goals and objectives the proposed project is designed to achieve. The discussion also compares the level of impact that would result from each build alternative and describes design features and measures that would avoid or reduce impacts. A summary of identified areas of controversy, and a list of the next steps in the environmental review process are also provided.

This Draft EIS is consistent with guidelines of the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA). Sound Transit is the lead agency under SEPA and the Federal Transit Administration (FTA) is the lead federal agency under NEPA. The environmental analysis provided will assist decision-makers in identifying a preferred alternative for the Final EIS.

#### Purpose and Need for the Proposed Project

#### **Purpose**

The purpose of the proposed project is to enable Sound Transit to meet the maintenance and storage needs of the expanded fleet of light rail vehicles (LRVs) identified in ST2. ST2 includes expansion of Sound Transit's Link light rail transit system, which will require additional operations and maintenance facility capacity to support the added LRVs.

Implementation of the proposed project would:

- Support the intended level of service for expanding the Link light rail system to the Lynnwood Transit Center, Overlake Transit Center and Kent/Des Moines.
- Minimize system annual operating costs and support efficient and reliable light rail service.
- Support regional long-range plans, including the Puget Sound Regional Council's VISION 2040 and Transportation 2040 plans, and the *Sound Transit Regional Transit Long-Range Plan* (Long-Range Plan).

The OMSF is expected to provide service and inspection functions to support a minimum of approximately 80 LRVs with the assumption that Sound Transit's existing light rail operations and maintenance facility (Forest Street Operations and Maintenance Facility [Forest Street OMF]) would continue to provide inspection services as well as heavy repair and overhauls. The OMSF would be used to store, maintain, and dispatch vehicles for daily service.

#### Need

The Forest Street OMF is located in the industrial area of downtown Seattle and is configured to serve up to 104 LRVs. To implement the ST2 expansion, Sound Transit needs to increase its LRV fleet to approximately 180 vehicles by 2023, which requires the proposed OMSF to be ready for operations in 2020 to accept delivery of new LRVs and support break-in procedures for those LRVs. The need for the proposed project exists because the Forest Street OMF cannot store, maintain, or deploy the vehicles associated with the expanded service called for in ST2. Sound Transit would not be able to provide the system-wide level of service called for by ST2 without adequate maintenance facility capacity. To implement ST2, the light rail system would require more storage and greater capacity for necessary service, maintenance, and inspection functions. The storage and maintenance facility must be sited to support efficient and reliable operations and deployment of LRVs to serve the entire Link light rail system.

#### **Project Goals and Objectives**

Based on the project purpose, Sound Transit developed the following goals and objectives to evaluate potential build alternatives. These goals and objectives uphold Sound Transit's legislative mandate to meet public transportation and mobility needs for high-capacity transit infrastructure while also being a responsible steward of the environment and being considerate of affected jurisdictions and the public while planning a fiscally responsible project.

• Transportation Goal. Facilitate operation of the expanded regional Link light rail system.

- o Locate a facility to provide efficient and reliable light rail service.
- **Environment Goal.** Preserve environmental quality.
  - o Minimize potential adverse impacts on the natural and built environment.
- Financial Goal. Achieve financial feasibility.
  - Build, operate, and maintain a facility that minimizes capital, construction, and annual system operating costs.

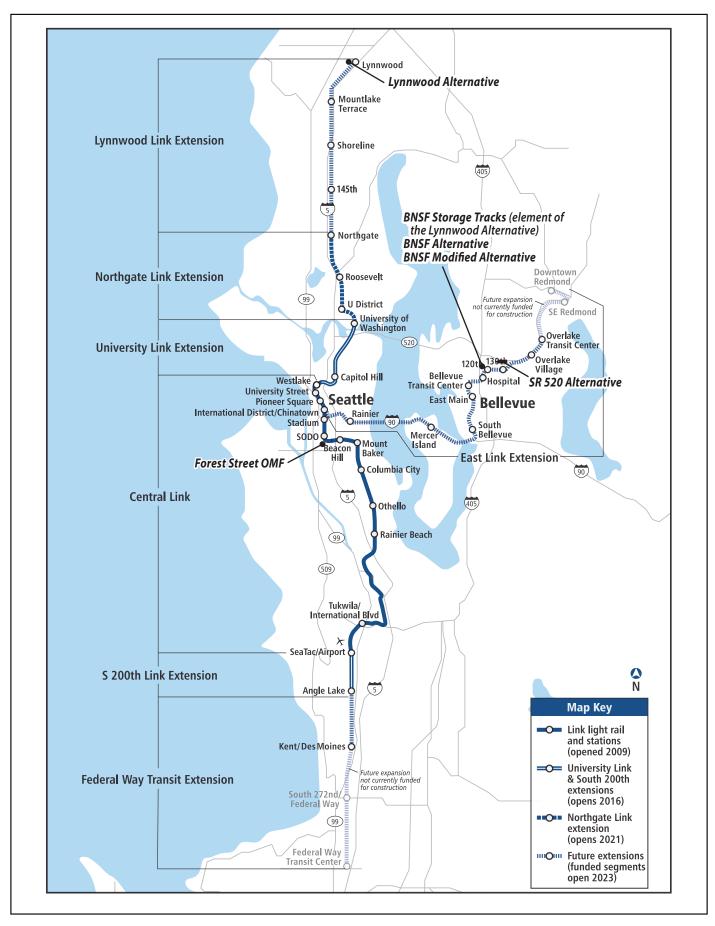
#### **Project Location**

Link light rail extensions of ST2 are planned in King and Snohomish Counties in the metropolitan Puget Sound region. Currently, planned light rail extensions with ST2 funding include the City of Lynnwood in the north, the Cities of Kent and Des Moines in the south, and the Cities of Bellevue and Redmond in the east. The OMSF would be located proximate to either the north or east line to serve the system. The project vicinity is shown in Figure S-1.

#### **Comparison of Alternatives**

During the early planning stages of the project, Sound Transit conducted a corridor analysis to identify constraints, benefits, and trade-offs of locating the facility in the north, south, and east corridors. Sound Transit found that sites located in the north and east corridors would meet operational needs. Locating an OMSF south of the junction where the north-south line and the north-east line meet at the International District Station, or expanding the Forest Street OMF (which is also located south of this junction), would not sufficiently support operations for the following reasons (Sound Transit 2012b).

- The time allotted to deploy trains serving the 6:00 a.m. to 10:00 a.m. morning peak period would be exceeded.
- The 4-hour nightly inspection and maintenance window (1:00 a.m. to 5:00 a.m.), when all trains must be off the system, could not be maintained.
- Expansion of the Forest Street OMF would not provide capacity (e.g., number of vehicle bays, operator report facility, parts storage and component repair) to meet the daily and weekly maintenance and inspection needs for the entire fleet of 180 vehicles.
- There is insufficient property to expand the Forest Street OMF to provide these needs without vacating or closing 6th Avenue S and/or Airport Way, which provide for freight mobility in the SODO industrial area.
- If all 180 vehicles were stored on a single site, a system failure during the morning deployment could result in the entire fleet being trapped and unable to begin service.



**Figure S-1:** Regional Setting for the Build Alternatives Sound Transit Link Light Rail OMSF Draft EIS

The environmental scoping period was held from September 17 to October 22, 2012. During this time, Sound Transit and FTA asked the public to provide comments on the proposed purpose and need statement, environmental issues for evaluation in the Draft EIS, and the potential alternatives being considered for study in the Draft EIS. Scoping was conducted by Sound Transit and FTA in consultation with other agencies, including the Washington State Department of Transportation (WSDOT); Snohomish and King Counties; the Cities of Lynnwood and Bellevue; potentially affected tribes; and other regional, state, and federal agencies.

The Sound Transit Board of Directors considered the project purpose and need; the physical and operational requirements of the OMSF and associated site screening criteria; and scoping comments and suggestions provided by agencies and the public. In December 2012, the Board adopted Motion M2012-82, which identified four build alternatives for detailed evaluation in this Draft EIS.

#### No Build Alternative

This EIS evaluates a No Build Alternative, as required under NEPA and SEPA, to represent the transportation system and the environment as they would exist without the proposed project. The No Build Alternative also provides a baseline against which the build alternatives can be compared. Under the No Build Alternative, an OMSF would not be built. The operations and maintenance support needs for the existing and currently planned and funded Link light rail system expanded by ST2 would be served exclusively by the Forest Street OMF south of downtown Seattle, which has the capacity to maintain up to 104 LRVs.

#### Key Operational and Environmental Impacts of the No Build Alternative

Under the No Build Alternative, light rail system service levels would be substantially lower than with the proposed project. With the OMSF, the light rail system would operate at the service levels anticipated in ST2: four-car trains at 8-minute headways (intervals between trains) on each operating line during peak periods (4-minute headways between the Lynnwood Transit Center and the International District Station, which represents the two combined operating lines); and 10 to 15-minute headways in the off-peak and late evenings (5- to 7.5-minute headways on the combined lines). Without the addition of an OMSF, the light rail system would operate using three-car trains at 11-minute headways during peak periods (5.5-minute headways on the combined lines), which would reduce the system's passenger capacity by more than 40% compared to the build alternatives.

Without the OMSF, some trains serving the East Link line would likely be deployed from the Forest Street OMF to establish morning service requiring them to travel north through the Downtown Seattle Transit Tunnel (DSTT) and turn back south at the Northgate Station to reach the East Link line. This level of service across the entire system would not meet projected demand and could result in passenger overcrowding on trains and station platforms. Lower service levels and light rail passenger capacity could result in fewer commuters using transit. These commuters may continue using automobiles instead, resulting in greater vehicular and greenhouse gas emissions. Economic activity and desired land use patterns, particularly those incorporating mixed-use and higher

densities, may occur more slowly near transit stations due to the reduced system capacity. While there would be no effect on ecosystems under the No Build Alternative, none of the benefits of the proposed project would be realized, such as updating stormwater management for improved water quality. Similarly, opportunities to implement seismic and slope stability best management practices (BMPs) may not occur as current land uses would continue. In short, the No Build Alternative would not meet the critical need for expanding LRV operation and maintenance capacity to meet the demands of the expanded ST2 system. Without an OMSF, Sound Transit would have to operate the expanded system at a lower level of service than planned, or delay some or all of the planned ST2 light rail extensions, until it developed additional operations and maintenance capacity.

#### **Build Alternatives**

The four build alternatives and their key operational and environmental impacts are described below. Table S-1 identifies the differentiating characteristics and impacts of the build alternatives. Environmental impacts related to transportation; social, community facilities, and neighborhoods; visual and aesthetic resources; air quality and greenhouse gases; energy; hazardous materials; electromagnetic fields; geology and soils; utilities; and historic and archaeological resources would be similar among the build alternatives.

#### **Lynnwood Alternative**

Under the Lynnwood Alternative, Sound Transit would construct the OMSF north of I-5 and east of the 52nd Avenue W/Cedar Valley Road intersection in the City of Lynnwood. The proposed Lynnwood Link Extension alignments in the *Lynnwood Link Extension Draft EIS* (Sound Transit 2013) are located along the OMSF Lynnwood Alternative site. A decision on what is to be built for the Lynnwood Link Extension has not yet been made. Therefore, the Lynnwood Alternative for the OMSF includes three design options, each connecting to one of the three build alternatives evaluated in the *Lynnwood Link Extension Draft EIS* (Sound Transit 2013). Design Option C1 would include lead track connecting to Lynnwood Link Extension Alternative C1, Design Option C2 would include lead track connecting to Lynnwood Link Extension Alternative C2, and Design Option C3 would include lead track connecting to Lynnwood Link Extension Alternative C3. The Lynnwood Alternative would require acquiring approximately 37 to 41 acres. The OMSF development footprint would be approximately 24 acres for all three design options, leaving approximately 9 to 13 acres for redevelopment.

The Lynnwood Alternative for the OMSF also includes offsite LRV storage, operator report facilities, and interior cleaning functions for up to 32 LRVs to provide morning service to the Eastside. This would be located north of NE 12th Street and south of State Route (SR) 520 in the City of Bellevue within the Sound Transit-owned Eastside Rail Corridor and on an adjacent property located immediately east of the Eastside Rail Corridor. The design acknowledges the railbanked status of the Eastside Rail Corridor by allowing sufficient width to accommodate a future trail and future freight or passenger rail use of the corridor. Conceptual layouts and bird's eye views of the Lynnwood Alternative site and additional storage area with ancillary facilities in Bellevue (BNSF Storage Tracks) are shown in Figures S-2a through S-2e.

Table S-1. Differentiating Characteristics and Impacts of the Build Alternatives

Differentiating Characteristic	Lynnwood Alternative	BNSF Alternative	BNSF Modified Alternative	SR 520 Alternative	
Capital Costs (2013 dollars)					
Million dollars	\$350-\$355	\$345	\$415	\$385	
Operations					
Requires off-site storage tracks	Yes	No	No	No	
Annual Facility Operating Costs (co	Annual Facility Operating Costs (constant dollars)				
Million dollars	\$66	\$63	\$63	\$63	
Acquisitions, Displacements, and I	Relocations				
Number of parcels acquired	14–15	6	14	13	
Number of existing land uses displaced	11–14	14	25	101	
Land Use					
Consistent with zoning / comprehensive plan designations	No; would require comp. plan and zoning change and a CUP	No; would require a CUP	No; would require a CUP	No; would require a CUP	
Surplus land available for redevelopment	9–13 acres	4 acres	8 acres	0 acres	
Economics					
Loss of annual property tax revenue (2012)	\$413,100- \$450,400	\$464,200	\$572,400	\$630,500	
Noise and Vibration					
Affected sensitive receptors and adjacent land uses (number after mitigation)	2 homes (None)	None	None	None	
<b>Ecosystems and Water Resources</b>					
Aquatic impacts	≤ 0.1 acre of stream buffer	0 acres of stream buffer	0 acres of stream buffer	Piping approx. 700 feet of Goff Creek and 0.64 acre of stream buffer	
Vegetation and wildlife impacts (vegetation removal)	11–12 acres	3 acres	6 acres	2 acres	
Wetland impacts (direct)	1.98-2.18 acres	0.07 acre	0.6 acre	0.39 acre	
Wetland buffer impacts	1.79 acres	0.25 acre	1.33 acres	0.29 acre	
Groundwater and stream baseflow impacts	No	No	No	Yes	
Public Services					
Number of direct impacts on essential public facilities	1	0	1	0	
Parkland and Open Space					
Number of temporary impacts on park resources	1	0	0	0	



**Figure S-2a:** Lynnwood Alternative, Design Option C1 Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-2b:** Lynnwood Alternative, Design Option C2 Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-2c:** Lynnwood Alternative, Design Option C3 Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-2d:** Lynnwood Alternative, Design Option C3—Bird's Eye View Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-2e:** Lynnwood Alternative, BNSF Storage Tracks\*
Sound Transit Link Light Rail OMSF Draft EIS
\*The BNSF Storage Tracks are located in Bellevue

#### Key Operational and Environmental Impacts of the Lynnwood Alternative

The Lynnwood Alternative would require off-site storage tracks, duplicating some functions (such as LRV cleaning and operator reporting), and introducing logistical complications in operations (such as introducing the need to rotate LRVs between two separate locations to accomplish all maintenance). The Lynnwood Alternative would result in 15-minute headways after 6:30 p.m. on the Lynnwood to Overlake Transit Center operating line. This would result from the need to provide daily inspection and interior cleaning of 32 LRVs at the BNSF Storage Tracks so those vehicles are ready for the next morning's deployment. The time needed to complete these functions at the BNSF Storage Tracks would require that these vehicles be removed from service earlier in the evening, resulting in longer headways after 6:30 p.m. This headway does not meet Sound Transit's planned off-peak headway of 10 minutes until 10:00 p.m. This could also result in irregular spacing of trains after 6:30 p.m. north of the International District Station, where the two operating lines merge.

The Lynnwood Alternative site is currently zoned for Light Industrial and Business / Technical Park uses. Development of the OMSF is not explicitly addressed in the City's land use code and would require a Conditional Use Permit (CUP) approval from the City of Lynnwood, and an amendment to the City's official zoning map. This is the only alternative that has the potential to affect existing residential uses (the neighborhood west of the Lynnwood Alternative site) due to the increase in noise. However, the increase in noise would be fully mitigated. The Lynnwood Alternative would also result in the highest annual facility operating costs and greatest impacts on ecosystem resources including vegetation, wetlands, and wildlife habitat. The Lynnwood Alternative would also require temporary closure and detour of the Interurban Trail while the elevated lead track is constructed. This alternative would occupy land owned by the Edmonds School District that is planned for a district support center, which would include administrative offices and school bus storage and maintenance facilities. The proposed maximum building height of the OMSF would be approximately 32 feet, consistent with the low profile of the buildings in the surrounding area and, therefore, does not represent a substantial visual change. Additionally, screening fences and landscape elements would be incorporated into the design.

#### **BNSF Alternative**

Under the BNSF Alternative, Sound Transit would construct the OMSF on property located between the Eastside Rail Corridor on the west and 120th Avenue NE on the east, south of SR 520 and north of NE 12th Street in the City of Bellevue. This site is approximately 27 acres—2 of which are a former rail spur right-of-way now under ownership of Sound Transit as part of the Eastside Rail Corridor—and is located along the adopted East Link revenue line northwest of the 120th Avenue NE station. The OMSF development footprint on the site is approximately 23 acres leaving approximately 4 acres to remain for redevelopment. Infrastructure for the proposed project would occupy most of the site leaving the southern portion available for other development. A conceptual layout of this site is shown in Figure S-3a and a bird's eye view is shown in Figure S-3b.



**Figure S-3a:** BNSF Alternative Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-3b:** BNSF Alternative—Bird's Eye View Sound Transit Link Light Rail OMSF Draft EIS

#### Key Operational and Environmental Impacts of the BNSF Alternative

The BNSF Alternative would be the least expensive to construct. The BNSF Alternative site is in the Bel-Red Corridor planning area, which is currently zoned for mixed use, office, and residential uses. The BNSF Alternative is not consistent with planned future land uses in the area. The City's land use code would require a CUP approval from the City of Bellevue. This alternative would require relocating existing industrial and commercial uses. The Bel-Red Corridor no longer includes industrially zoned land, but relocation of displaced businesses could occur on industrially zoned land elsewhere in Bellevue. The OMSF is consistent with existing uses and would not result in substantial changes to the existing visual environment because the building mass, size, and use are typical of the surrounding area.

#### **BNSF Modified Alternative**

Under the BNSF Modified Alternative, Sound Transit would construct the OMSF on both sides of the Eastside Rail Corridor west of 120th Avenue NE, south of SR 520 and north of NE 12th Street in the City of Bellevue. This site is located along the adopted East Link revenue line and is approximately 34 acres in size, including 2 acres of the Eastside Rail Corridor now under Sound Transit ownership. The OMSF development footprint on the site is approximately 24 acres leaving approximately 8 acres for future redevelopment. The storage tracks would be located on the western portion of the site, west of the rail corridor. Other OMSF facilities would be located adjacent to the east side of the rail corridor, leaving the frontage area along 120th Avenue NE available for other development. A conceptual layout of this site is shown in Figure S-4a and a bird's eye view is shown in Figure S-4b.

#### Key Operational and Environmental Impacts of the BNSF Modified Alternative

The BNSF Modified Alternative would be the most expensive to construct. Existing topography and the complexity of building on both sides of the Eastside Rail Corridor (with circulating track spanning over the corridor) would require additional structures and retaining walls. This alternative site has the same zoning designations as the BNSF Alternative on the east side of the Eastside Rail Corridor. Properties west of the rail corridor are zoned for medical office uses. The BNSF Modified Alternative is not consistent with future planned land uses in the area. The land use approval process would be the same as the BNSF Alternative. The BNSF Modified Alternative would result in nearly identical impacts as BNSF Alternative except that it would also require the acquisition and relocation of the Bellevue Public Safety Training Center. The OMSF is consistent with existing uses and would not result in substantial changes to the existing visual environment because the building mass, size, and use are typical of the surrounding area.



**Figure S-4a:** BNSF Modified Alternative Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-4b:** BNSF Modified Alternative—Bird's Eye View Sound Transit Link Light Rail OMSF Draft EIS

#### SR 520 Alternative

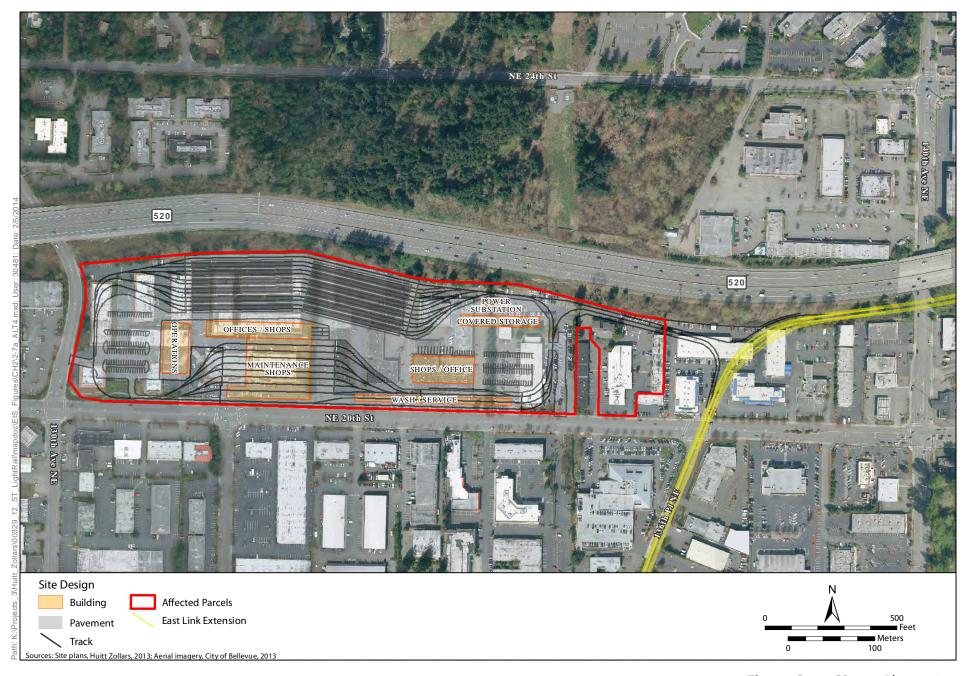
Under the SR 520 Alternative, Sound Transit would construct the OMSF south of SR 520 and north of Northup Way/NE 20th Street, east of 130th Avenue NE and west of 140th Avenue NE in the City of Bellevue. This site is located along the adopted East Link revenue line and is approximately 25 acres. The OMSF development footprint encompasses the entire site, leaving no substantial area for redevelopment. Primary access to the site would be directly off of NE 20th Street west of 136th Place NE. The configuration of buildings under this alternative would vary from the other alternatives in that the operations offices would be in a separate building to the west of the LRV maintenance shops, and the LRV covered wash and service bay would be in a separate building east of the LRV maintenance shops. A conceptual layout of this site is shown in Figure S-5a and a bird's eye view is shown in Figure S-5b.

#### Key Operational and Environmental Impacts of the SR 520 Alternative

The SR 520 Alternative is the second most expensive alternative to construct. Existing topography would require earthwork and retaining walls along both the SR 520 right of way and along NE 20th Street. This alternative would modify a portion of East Link to accommodate the lead track connection, resulting in reduced operating speed on the mainline. The SR 520 Alternative site is currently zoned for commercial uses and development of the OMSF would require a similar CUP approval as the BNSF Alternative or BNSF Modified Alternative. The SR 520 Alternative would displace the greatest number of commercial businesses. The SR 520 Alternative would also have the greatest aquatic resource impacts related to piping portions of Goff Creek that are currently daylighted through the site. Modifications to the Goff Creek channel would be inconsistent with the Bel-Red Subarea Plan, would require mitigation, and may affect shallow groundwater to the degree that it would affect the amount of baseflow entering the creek. The OMSF would not result in substantial changes to the visual environment because the building mass, size, and use are typical of the surrounding area. Views from the Bridle Trails neighborhood north of the site are blocked by existing vegetation and landforms.

#### **Avoidance, Minimization, and Mitigation Measures**

Sound Transit is committed to satisfying applicable federal, state, and local environmental regulations to reduce or preclude impacts. In addition, the Draft EIS identifies potential measures to preclude or reduce impacts from project construction and operation, including application of its project commitments and design measures. If impacts remain, Sound Transit would implement mitigation measures to reduce these impacts. These measures would be refined through final design and permitting. A list of all committed mitigation measures will be included in the NEPA Record of Decision (ROD), which will be issued after the final environmental impact statement (Final EIS). The design measures, environmental commitments, and potential mitigation measures are described below.



**Figure S-5a:** SR 520 Alternative Sound Transit Link Light Rail OMSF Draft EIS



**Figure S-5b:** SR 520 Alternative—Bird's Eye View Sound Transit Link Light Rail OMSF Draft EIS

Not to Scale

#### **Land Use**

All alternatives would require a CUP from local cities. As a condition of the permit, the Cities of Lynnwood and Bellevue may require additional site-specific mitigation measures. Sound Transit will consult with the cities regarding local city requirements. Sound Transit is also exploring the feasibility of incorporating transit-oriented development at or adjacent to the build alternative sites.

#### Visual

Landscaping would be required by the City of Lynnwood Municipal Code and City of Bellevue Municipal Code to screen the site and soften the visual appearance of the perimeter of the site. The Bel-Red Zoning Code and Ordinance and overlay district requirements also provide design guidance within the Bel-Red corridor. As a condition of a CUP, the Cities of Lynnwood and Bellevue may require additional site-specific mitigation measures such as visual screening. Sound Transit will consult with the cities regarding local city requirements.

#### Noise

Mitigation for the noise impacts under the Lynnwood Alternative (all design options) would include modifications to the vehicle wash facility, such as enclosing the compressors and shielding the blowers. Additionally, facility design incorporates a combination of long bays and automated doors, which would also reduce noise from the blowers. Sound Transit would work with the manufacturer of the wash facility to ensure that the noise emissions from the blowers meet the project requirements. In addition, mitigation for the noise impacts under the Lynnwood Alternative (only Design Options C1 and C2) includes special track work to reduce noise from the crossovers.

#### **Ecosystems**

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

#### **Parklands**

Construction of the Lynnwood Alternative would require temporary closure of the Interurban Trail. Sound Transit would coordinate with the City of Lynnwood to develop detours and provide public information and signed detour routes during construction to allow for continued use of the trail. Replacement landscaping would also be provided where vegetated areas would need to be cleared for construction.

# **Significant Unavoidable Adverse Impacts**

With the avoidance, minimization, and mitigation measures listed above, significant adverse impacts would be avoided for all build alternatives.

#### Other Environmental Considerations

#### **Environmental Justice**

Environmental Justice has been addressed in compliance with Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated February 11, 1994, and the U.S. Department of Transportation Order to Address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 5610.2). The purpose of the analysis was to determine whether the proposed project would result in any disproportionately high and adverse impacts on minority and/or low-income populations.

The analysis concludes that, after proposed mitigation, the proposed project (under any alternative) is not expected to result in any disproportionately high and adverse impacts on minority and low-income populations. For the most part, impacts resulting from the proposed project would be limited in scope and others would be mitigated. Indirect benefits of the proposed project would include improving regional connectivity by providing a reliable, efficient, and affordable means of transportation for populations reliant on public transit.

#### **Section 4(f) Resources**

Some of the build alternative sites are situated in proximity to recreational facilities and parklands in the Cities of Bellevue and Lynnwood. Federal regulations specifically protect parklands.

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits FTA from approving a project or program that uses land from a public park, recreation area, wildlife or waterfowl refuge, or historic site, unless the following conditions are met:

- a) The Administration determines that:
  - There is no feasible and prudent avoidance alternative to the use of land from the property;
     and
  - ii. The action includes all possible planning 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 on the property.
- c) If the analysis concludes that there is no feasible and prudent avoidance alternative, then the Administration may approve only the alternative that causes the least overall harmin light of the statute's preservation purpose (23 CFR 774).

Each design option under the Lynnwood Alternative would construct new elevated track that would cross over the Interurban Trail. However, the visual intrusion would be minor because users of the trail would cross beneath the track quickly, with little change to the user experience. Additionally, access to the Interurban Trail would remain unaffected by the Lynnwood Alternative and its associated design options. Sound Transit would consult with the City of Lynnwood regarding the temporary occupancy of the Interurban Trail. Therefore, there would be no use of a Section 4(f) resource. None of the other build alternatives would result in direct use, constructive use, and/or temporary occupancy resulting in use of a Section 4(f) resource.

#### Areas of Controversy and Issues to be Resolved

The following are known areas of controversy and issues to be resolved.

 Determining whether the Edmonds School District could and would develop the portion of the Lynnwood Alternative site not needed for the OMSF to accommodate some functions of the planned district support center.

 Resolving conflicts related to locating the proposed project in areas envisioned for transit-oriented development within the City of Bellevue's Bel-Red Corridor under the BNSF Alternative and BNSF Modified Alternative and near the Lynnwood City Center under the Lynnwood Alternative.

#### **Next Steps**

Following publication of this Draft EIS, the following steps are anticipated.

- **Draft EIS Comment Period.** The Draft EIS will be available for public and agency comment for 45 days. This includes a public hearing and other opportunities for the public and agencies to comment in person or in writing.
- Identification of the Preferred Alternative. Following the public comment period, and after reviewing the Draft EIS, public and agency feedback, and other relevant information, the Sound Transit Board will identify a preferred alternative.
- **Preparation of the Final EIS.** After the Draft EIS is distributed and comments reviewed, a Final EIS will be prepared. The Final EIS will document and address comments received on the Draft EIS, describe the preferred alternative along with the other alternatives evaluated in the Draft EIS, and describe proposed mitigation commitments associated with the project.
- **Project Decision.** After completion of the Final EIS, the Sound Transit Board will select the alternative to be built.
- **Federal Approval.** FTA will issue a decision document referred to as the federal ROD, which states the administration's decision on the project, identifies the alternatives considered, and itemizes mitigation commitments. Issuance of the ROD is required before any federal funding or approvals.