September 2026

Everett Link Extension

Draft Environmental Impact Statement

ENERGY TECHNICAL REPORT

Appendix G.11

SOUNDTRANSIT

U.S. Department of Transportation
Federal Transit Administration

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Acronyms

AIR	SR 99/Airport Road
ALD	West Alderwood
ASH	Ash Way
BI	Broadway/I-5
Btu	British thermal unit
CFR	Code of Federal Regulations
CO_2e	carbon dioxide equivalent
EGN	SR 526/Evergreen
EIA	Energy Information Administration
EIS	Environmental Impact Statement
EVLE	Everett Link Extension
EVT	Everett Station
FHWA	Federal Highway Administration
MAR	Mariner
MnDOT	Minnesota Department of Transportation
mmBtu	million British thermal units
NEPA	National Environmental Policy Act
OMF	operations and maintenance facility
PSE	Puget Sound Energy
PSRC	Puget Sound Regional Council
quad	quadrillion British thermal units
RCW	Revised Code of Washington
SR	State Route
ST3	Sound Transit 3
SWI	SW Everett Industrial Center
VMT	vehicle miles traveled
WSDOT	Washington State Department of Transportation

1 INTRODUCTION

1.1 Overview

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to expand Link light rail transit service northward from the Lynnwood City Center Station to the Everett Station area in Snohomish County, Washington (Figure 1-1). The Everett Link Extension (EVLE) Project would provide fast, reliable light rail service to regional residential and job centers in Snohomish County's growing urban areas. The proposed project is part of the Sound Transit 3 (ST3) Plan of regional transit system investments, funding for which was approved by voters in the region in 2016.

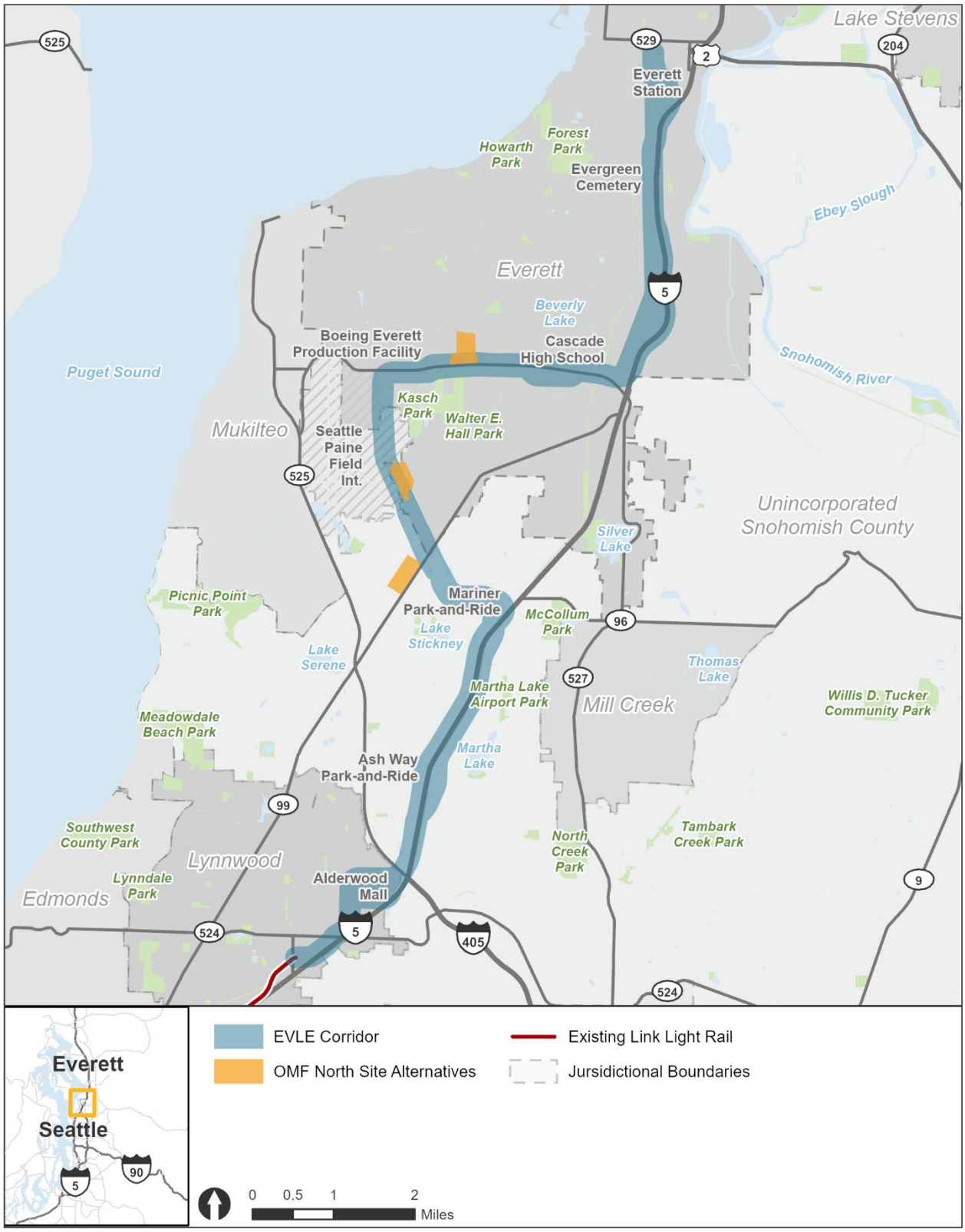
For this analysis, the EVLE Project consists of approximately 16 miles of light rail guideway, seven light rail stations, two parking facilities, and an operations and maintenance facility (OMF North). Sound Transit proposes to begin construction of the project in 2030. The current schedule for opening light rail service from the Lynnwood City Center Station to Everett Station is 2041. A shorter route connecting Lynnwood City Center to the SW Everett Industrial Center Station would open first in 2037 as the initial phase. OMF North would open by 2034, prior to opening of the light rail extension, as the facility is necessary for storing rail cars and supporting service for not only the extension to Everett, but also other parts of the regional system.[1] Parking facilities at the Mariner and Everett Stations would open by 2046.

One station, State Route (SR) 99/Airport Road Station, is currently considered provisional since planning, preliminary engineering, and environmental review are funded, but final design and construction are not. However, for purposes of this evaluation, all seven stations are assumed to be funded and open according to the schedule described above to capture all locations where impacts could occur. The station would be fully constructed and open for service when additional funding is identified.

This document includes analysis of the complete project as well as the initial phase as described further in Section 2.2.

[1] Construction of light rail projects is typically divided into sections, and construction would occur across different parts of the corridor between 2030 and 2046. For more information on the construction approach, see Draft EIS Appendix B.

Figure 1-1 EVLE Project Corridor



For planning and engineering purposes, the project is organized into eight geographic segments, discussed in this document from south to north. Within those segments, a total of 17 alignment alternatives and 18 station location alternatives are under consideration. These alignment and station alternatives are combined into Build Alternatives for analysis as shown in Table 1-1 and Figure 1-2.

Table 1-1 describes the alignment and station alternatives as follows:

- **Segments:** The eight alignment segments and corresponding abbreviations are:
  - West Alderwood (ALD).
  - Ash Way (ASH).
  - Mariner (MAR).
  - SR 99/Airport Road (AIR).
  - SW Everett Industrial Center (SWI).
  - SR 526/Evergreen (EGN).
  - Broadway/I-5 (BI).
  - Everett Station (EVT).
- **Alignment alternatives:** Alignment alternatives in each segment are identified with numbers (e.g., ALD-1).
- **Station alternatives:** Station alternatives in each segment are identified with letters (e.g., ALD-B).[2]
- **Build Alternatives:** Alignments and stations are combined to create the Build Alternative name (e.g., Station ALD-B is located on Alignment ALD-1, so this pairing is referred to as Alternative ALD-1B). If a preferred Build Alternative has been identified by the Sound Transit Board of Directors, it is indicated with an asterisk.
- **Design options:** A design option is an alternate design for a portion of a Build Alternative. It could be a different route or profile along a portion of an alignment, a different station configuration, or a different parking location. For example, in the West Alderwood Segment the Alderwood Mall Boulevard Design Option is being considered for all three Build Alternatives.

[2] Letters identifying station alternatives are non-sequential in some segments; missing letters denote alternatives that did not perform as well as alternatives considered in the Draft EIS. For more information on the Alternatives Development process, see Draft EIS Chapter 2.

Table 1-1 Alignment and Station Build Alternatives by Segment

Segment	Alignment Alternatives	Station Alternatives	Build Alternatives (Combined Alignment and Station)	Build Alternative Design Options Also Considered
West Alderwood	ALD-1	ALD-B	ALD-1B	Alderwood Mall Boulevard
	ALD-2	ALD-D	ALD-2D*	Alderwood Mall Boulevard
		ALD-F	ALD-2F	Alderwood Mall Boulevard
Ash Way	ASH-1	ASH-A	ASH-1A	None
	ASH-2	ASH-D	ASH-2D	None
Mariner	MAR-1	MAR-B	MAR-1B	Surface Parking
	MAR-2	MAR-D	MAR-2D	Surface Parking
SR 99/ Airport Road	AIR-1	AIR-A	AIR-1A	None
	AIR-2	AIR-B	AIR-2B	None
SW Everett Industrial Center	SWI-1	SWI-A	SWI-1A*	Lower
		SWI-B	SWI-1B	None
		SWI-C	SWI-1C	None
SR 526/ Evergreen	EGN-1	EGN-A	EGN-1A	None
	EGN-2	EGN-B	EGN-2B	North Side of SR 526
	EGN-3	EGN-E	EGN-3E	North Side of SR 526
Broadway/I-5	BI-1	None	BI-1*	None
	BI-2	None	BI-2	None
Everett Station	EVT-1	EVT-A	EVT-1A	None
	EVT-2	EVT-C	EVT-2C*	None
	EVT-3	EVT-D	EVT-3D*	None

* Denotes preferred alternative

There are also three OMF North site alternatives under consideration as shown in Table 1-2 and Figure 1-2.

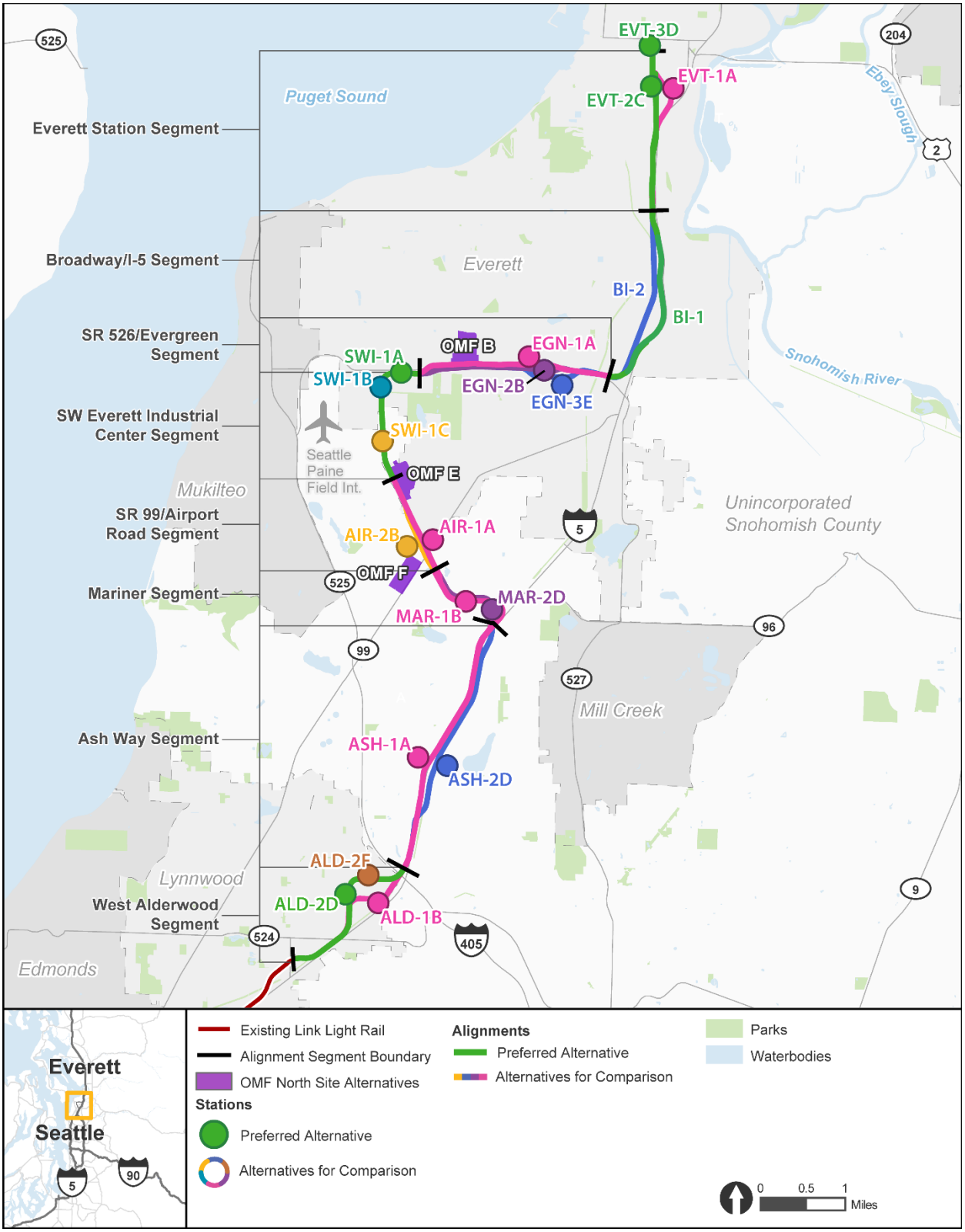
Table 1-2 OMF North Site Alternatives

Build Alternative	Build Alternative Design Options Also Considered
OMF Site F	Lead Tracks to West Side of Airport Road
OMF Site E	None
OMF Site B	Lead Tracks to South Side of SR 526

Analysis of the Build Alternatives was based on the conceptual design drawings included in Draft Environmental Impact Statement (EIS) Appendix F.

The No Build Alternative describes the environment, including the transportation system, as it would exist in 2046 without the proposed project. The No Build Alternative uses 2046 as the year of analysis to align with the target date for completion of all EVLE Project components and the full buildout of the light rail capital projects included in the ST3 Plan.

Figure 1-2 EVLE Project Alternatives



1.2 Potential Design Refinements

In addition to the alternatives described above, the Draft EIS provides a qualitative evaluation of potential design refinements that could reduce overall project cost if applied to the alignment and station alternatives (for more information, see Draft EIS Chapter 2). The potential design refinements identified to date that could be considered in each segment, along with potential changes in impacts, are described in Draft EIS Chapter 4. Sound Transit has not identified any change in energy impacts as a result of the potential design refinements (see quantitative analysis methodology in Draft EIS Appendix I). If Sound Transit decides to include these refinements as part of the project prior to the Final EIS, they would be reflected in the conceptual design plans and evaluated in the Final EIS.

1.3 Purpose of Report

This report documents the technical analysis of energy impacts for the EVLE Project. The objective of this analysis was to address the magnitude of energy consumption associated with construction and operation of the Build and No Build Alternatives in the context of regional energy usage and to present measures to avoid, minimize, or mitigate potential impacts, if needed.

This report also includes a review of applicable federal, state, and local regulatory guidelines, transportation plans and policies, and goals and targets for energy consumption reduction, efficiency, and conservation.

2 REGULATORY CONTEXT AND METHODOLOGY

2.1 Applicable Laws, Regulations, and Guidelines

There are no federal, state, or local laws that specifically and quantitatively regulate energy consumption in the transportation sector. Many state, local, and regional transportation plans and policies identify goals for the efficient use of energy, energy conservation, and reduction goals, and targets occur at all levels of government.

This analysis considered the following laws, regulations, guidelines, and plans:

- Federal
  - Code of Federal Regulations (CFR) Title 49, Section 622.301, Federal Transit Administration (FTA) Requirements for Energy Assessments – Buildings.
  - Energy Policy Act of 2005.
  - Clean Energy Act of 2007.
- State
  - Revised Code of Washington (RCW) 47.01.440, Adoption of Statewide Goals to Reduce Annual Per Capita Vehicle Miles Traveled.
  - RCW 39.35, Energy Conservation in Design of Public Facilities.

- *2016 Washington State Public Transportation Plan* (Washington State Department of Transportation [WSDOT] 2016).
- Governor's Executive Order 07-02 and Senate Bill 6001.
- Governor's Executive Order 09-05.
- Washington Transportation Commission Policy.
- Washington State Energy Code (RCW 19.27A).

2.2 Methodology

The energy analysis evaluated impacts from energy production with the No Build and Build Alternatives within the study area. National Environmental Policy Act (NEPA) regulations require that an EIS disclose impacts (i.e., effects) of a proposed action on the environment. NEPA requires an EIS to evaluate and disclose the "reasonably foreseeable environmental effects of the proposed agency action" (42 USC Section 4332). Reasonably foreseeable environmental effects are those that are sufficiently likely to occur during operation (long-term) or construction (short-term). Reasonably foreseeable environmental effects do not include effects that are speculative in nature or remote in time or place, or that are the result of a lengthy causal chain. For this analysis, reasonably foreseeable effects include all effects that are considered likely to result from the project over its operational lifetime within the study area of each resource.

The study area for considering energy use for the project is regional and covers the Puget Sound Regional Council (PSRC) four-county area, including King, Pierce, Kitsap, and Snohomish counties, consistent with the study area used in the transportation analysis. Energy use is typically expressed in terms of British thermal units (Btu), million British thermal units (mmBtu), or quadrillion British thermal units (quads).

This analysis used transportation and energy data for the baseline year (2023) as well as the 2037 initial phase opening year and 2046 horizon year (the year all components of the project would be open). The 2037 opening year represents the opening of OMF North in 2034 and service to SW Everett Industrial Center in 2037, not including construction of parking facilities. The horizon year is consistent with Sound Transit long-range planning, assuming full build of Sound Transit's ST3 system, service to Everett Station in 2041, and construction of station parking facilities in 2046.

Transportation data used in producing energy consumption estimates includes average daily vehicle miles traveled (VMT) generated using the PSRC Regional Travel Model. Transportation data was modeled for the years 2040 and 2050 and interpolated to project VMT estimates for the 2037 and 2046 analysis years. This VMT data was used, along with typical energy consumption rates by vehicle mode, to estimate changes in energy usage resulting from project impacts on regional transportation. The energy consumption rate for each vehicle type was obtained from the *Transportation Energy Data Book, Edition 37* (Oak Ridge National Laboratory 2019; Sound Transit 2020).

Energy use estimates were calculated using an Infrastructure Estimator Tool available from the Minnesota Department of Transportation (MnDOT), as it allows users to create ballpark estimates of energy usage using limited data inputs (MnDOT 2020). A 16-year analysis period was used to estimate energy consumption for project construction, which corresponds to the anticipated construction period.

3 AFFECTED ENVIRONMENT

This section discusses existing conditions and patterns related to energy use for both the state and the study area. According to the U.S. Energy Information Administration (EIA), the state of Washington consumed approximately 1.898 quads of energy in total and 245 mmBtu of energy per capita in 2021 (EIA 2024). This ranks Washington 37th out of all states in per capita energy consumption (EIA n.d.). Per capita energy use in general is declining, while the state's overall energy use is increasing (EIA n.d.). According to the *Washington State Electric Utility Resource Planning 2018 Report*, the general decline in per capita energy use since the 1990s is due to several factors, including the decline in industrial energy use, higher energy prices between 2002 and 2014, and more aggressive federal and state codes, standards, and programs that focus on energy efficiency (Washington State Department of Commerce 2018). Additionally, according to the *Washington State Electric Utility Resource Planning 2020 Report*, the state of Washington's overall energy use is expected to increase over the next decade due to growth in jobs, population, and demand for vehicle travel (Washington State Department of Commerce 2020b). Snohomish County Public Utility District (SnoPUD) is the primary provider of natural gas and electricity in the project area. SnoPUD is the second largest publicly owned utility in the Pacific Northwest and provided 8.3 million megawatt-hours of energy usage for its service area in 2023 (SnoPUD 2024).

In 2021, transportation accounted for 0.604 quads consumed, or about 32% of Washington's total energy consumption, followed by the residential (25%), industrial (25%), and commercial (18%) sectors (EIA 2024). With transportation remaining the largest sector in terms of energy usage, the Washington State Department of Commerce highlights improvements in transportation in its *Washington 2021 State Energy Strategy*, focusing on improving efficiency and reducing the VMT required to meet people's needs (Washington State Department of Commerce 2020a).

According to the PSRC travel demand model, which provided the base transportation data used for this analysis, most regional miles traveled are in passenger cars and trucks. For the study area, Table 3-1 shows the existing daily VMT and energy use for transportation modes that would be most impacted by the EVLE Project. According to the PSRC travel demand model, the existing daily VMT for these modes in the study area is approximately 91 million miles. The associated daily energy use is approximately 531,600 million Btu.

Table 3-1 Existing Energy Consumption by Mode in PSRC Region

Vehicle Type	Energy Consumption Rate (Btu/vehicle mile)	Existing Daily VMT[a]	Existing Daily Energy Consumption (mmBtu)
Passenger vehicle[b]	5,300	87,704,300	462,800
Heavy-duty truck[c]	21,300	2,868,900	61,200
Transit bus[d]	37,400	197,300	7,400
Light Rail	25,100	6,200	200
Total[e]	**-**	**90,776,800**	**531,600**

SOURCES: Oak Ridge National Laboratory (2019); PSRC (2024).

NOTES:

a) This VMT summary is provided for the 2023 base year model run.
b) Passenger vehicle includes the following vehicle classes: standard occupancy vehicle, high occupancy vehicle, transportation network company, medium truck.
c) Heavy-duty truck includes the following vehicle classes: heavy truck.
d) Transit bus includes the following vehicle classes: bus.
e) Totals may not add up due to rounding.

4 ENVIRONMENTAL IMPACTS

The energy analysis addresses the long term and construction energy requirements of the EVLE Project, placed within the context of regional energy consumption. The analysis applies to all alignment/station and OMF North site alternatives because their operation and ridership characteristics are similar.

4.1 Build Alternatives

4.1.1 Operational Impacts

The PSRC regional travel demand model was used to categorize and estimate future No Build and Build Alternative VMT by vehicle type. The direct impacts the project would have are illustrated by the change in regional energy consumption as a result of the project (i.e., mode shift and improved operations on roadways).

Table 4-1 and Table 4-2 show the energy consumption rate, VMT, and total energy consumption for the No Build and Build Alternatives. Regional VMT for passenger vehicles and heavy-duty trucks are expected to be lower under the Build Alternative, a benefit to regional energy consumption.

Table 4-1 Energy Consumption by Mode for No Build and Build Alternatives in 2037

Vehicle Type	Energy Consumption Rate (Btu/ vehicle mile)	2037 No Build Daily VMT	2037 No Build Daily Energy Consumption (mmBtu)	2037 Build Daily VMT	2037 Build Daily Energy Consumption (mmBtu)	Change from No Build (mmBtu)
Passenger vehicle[a]	5,300	95,516,400	504,000	94,732,300	499,900	-4,100
Heavy-duty truck[b]	21,300	3,421,100	73,000	3,420,400	73,000	0
Transit bus[c]	37,400	240,400	9,000	258,500	9,700	700
Light Rail	25,100	24,800	600	29,000	700	100
Total[d]	-	99,202,800	586,600	98,440,300	583,300	-3,400

SOURCES: Oak Ridge National Laboratory (2019); PSRC (2024)

NOTES:

a) Passenger vehicle includes the following vehicle classes: standard occupancy vehicle, high occupancy vehicle, transportation network company, medium truck.
b) Heavy-duty truck includes the following vehicle class: heavy truck.
c) Transit bus includes the following vehicle class: bus.
d) Totals may not add up due to rounding.

Table 4-2 Energy Consumption by Mode for No Build and Build Alternatives in 2046

Vehicle Type	Energy Consumption Rate (Btu/ vehicle mile)	2046 No Build Daily VMT	2046 No Build Daily Energy Consumption (mmBtu)	2046 Build Daily VMT	2046 Build Daily Energy Consumption (mmBtu)	Change from No Build (mmBtu)
Passenger vehicle[a]	5,300	100,906,200	532,500	99,941,900	527,400	-5,100
Heavy-duty truck[b]	21,300	3,760,000	80,200	3,759,100	80,200	0
Transit bus[c]	37,400	249,700	9,300	286,600	10,700	1,400
Light Rail	25,100	24,800	600	30,800	800	200
Total[d]	-	104,940,700	622,700	104,018,500	619,100	-3,600

SOURCES: Oak Ridge National Laboratory (2019); PSRC (2024)

NOTES:

a) Passenger vehicle includes the following vehicle classes: standard occupancy vehicle, high occupancy vehicle, transportation network company, medium truck.

b) Heavy-duty truck includes the following vehicle class: heavy truck.

c) Transit bus includes the following vehicle class: bus.

d) Totals may not add up due to rounding.

As all alignment/station alternatives would be of similar length and ridership and all OMF North site alternatives would be of similar size, direct impacts on the local electrical utilities would be similar for all alternatives. To provide power for the EVLE Project, Sound Transit would purchase electricity from SnoPUD.

In general, the project's long-term impacts would change energy consumption for transportation on roadways and by the public transit system. When compared with the No Build Alternative in 2037 and 2046, the EVLE Project would reduce regional passenger and heavy-duty truck VMT. In 2037 and 2046, the Build Alternatives would reduce miles traveled by passenger vehicles by about 784,000 and 964,200 miles per day, respectively. In 2037 and 2046, the Build Alternatives would reduce miles traveled by heavy-duty trucks by about 700 and 900 miles per day, respectively. As shown in Table 4-1 and Table 4-2, the Build Alternatives would reduce overall daily energy consumption for the modes of transportation most affected by the EVLE Project.

4.1.2 Construction Impacts

Energy-related impacts during construction of the EVLE Project would be short term in nature and are not expected to be adverse. Construction materials produced and transported to the site and the operation and maintenance of construction equipment would consume energy. The energy analysis used the Infrastructure Estimator Tool (MnDOT 2020) to understand construction impacts associated with the project. Table 4-3 shows the estimated energy usage associated with the project construction.

Table 4-3 Estimated Energy Consumption for Construction of the Build Alternatives

Item	Consumption (mmBtu)
Upstream Energy Consumption	
Materials[a]	4,547,500
Downstream Energy Consumption	
Transportation[b]	230,900
Construction[c]	185,400
Operations & Maintenance (O&M)[d]	76,000
Total Downstream Energy Consumption[e]	**492,300**

SOURCE: Infrastructure Estimator Tool (MnDOT 2020); refer to Attachment A.

NOTES:

a) Materials considers fuel usage associated with raw material extraction, production, and transportation.
b) Transportation considers fuel usage associated with transportation of materials to site during construction.
c) Construction considers fuel usage associated with operating construction equipment during construction.
d) Operations & Maintenance considers fuel usage associated with snow removal and vegetation management equipment, roadway repair and rehabilitation, and other routine maintenance during construction.
e) Totals may not add up due to rounding.

Assuming a 16-year construction period, the average annual energy consumed locally by construction of the EVLE Project would represent about 0.01% or less of the energy consumed in Washington State during that period.

4.2 No Build Alternative

Under the No Build Alternative, if the EVLE Project is not built, there would be no light rail related changes to energy use. In addition, fuel consumption (e.g., gasoline, diesel) associated with construction of or operation of the EVLE Project would not be required.

5 POTENTIAL MITIGATION MEASURES

Sound Transit is committed to complying with all applicable federal, state, and local environmental regulations, following best management practices (BMPs), and designing the EVLE Project in a way that mitigates adverse impacts. As a result, mitigation measures are reflected in the design of Build Alternatives. Final mitigation measures will be based on advanced design and will be included in the Final EIS and in FTA's Record of Decision as environmental commitments for the project.

The *Sound Transit Requirements Manual*, Set 803, outlines specific measures around energy efficient design to minimize impacts on energy use. The manual also adopts requirements in line with the United States Green Building Council Leadership in Energy & Environmental Design (LEED) rating system. Additionally, each construction phase of the project would pursue Envision certification, which includes elements of construction and operational reductions in energy consumption.

6 REFERENCES

Energy Information Administration (EIA). n.d. *Rankings: Total Energy Consumed per Capita, 2021.* www.eia.gov/state/rankings/. Accessed June 10, 2024.

Energy Information Administration (EIA). 2024. *Washington State Energy Profile*. www.eia.gov/state/print.php?sid=WA. Accessed June 10, 2024.

Minnesota Department of Transportation (MnDOT). 2020. *Infrastructure Estimator Tool.* https://www.dot.state.mn.us.

Oak Ridge National Laboratory. 2019. *Transportation Energy Data Book Edition 37*. tedb.ornl.gov/wp-content/uploads/2020/02/Edition37_Full_Doc.pdf. Accessed July 9, 2024.

Snohomish County Public Utility District (SnoPUD). 2024. *Quick Facts & Figures. https://www.snopud.com/wp-content/uploads/2024/04/QuickFacts_424.pdf*. Accessed August 21, 2024.

Washington State Department of Commerce. 2018. *Washington State Electric Utility Resource Planning 2018 Report.* https://www.commerce.wa.gov/wp-content/uploads/2019/02/Commerce-Electric-Utility-Resource-Planning.pdf. Accessed August 14, 2024.

Washington State Department of Commerce. 2020a. *Washington 2021 State Energy Strategy*. www.commerce.wa.gov/wp-content/uploads/2020/12/Washington-2021-State-Energy-Strategy-December-2020.pdf. Accessed June 10, 2024

Washington State Department of Commerce, 2020b. *Washington State Electric Utility Resource Planning 2020 Report.* https://www.commerce.wa.gov/wp-content/uploads/2020/12/Electric-Utility-Resource-Planning-2020-Report.pdf. Accessed August 14, 2024.

Washington State Department of Transportation (WSDOT). 2016. *2016 Washington State Public Transportation Plan*. wsdot.wa.gov/sites/default/files/2021-10/PT-Report-WashingtonStatePublicTransportationPlan-2016.pdf. Accessed July 17, 2024.

Everett Link Extension

ATTACHMENT A

Infrastructure Estimator Tool Outputs

SOUNDTRANSIT

Summary Results - Light_Rail

Show	Total Energy Use	Units	BTU

Stations

There will be six new stations connecting Snohomish County residents to the regional Link light rail network. There will also be a provisional station at SR 99/Airport Road. This totals to seven stations.

Light Rail Infrastructure

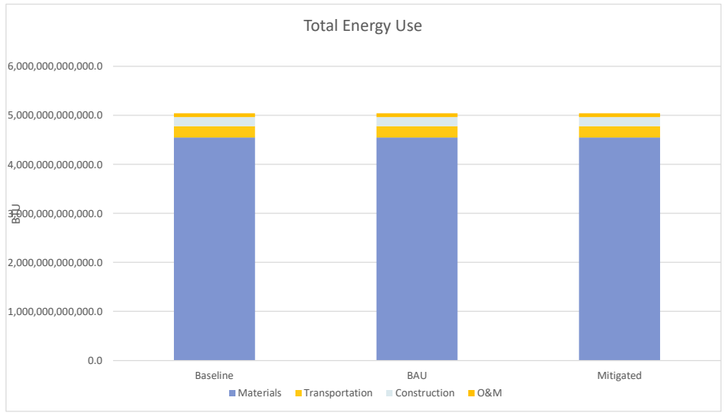
Total existing track miles of light rail: 36.5

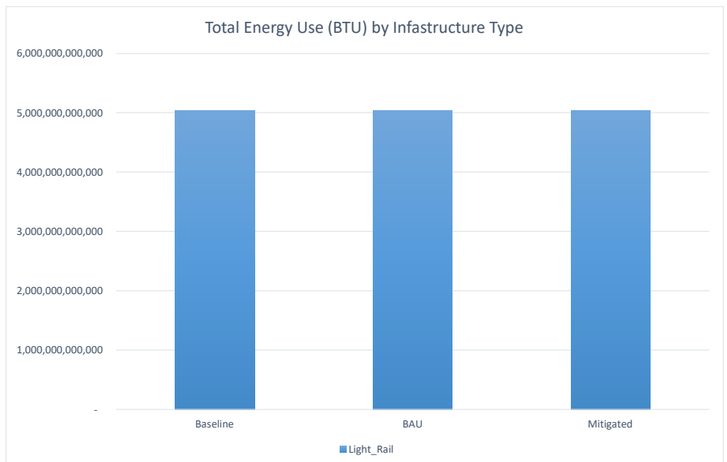
Light Rail Construction

Year construction starts: 2030
New construction (elevated) - track miles: 16
New rail station (elevated) - stations: 7

	Total Energy Use (BTU) by Infastructure Type		
	BTU	BTU	BTU
	Baseline	BAU	Mitigated
Light_Rail	5,039,819,449,520	5,039,819,449,520	5,039,819,449,520
Total	**5,039,819,449,520**	**5,039,819,449,520**	**5,039,819,449,520**

Summary Results - Charts





NOTE:
- **Baseline refers to values without any mitigations applied.**
- **Business-as-Usual (BAU) deployment refers to any "default" mitigations that are deployed through standard agency practices.**
- **Planned deployment reflects the level of mitigations planned for the analyzed case.**
- **These values are set in the *Mitigation Strategies* tab.**

Summary Results - Tables

	Total Energy Use		
	BTU	BTU	BTU
	Baseline	BAU	Mitigated
Materials	4,547,533,819,121	4,547,533,819,121	4,547,533,819,121
Transportation	230,868,927,444	230,868,927,444	230,868,927,444
Construction	185,390,712,168	185,390,712,168	185,390,712,168
O&M	76,025,990,786	76,025,990,786	76,025,990,786
Total	**5,039,819,449,520**	**5,039,819,449,520**	**5,039,819,449,520**

	Total Energy Use Per Material Type		
	BTU	BTU	BTU
	Baseline	BAU	Mitigated
Aggregate	202,783,396,409	202,783,396,409	202,783,396,409
Cement	2,997,479,670,728	2,997,479,670,728	2,997,479,670,728
Steel	1,346,136,222,044	1,346,136,222,044	1,346,136,222,044
Water	1,134,529,940	1,134,529,940	1,134,529,940
Transportation Fuel	230,868,927,444	230,868,927,444	230,868,927,444
Construction Fuel	185,390,712,168	185,390,712,168	185,390,712,168
O&M fuel (DGEs)	76,025,990,786	76,025,990,786	76,025,990,786
Total	**5,039,819,449,520**	**5,039,819,449,520**	**5,039,819,449,520**

	Total Energy Use Reductions Relative to BAU				
	BTU	BTU	BTU	BTU	BTU
	Materials	Transportation	Construction	O&M	TOTAL
Total	-	-	-	-	-

	Total Energy Use (BTU) by Infastructure Type		
	BTU	BTU	BTU
	Baseline	BAU	Mitigated
Light_Rail	5,039,819,449,520	5,039,819,449,520	5,039,819,449,520
Total	**5,039,819,449,520**	**5,039,819,449,520**	**5,039,819,449,520**