



# ***Operations and Maintenance Facility South***

## **Draft Environmental Impact Statement Executive Summary**



 **SOUNDTRANSIT**

**March 2021**





March 5, 2021

Dear Recipient:

Sound Transit (the Central Puget Sound Regional Transit Authority) has prepared this Draft Environmental Impact Statement (EIS) on the proposed Operations and Maintenance Facility South. The facility will provide operations and maintenance services for the Link light rail system and about 144 light rail vehicles. The facility is a key element of the Sound Transit 3 plan, and it supports the expansion of light rail service throughout the region. Sound Transit is the project proponent.

The Draft EIS has been prepared pursuant to the State Environmental Policy Act (Ch. 43.21C RCW). It has been prepared to inform the public, agencies, tribal governments and decision makers about the environmental consequences of building and operating the Link light rail Operations and Maintenance Facility South in the cities of Kent or Federal Way. The Draft EIS examines the project alternatives identified by the Sound Transit Board for further study in May 2019.

The major choices for the project involve the location of a light rail operations and maintenance facility. The Sound Transit Board will consider the analysis of alternatives, impacts, and potential mitigation measures contained in the Draft EIS; public, agency, and tribal comments on the Draft EIS; and other information before identifying a preferred facility location. Sound Transit will prepare a Final EIS that will respond to comments on the Draft EIS and evaluate environmental impacts and potential mitigation measures for the preferred alternative and the other alternatives considered. After completion of the Final EIS, the Sound Transit Board will select the project to be built.

The Draft EIS includes appendices and technical reports supporting the environmental evaluation. Please see the Fact Sheet of this Draft EIS regarding document availability and who to contact for further information about the documents.

Sincerely,

Hussein Rehmat  
Office of Environmental Affairs and Sustainability

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# **Operations and Maintenance Facility South**

## ***DRAFT ENVIRONMENTAL IMPACT STATEMENT***

March 5, 2021

Issued by the

**Central Puget Sound Regional Transit Authority**

(Sound Transit)

Prepared in compliance with the

State Environmental Policy Act (SEPA) (Chapter 43.21C RCW)

and Sound Transit Resolution R2018-17 implementing SEPA

in Sound Transit Procedures

# Land Acknowledgement

The Puget Sound is the traditional homelands of the Coast Salish peoples, who live around the Salish Sea in what is now Washington State and the Canadian province of British Columbia. The Coast Salish Tribes have called the Puget Sound home since time immemorial. These tribes are sovereign nations with a deep connection and respect for their homeland and natural resources. Tribal Nations enrich the region through environmental stewardship, cultural heritage, economic development, and collaboration with local governments and agencies to shape the region's future. Sound Transit is coordinating with four tribes for the OMF South project: the Puyallup Tribe of the Puyallup Reservation (Puyallup Tribe of Indians); the Muckleshoot Indian Tribe; the Nisqually Indian Tribe; and the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation).





# Fact Sheet

## Project Title

Operations and Maintenance Facility South  
(OMF South)

## Proposed Action

Sound Transit proposes to construct and operate an operations and maintenance facility in its South Corridor (OMF South) to meet agency needs for an expanded fleet of light rail vehicles (LRVs). The need to expand LRV maintenance capacity was identified in Sound Transit 3: The Regional Transit System Plan for Central Puget Sound (Sound Transit 3). OMF South would be used to store, maintain, and deploy about 144 LRVs for daily service. It would provide facilities for vehicle storage, inspections, maintenance and repair, interior vehicle cleaning, and exterior vehicle washing. Additionally, the facility would receive, test, and commission new LRVs for the entire light rail system. OMF South would create high-skilled, living-wage jobs for more than 470 people in South King County.

OMF South would also be used to accommodate administrative and operational functions, such as serving as a report base for LRV operators. Included is a Maintenance of Way (MOW) building for maintenance and storage of spare parts for tracks, vehicle propulsion equipment, train signals, and other infrastructure, in addition to storage facilities for the entire Link light rail system. Other facility elements would include employee and visitor 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.

OMF South would need to have tracks connecting to a light rail line that will be operating when the facility is planned to open, which in southern King County is the Federal Way Link Extension (FWLE).

The length and location of these connecting tracks varies by alternative.

Three site alternatives for the proposed project are evaluated in the Draft Environmental Impact Statement (EIS): one in Kent and two in Federal Way. These alternatives are named the Midway Landfill Alternative, South 336th Street Alternative, and South 344th Street Alternative, respectively.

## Dates of Construction and Opening

The COVID-19 pandemic is reducing the tax revenue Sound Transit relies on to expand the regional transit system. Through a process called realignment, the Sound Transit Board of Directors is working to determine which plans and timelines for Sound Transit 3 projects will need to change. The Board decisions on realignment, influenced by COVID-19 and increased project cost estimates, may have an impact on the future project schedule.

The current schedule is to begin construction by about 2024; Sound Transit expects the facility could be open for operations between 2029 and 2034, depending on the alternative selected to be built. Depending on the outcome of realignment, this schedule could change, resulting in a delayed opening or the construction of OMF South in phases to reach full operational capacity over time.

## Project Proponent and State Environmental Policy Act (SEPA) Lead Agency

Central Puget Sound Regional Transit Authority  
(Sound Transit)

Union Station

401 S Jackson Street

Seattle, Washington 98104

[www.soundtransit.org](http://www.soundtransit.org)

### SEPA Responsible Official

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### Contacts for Additional Information

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### Principal Contributors

This Draft Environmental Impact Statement was prepared by Sound Transit in consultation with the following firms: HDR; Parametrix; Aqua Terra Cultural Resource Consultants; Historical Research Associates, Inc.; Cross-Spectrum Acoustics, Inc.; ECONorthwest; EnviroIssues; and Two Hundred. See Appendix A1, List of Preparers, for a detailed list of preparers and the nature of their contributions.

### Date of Issue

March 5, 2021

### Commenting on the Draft Environmental Impact Statement

The comment period for the Draft Environmental Impact Statement extends from March 5 to April 19, 2021 (an extended 45-day comment period). During

the comment period, comments can be made online, by email, in writing, by phone, and at online public comment hearings.

How to comment:

- Online: [OMFSouth.participate.online](https://omfsouth.participate.online)
- Email: [OMFSouthDEIS@soundtransit.org](mailto:OMFSouthDEIS@soundtransit.org)
- Mail: OMF South, c/o Hussein Rehmat  
Sound Transit  
401 S Jackson Street  
Seattle, WA 98104  
  
(comments must be postmarked by April 19, 2021)

- Phone: (206) 257-2135
- Online Informational Meetings/Public Hearings:  
During the comment period, two online informational meetings/public hearings will be held to share project information and obtain input from the community. A court reporter will record spoken statements made during the online comment hearing. Meeting attendees will also have access to a link to the comment form and can submit comments electronically at any point during the meeting. These meetings will be held on:
  - Wednesday, March 24, 5:30 – 7:30 p.m.
  - Tuesday, March 30, 11:00 a.m. – 1:00 p.m.

The events can be accessed online at the following web address:

[OMFSouth.participate.online](https://omfsouth.participate.online) on the dates listed above. People with disabilities may request an accommodation to participate by calling 1-800-201-4900 / TTY Relay: 711 or email [Sagar.Ramachandra@soundtransit.org](mailto:Sagar.Ramachandra@soundtransit.org). Translation assistance for limited English proficiency persons, is available by calling Sound Transit at 1-800-823-9230 / TTY Relay: 711.



## Anticipated or Potential Licenses, Permits, and Approvals

License, Permit or Approval	Issuing Agency
<b>Federal</b>	
Air Space Lease for Use of Interstate Right-of-Way	Federal Highway Administration
Section 106 Review	Federal Highway Administration
Section 4(f) Review	Federal Highway Administration
Clean Water Act, Section 404	U.S. Army Corps of Engineers
Federal Endangered Species Review	U.S. Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries Service
National Environmental Policy Act documentation for reconfiguration of towers and power lines for alternatives in Federal Way	Bonneville Power Administration
<b>State</b>	
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
Temporary Modification of Water Quality Criteria	Washington State Department of Ecology
Underground Storage Tank Notification Requirement	Washington State Department of Ecology
Clean Water Act, Section 401 Water Quality Certification	Washington State Department of Ecology
Temporary Construction Easement (SR 99, I-5)	Washington State Department of Transportation
Air Space Lease: State Transportation Routes and Interstate Right-of-Way (with Federal Highway Administration)	Washington State Department of Transportation
Cleanup Action Plan Amendment and related Consent Decree (for Midway Landfill Alternative only)	Washington State Department of Ecology

## Anticipated or Potential Licenses, Permits, and Approvals (continued)

License, Permit or Approval	Issuing Agency
<b>City (depending on location of alternative)</b>	
Street Use Permits	City of Kent or Federal Way
Construction Permits	City of Kent or Federal Way
Right-of-Way Permits	City of Kent or Federal Way
Environmental Critical Areas/Sensitive Areas Review	City of Kent or Federal Way
Compliance Review of National Pollutant Discharge Elimination System Stormwater Discharge requirements before discharge to local stormwater system	City of Kent or Federal Way
Development Permits, Including Conditional Use Permit or Land Use Code Amendment	City of Kent or Federal Way
Noise Variance	City of Kent or Federal Way
Street Vacations	City of Federal Way
<b>Other</b>	
Solid Waste Disposal Permit (for Midway Landfill Alternative)	King County
Notification of Intent to Perform Demolition or Asbestos Removal	Puget Sound Clean Air Agency
Title V Operating Permit	Puget Sound Clean Air Agency
Pipeline and Utility Crossing Permits	Utility Providers
Utility Approvals: Easements and Use Agreements	Utility Providers

## Next Steps

At the end of the comment period, Sound Transit will collect and consider the comments received and prepare a report to summarize them. The report will be publicly available. The Board of Directors will consider the comments as it identifies a preferred alternative, which will be evaluated along with the other alternatives in the Final Environmental Impact Statement.

The Final Environmental Impact Statement's anticipated publication date is 2022. Following publication, the Board will select which OMF South alternative to build.

During or after preparation of the Final Environmental Impact Statement, the Federal Highway Administration (FHWA) is expected to conduct environmental review under the National Environmental Policy Act (NEPA) as all three project alternatives would require work within the Federal Interstate right-of-way and require approvals from FHWA.

Additionally, Bonneville Power Administration (BPA) is expected to conduct NEPA environmental review for the relocation of transmission towers in Federal Way if either of the site alternatives in Federal Way is selected to be built. The U.S. Army Corps of Engineers (Corps) may also require additional



environmental review to support permitting, depending on which alternative is selected as a result of the Final Environmental Impact Statement.

## Related Documents

- Regional Transit Long-Range Plan Update (Sound Transit, December 2014)
- Regional Transit Long-Range Plan Update Final Supplemental Environmental Impact Statement (Sound Transit, November 2014)
- Federal Way Link Extension Final Environmental Impact Statement (Sound Transit, November 2016)
- Sound Transit 3: The Regional Transit System Plan for Central Puget Sound (Sound Transit, June 2016)
- Tacoma Dome Link Extension and Operations and Maintenance Facility South: Early Scoping Information Report (Sound Transit, March 2018)
- Tacoma Dome Link Extension and Operations and Maintenance Facility South: Early Scoping Summary Report (Sound Transit, June 2018)
- Operations and Maintenance Facility South: Alternatives Evaluation Technical Memorandum (Sound Transit, February 2019)
- Operations and Maintenance Facility South: Scoping Information Report (Sound Transit, February 2019)
- Operations and Maintenance Facility South: Scoping Summary Report (Sound Transit, May 2019)

## Cost and Availability of Draft Environmental Impact Statement

The Draft Environmental Impact Statement is available for public review in a variety of formats and locations.

It is available on the Sound Transit website:

[www.soundtransit.org/system-expansion/operations-maintenance-facility-south/documents](http://www.soundtransit.org/system-expansion/operations-maintenance-facility-south/documents) and on flash

drives at no cost by request. Paper copies are available for the cost listed below, which does not exceed the cost of reproduction:

- Executive Summary - Free
- Draft Environmental Impact Statement - \$25.00
- Technical Reports and other appendices - \$15.00 each

To request a flash drive or paper copies of the documents, please contact Hussein Rehmat at (206) 689-4828 or email

[Hussein.Rehmat@soundtransit.org](mailto:Hussein.Rehmat@soundtransit.org).

Paper copies of the Draft Environmental Impact Statement documents are also available for review at the following locations:

- Kent City Hall, 220 4th Avenue S, Kent
- Federal Way Community Center, 876 S 333rd Street, Federal Way



# *Executive Summary*





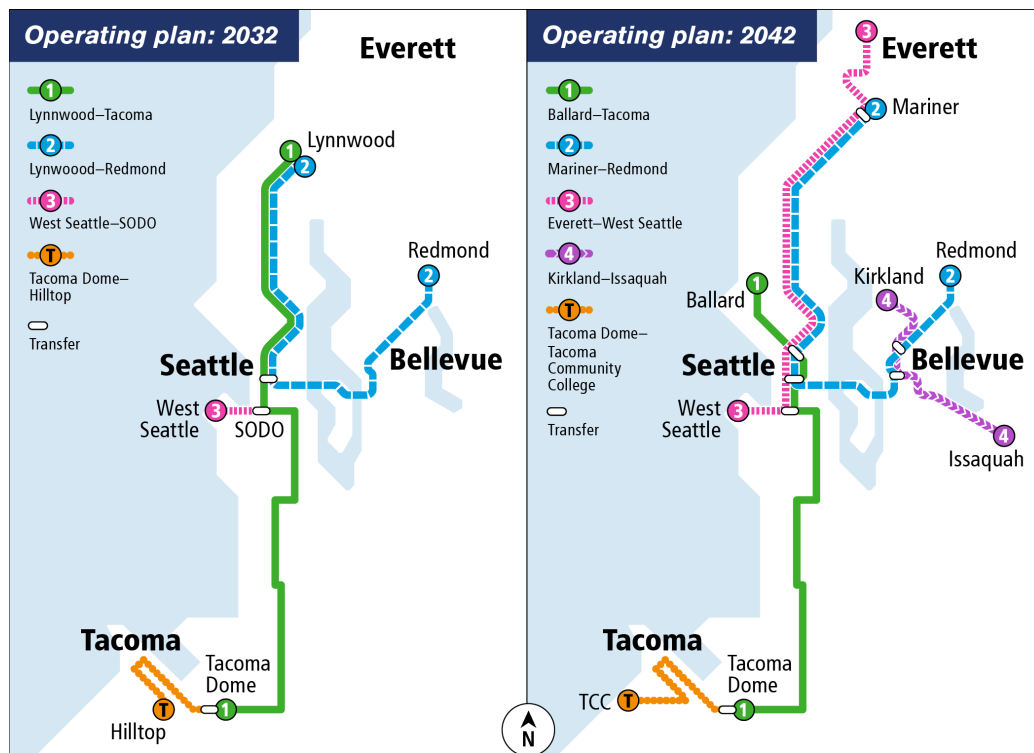
## Introduction

The Central Puget Sound Regional Transit Authority (Sound Transit) proposes to build and operate an operations and maintenance facility in its South Corridor (OMF South) to meet agency needs for an expanded fleet of light rail vehicles (LRVs). OMF South would support the expansion of the Link light rail system as part of Sound Transit 3: The Regional Transit System Plan for Central Puget Sound (Sound Transit 3). Sound Transit 3 includes the expansion of bus rapid transit, commuter rail, and light rail service throughout the region. Under Sound Transit 3, the light rail system in central Puget Sound would grow to 116 miles with over 80 stations.

Light rail would expand north to Everett, south to Federal Way and Tacoma, east to Redmond, south Kirkland, and Issaquah, and west to West Seattle

and Ballard as shown in Figure ES-1.<sup>1</sup> Sound Transit 3 calls for a total fleet of approximately 460 LRVs. In order to meet the system expansion goals, Sound Transit needs two additional operations and maintenance facilities: one each in the North and South Corridors. While OMF South would be located in the South Corridor, it would support Sound Transit's system-wide expansion by providing a facility to receive, test, commission, store, maintain, and deploy an increased LRV fleet.

As the lead agency under SEPA, Sound Transit prepared this Draft Environmental Impact Statement to evaluate three build alternatives that meet the purpose and need for the proposed project, as described below. These three alternatives are the Midway Landfill Alternative in Kent, the South 336th Street Alternative in Federal Way, and the South 344th Street Alternative in Federal Way, as shown in Figure ES-2.



**Figure ES-1: Link Light Rail System Expansion**

<sup>1</sup> The Board decisions on realignment, influenced by COVID-19 and increased project cost estimates, may have an impact on the future project schedule.



### Figure ES-2: Project Alternatives



The OMF South Draft Environmental Impact Statement also evaluates a No-Build Alternative, which considers how the transit 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.

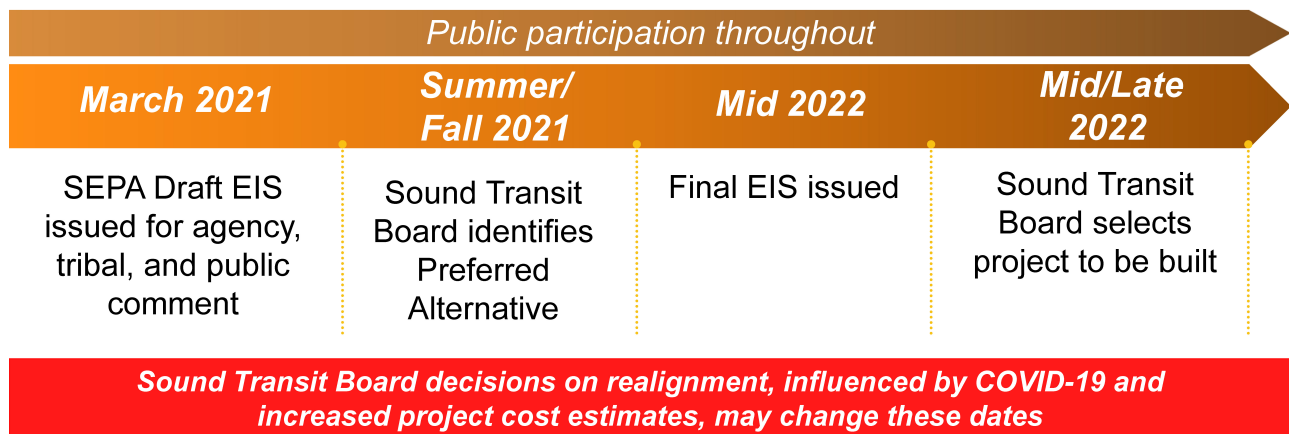
The discussion that follows states the proposed project's purpose and need, compares the levels of impact that would result from each build alternative, and describes design features and measures that would avoid, reduce, or mitigate impacts. The methodology used to evaluate impacts are generally described throughout Chapter 3 of the Draft Environmental Impact Statement in the introduction to each element of the environment. Figure ES-3 shows the anticipated milestones for the environmental review process.

Due to the COVID-19 pandemic, the scheduled durations could change depending on available funds and construction costs. The pandemic is reducing

the tax revenue Sound Transit relies on to expand the regional transit system. Through a process called realignment, the Board of Directors is working to determine which plans and timelines for Sound Transit 3 projects will need to change. The Board decisions on realignment, influenced by COVID-19 and increased project cost estimates, may have an impact on the future project schedule.

The current schedule is to begin construction by about 2024; Sound Transit expects the facility could be open for operation between 2029 and 2034, depending on the alternative selected to be built. Depending on the outcome of realignment, this schedule could change, resulting in a delayed opening or the construction of OMF South in phases to reach full operational capacity over time. For the purposes of this Draft Environmental Impact Statement, the analysis evaluates the potential environmental impacts of OMF South at full buildout.

## OMF South Environmental Review Milestones



**Figure ES-3:** Anticipated Project Milestones

### Purpose and Need

The purpose of the Sound Transit OMF South project is to construct an operations and maintenance facility in the South Corridor to support Sound Transit's Link light rail system expansion and the related increase in the LRV fleet and daily operations, as identified in Sound Transit 3.

OMF South would:

- Provide a facility with the capacity to receive, test, commission, store, maintain, and deploy vehicles to support the intended level of service for the system-wide light rail system expansion.
- Support efficient and reliable light rail service that minimizes system operating costs.
- Support and connect efficiently to the regional system and be technically and financially feasible to build, operate, and maintain, consistent with the Sound Transit 3 Plan and the Sound Transit Regional Transit Long-Range Plan.
- Preserve and promote a healthy and sustainable environment by minimizing adverse impacts to people and the natural and built environments.

The project is needed because:

- The current regional system lacks a facility with sufficient capacity to support the efficient and reliable long-term operations for system-wide light rail expansion, including the next phase of expansion in King and Pierce counties.
- New light rail maintenance and storage capacity needs to be available with sufficient time to accept delivery of and commission new vehicles to meet expansion needs and to store existing vehicles while the new vehicles are tested and prepared.

The OMF South project is necessary to support the addition of about 144 LRVs as part of the Sound

Transit 3 system expansion, even if construction of light rail extensions throughout the system is phased or delayed. The facility program includes functions that support the entire Link light rail system, such as receiving, testing, and commissioning LRVs. In addition, OMF South will include Maintenance of Way facilities and a Link System-Wide Storage building to receive and store vehicle parts and components, tracks and components, and station parts and components.

### Alternatives Considered

The OMF South alternatives underwent an extensive evaluation process prior to their selection for study in this Draft Environmental Impact Statement. Beginning in early 2018, Sound Transit conducted early scoping, followed by alternatives development, including site identification, prescreening, and alternatives evaluation. In early 2019, six alternatives were presented to the public during the SEPA scoping period, and in May 2019 the Board identified three alternatives for evaluation in the Draft Environmental Impact Statement. These three alternatives are the Midway Landfill Alternative in Kent, the South 336th Street Alternative in Federal Way, and the South 344th Street Alternative in Federal Way.

The Board is expected to identify a preferred alternative after the Draft Environmental Impact Statement is issued and public, agency, and tribal comments are received and considered.

### No-Build Alternative

The No-Build Alternative assumes the other light rail system improvements listed in Sound Transit 3 would be built, including extensions from downtown Seattle to West Seattle and Ballard, Lynnwood to Everett, Kent/Des Moines to Federal Way Transit Center (Federal Way Link Extension [FWLE]), and Federal Way Transit Center to Tacoma Dome (Tacoma Dome Link Extension [TDLE]). The No-Build Alternative



also assumes that the new North Corridor OMF would be constructed along the Lynwood to Everett corridor (OMF North). Under Sound Transit's System Expansion Plan, each of these projects would be constructed and operating by 2042, pending the outcome of the realignment.

For the purposes of this Draft Environmental Impact Statement, the analysis of the No-Build Alternative is based on the expected conditions in 2042, which is the future design year for the project. This provides a common future analysis year for ridership forecasting, air, noise, transportation, and other environmental elements on all Sound Transit 3 projects.

Under the No-Build Alternative, impacts resulting from the Sound Transit 3 projects listed above, including FWLE and TDLE, would still occur. As the FWLE and TDLE projects are within the study areas for the OMF South project alternatives, there are impacts that may be similar to or that overlap with those of OMF South. FWLE is under construction and is planned to open for service in 2024. The impacts of FWLE have been addressed in the Federal Way Link Extension Final Environmental Impact Statement. Under the Sound Transit 3 plan, TDLE was planned to open in 2030 (after the expected opening of OMF South). The COVID-19 pandemic has impacted the TDLE project schedule, and the project can no longer achieve this opening date. The TDLE and OMF South schedules are also subject to the outcome of realignment. TDLE is currently undergoing environmental review under both NEPA and SEPA by the Federal Transit Administration and Sound Transit. The Tacoma Dome Link Extension Environmental Impact Statement is expected to be published in 2022.

The TDLE mainline track south of Federal Way Transit Center may also serve as part of connecting mainline track to OMF South, depending on which OMF South build alternative is chosen. In those instances, impacts from the mainline tracks would be





primarily the same under both the No-Build and build alternatives, although the timing of those impacts would be different. Because TDLE will open after OMF South and has not yet completed environmental review, impacts associated with the TDLE mainline tracks connecting to the OMF South alternatives are addressed in the discussion of the build alternatives and are not considered part of the No-Build Alternative. TDLE impacts beyond those associated with the connecting mainline tracks are part of the 2042 No-Build condition and are addressed in the Cumulative Impact Analysis in Chapter 4 of this Draft Environmental Impact Statement. TDLE impacts will be further detailed in the separate Tacoma Dome Link Extension Environmental Impact Statement.

While the other Sound Transit 3 projects, including OMF North, would be constructed, the No Build Alternative assumes Sound Transit's light rail storage and maintenance facilities would support a maximum light rail fleet size of about 352 LRVs, which is fewer than the approximately 460 needed to operate the system at the planned service levels of Sound Transit 3. As a result, light rail operations would be less efficient than they would otherwise be with OMF South, and Sound Transit would not be able to meet expected ridership demand. The No-Build Alternative would fail to meet the purpose and need of the project and could indirectly result in worse traffic congestion and greater vehicle emissions than would otherwise occur under the build alternatives.

### ***Build Alternatives***

Several separate operational functions are proposed for OMF South. These functions would be the same for all build alternatives. Each alternative would include a 2-story OMF building, a 1-story Maintenance of Way building, a 1-story Link System-Wide Storage building, storage tracks, parking, and yard areas (building heights do not vary between alternatives). The site would include space for receiving, testing,

commissioning, storing, maintaining, and deploying about 144 LRVs in addition to housing administrative and operational functions, such as serving as a report base for operators. OMF South would include administration, workshop, and storage space for Maintenance of Way and Facilities staff and functions. There would be a training track that would include all the track installation configurations found in the Link system. OMF South would also include an area dedicated to storage needs for the entire Link light rail system.

Three build alternatives are evaluated for OMF South: Midway Landfill Alternative, South 336th Street Alternative, and South 344th Street Alternative. The differences between the three alternatives are due to their geographic location; the basic design and function of the OMF South site would be the same for all alternatives.







### Midway Landfill Alternative

The Midway Landfill Alternative is in Kent between S 246th Street and S 252nd Street and between Interstate 5 (I-5) and State Route (SR) 99.

#### **Mainline**

Because the site would be located adjacent to FWLE, which is scheduled to open as an active light rail line in 2024, there would be no need to build additional mainline.

#### **OMF South Site**

The site footprint of the Midway Landfill Alternative is approximately 68 acres, which includes the OMF building, the Maintenance of Way (MOW) building, the Link System-Wide Storage building, storage tracks, training track, parking, and yard areas. There would be approximately 450 parking spaces, including spaces for employees, visitors, accessible parking, and nonrevenue Sound Transit vehicles. The yard area encompasses approximately 8.5 acres. Figure ES-4 is an aerial view with a conceptual site layout.

The Midway Landfill Alternative includes connections to the FWLE mainline via lead tracks between the Kent/Des Moines and South 272nd Street stations. An approximately 3,780-foot-long lead connector track would run parallel to FWLE to connect the OMF South lead tracks. About 35 percent of the lead connector tracks would be elevated. Five lead tracks would connect to the OMF South yard to allow trains to enter and exit the site. Each of these lead tracks would be approximately 450 feet long and mostly built at grade.

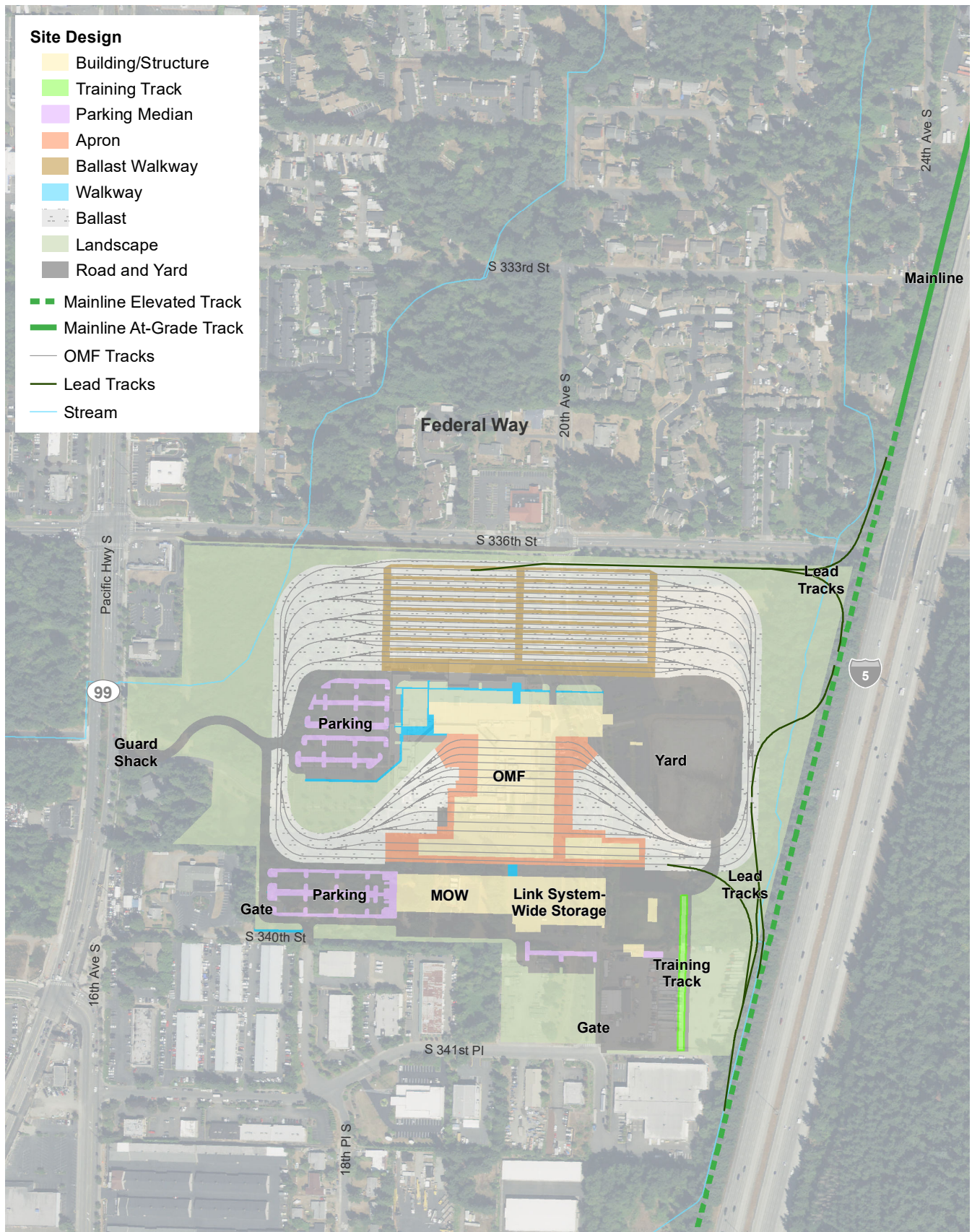


**Figure ES-4:** Conceptual Layout: Midway Landfill Alternative









**Figure ES-6:** Conceptual Layout: South 336th Street Alternative

### South 344th Street Alternative

The South 344th Street Alternative is in Federal Way between S 336th Street and S 344th Street and between I-5 and 18th Place S.

#### **Mainline**

The South 344th Street Alternative would require approximately 1.8 miles of connecting mainline track from the terminus of the FWLE project at the Federal Way Transit Center to the site, including the proposed mainline tail track. As with the South 336th Street Alternative, these tracks would serve as future mainline tracks for TDLE and would follow the same alignment. The mainline alternative alignment options are the same as those described for the South 336th Street Alternative as described in the section above and shown in Figure ES-5.

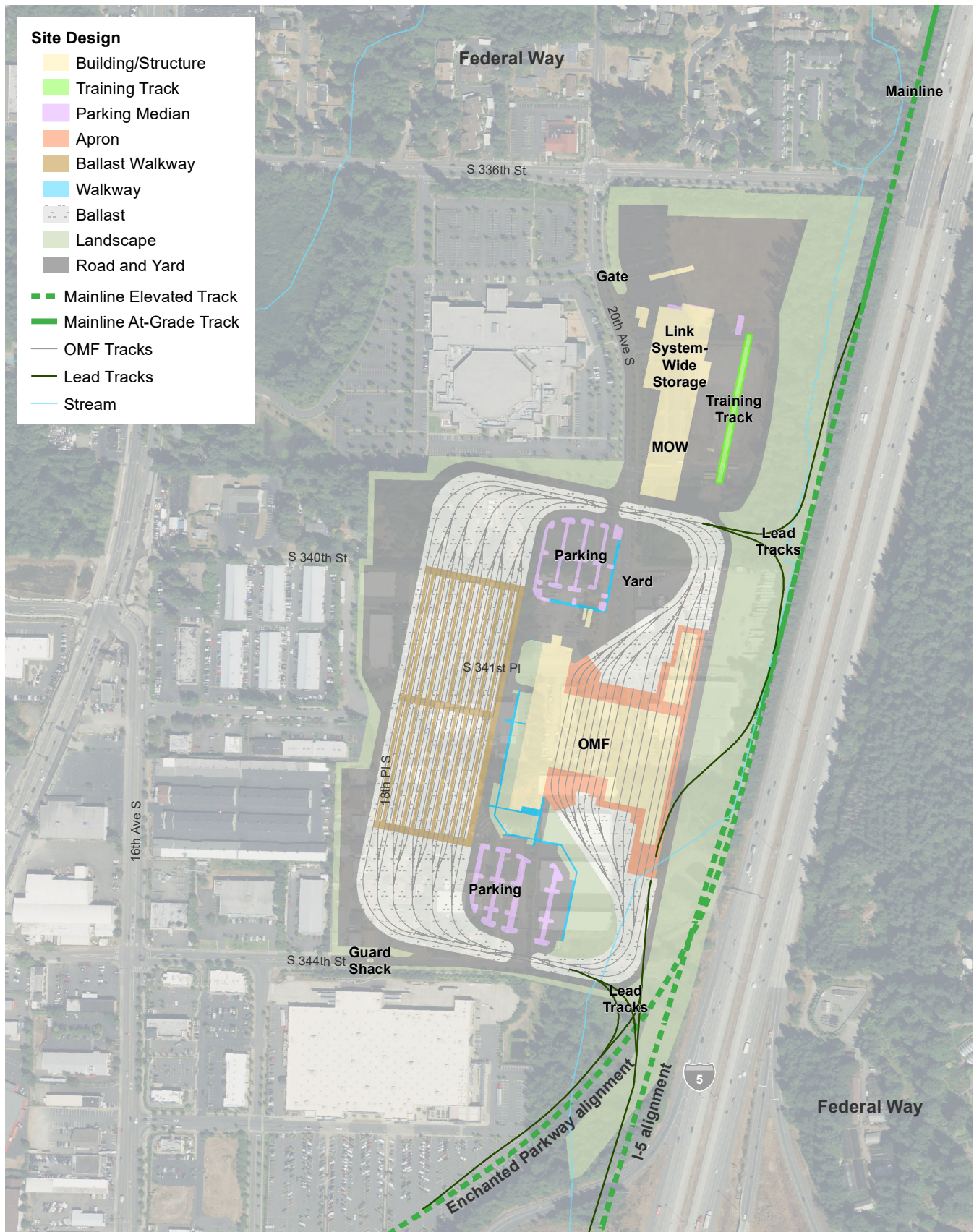
As with the South 336th Street Alternative, the mainline would extend past the southeast corner of the site to serve as tail tracks. Until the TDLE mainline is extended to the south, these tail tracks would be used to allow trains to access the Link system if the northeast lead tracks are out of service. Train speeds would be less than 5 mph because the trains would be coming to a stop to allow them to reverse direction and head north. There are two options for the South 344th Street Alternative tail tracks that follow the design alternatives for TDLE: the Enchanted Parkway alignment and the I-5 alignment. Both options are completely elevated, with the Enchanted Parkway alignment extending approximately 1,500 feet south of the site and the I-5 alignment extending approximately 1,800 feet south of the site.

#### **OMF South Site**

The South 344th Street Alternative site footprint is approximately 65 acres, which includes the OMF building, the Maintenance of Way building, the Link System-Wide Storage building, storage tracks, training track, parking, and yard areas. There would be approximately 435 parking spaces, including spaces for employees, visitors, accessible parking, and nonrevenue Sound Transit vehicles. The yard area would be approximately 11.2 acres. Figure ES-7 is an aerial view with a conceptual layout.

In addition to the mainline extension, the site would also require lead tracks to access the rail system via the mainline. The elevated tracks would leave the northeast corner of the site and be approximately 1,070 feet long. Similarly, approximately 1,100 feet of elevated double tracks would leave the southeast corner of the site to connect to the mainline tail tracks for the Enchanted Parkway alignment; approximately 1,300 feet of elevated tracks would be needed to connect the site to the mainline tail tracks for the I-5 alignment.





**Figure ES-7:** Conceptual Layout: South 344th Street Alternative

### Construction Approach

Major construction activities would start with demolishing existing buildings, relocating utilities, and grading and excavating the site, which may include construction of retaining walls. The next phase of construction would include installing track work and electrical systems (overhead catenary system power lines, etc.) and constructing the OMF South buildings.

Typical construction would occur on a 5- to 6-day workweek schedule, primarily during daytime hours. In some situations (such as when street detours are involved or when daytime construction periods need to be shortened to reduce impacts), additional shifts, all-week, nighttime, or 24-hour construction activities could be necessary.

#### ***Midway Landfill Alternative Subsurface Construction Design Options***

The Midway Landfill site has several favorable attributes as a publicly owned, mostly vacant site in an appropriate location in relation to the existing Link system. However, there are unique risks involved with using a former landfill that has been contained and is under active Superfund site monitoring and reporting requirements. In addition, waste in the landfill is settling at different rates across the site, which poses long-term operations and maintenance concerns. After a series of workshops and further analysis to address this settlement concern, Sound Transit developed three subsurface construction design options for building an OMF on the landfill: Platform, Hybrid, and Full Excavation.

Under the Platform subsurface construction design option, OMF South would be built on a 3.5-foot-thick concrete slab platform supported on approximately 700 concrete-filled drilled shafts. The drilled shafts would be 10 feet in diameter, distributed on a 35-foot by 70-foot grid under the buildings, track, and drainage vault area. Average shaft depths would range from 120 feet to 180 feet below finished grade. Due to the number of drilled shafts, the entire

soil and geomembrane cap system that overlays the landfill would be removed then replaced after the shafts had been installed. The platform would then be constructed on top of the new cap, which would be designed to meet the regulatory requirements for the remedial controls to contain the landfill waste and hazardous emissions and to prevent precipitation from reaching the buried refuse where it could contaminate groundwater.

Under the Hybrid subsurface construction design option, the entire landfill cap system would also be removed and replaced. Approximately 4.3 million cubic yards of loose landfill material beneath the cap would be excavated, and the remaining fill would undergo a ground improvement process called deep dynamic compaction to prepare the site for construction. Excavated material would be screened to determine whether it was suitable for reuse. A 1-foot-thick concrete slab over a 3-foot-thick beam system would be built to support facilities sensitive to settlement, including tracks, parking, and roads. Approximately 110 concrete-filled drilled shafts would provide additional support where needed under buildings. Approximately 1.2 million cubic yards of loose material would need to be brought to the site.

The Full Excavation subsurface construction design option was designed to completely excavate the landfill, screen excavated material for reuse, and backfill it with soil that the OMF would be built on. The landfill cap system would also be removed and replaced to cover the reused landfill material. Excavation of the landfill would produce approximately 4.9 million cubic yards of loose material consisting of solid waste and soil, of which approximately 3 million cubic yards would be hauled off site. The hauled off material would be the equivalent of about 920 Olympic-sized swimming pools, each measuring 25 meters wide, 50 meters long, and 2 meters deep. Approximately 1.6 million cubic yards of suitable soil would be imported.



## Conceptual Capital Cost Estimates

The current conceptual capital cost estimates for the three subsurface construction design options at the Midway Landfill Alternatives are approximately \$2.4 billion for the Platform option, approximately \$1.9 billion for the Hybrid option, and approximately \$1.8 billion for the Full Excavation option. The capital cost estimates for the South 336th Street Alternative and South 344th Street Alternative are the same, at approximately \$1.2 billion. The capital cost estimates are presented in ranges in Table ES-1 to reflect the conceptual nature of the cost estimate at this phase of project development and the level of engineering (10 percent design) that informs the cost estimates. This range was established based on industry cost-estimate accuracy identified by the Association for Advancement of Cost Engineering International for projects at the 10 percent level of design as well as on Sound Transit experience.

The conceptual capital cost estimates include construction and demolition; property acquisition and relocation assistance; design, permitting, and program management; and allowances for construction contingencies. Estimates for annual operating costs include long-term expenses to maintain the facility, as well as operating costs associated with trains deploying from and returning to the OMF each day. Additionally, annual mainline maintenance expenses for the South 336th Street and South 344th Street alternatives would apply until TDLE is completed.

Sound Transit has initiated an independent third-party review of conceptual capital cost estimates and trends for the OMF South and TDLE projects, among others. This review will include programmatic review and analysis of cost-estimating methodology for Sound Transit 3 construction and real estate costs for these projects.



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Table ES-1 below summarizes key characteristics and long-term impacts (unless otherwise specified) that differentiate the build alternatives. There would be additional temporary impacts to these elements of the environment during construction that are not reflected in this table. Both long-term and construction impacts are discussed in detail in the OMF South Draft Environmental Impact Statement.

**Table ES-1: Key Characteristics and Impacts of the Build Alternatives**

Key Characteristics and Impacts	Midway Landfill Alternative	South 336th Street Alternative	South 344th Street Alternative
<b>Conceptual Capital Cost Estimate (In billions of 2019 dollars)<sup>1, 2</sup></b>			
Mainline <sup>3</sup>	N/A	\$0.230 – 0.290	\$0.330 – 0.470
OMF <sup>4</sup>	Platform: \$2.2 – 2.8 Hybrid: \$1.8 – 2.3 Full Excavation: \$1.7 – \$2.1	\$1.1 – 1.4	\$1.1 – 1.4
<b>Annual Operating Cost Estimate (In millions of 2019 dollars)<sup>2</sup></b>			
Mainline <sup>3</sup>	N/A	\$1.0	\$1.2
OMF	Platform: \$11 Hybrid: \$11 Full Excavation: \$11	\$10	\$10
<b>Construction duration</b>			
Site preparation	Platform: 4y 1m Hybrid: 5y 7m Full Excavation: 4y 4m	1y 5m	1y 6m
Facility construction	Platform: 2y 3m Hybrid: 3y 1m Full Excavation: 2y 9m	2y 3m	2y 4m
Total <sup>5</sup>	Platform: 6y 2m Hybrid: 8y 8m Full Excavation: 7y 1m	3y 4m	3y 5m
<b>Transportation</b>			
<b>Operations: number of intersections with level of service impacts</b>			
Mainline <sup>3</sup>	N/A	0	0
OMF Site	1	0	0
<b>Construction: maximum anticipated daily truck trips during construction</b>			
Mainline <sup>3</sup>	N/A	120	120
OMF Site <sup>6</sup>	Platform: 71 Hybrid: 564 Full Excavation: 554	73	77

1. Preliminary capital cost estimate includes property acquisition, relocation assistance, final design, and construction.

2. The unit costs used to develop the cost estimates are based on costs from 2019. They do not account for future increases due to inflation.

3. The mainline is the principle track that connects stations and OMFs. The mainline in Federal Way is planned to be constructed as a part of TDLE and therefore would be built regardless of which OMF South alternative is selected.

4. There is potential increased cost risk due to the nature of the uncertain subsurface conditions at the landfill and the low level of design (10 percent) and subsurface exploration at this phase.

5. Construction duration totals reflect the overlap of some site preparation and facility construction activities and rounding of months. These construction durations do not include the approximately 18 months needed for testing and commissioning of the OMF facility.

6. Estimates represent a worst-case scenario during the site preparation phase and not a daily average of truck trips over the entire construction period.



Key Characteristics and Impacts	Midway Landfill Alternative	South 336th Street Alternative	South 344th Street Alternative
<b>Acquisitions, Displacements, and Relocations</b>			
<b>Parcels Affected</b>			
Mainline <sup>3</sup>	N/A	5	9
OMF Site	42	31	56
<b>Business Displacements</b>			
Mainline <sup>3</sup>	N/A	0	1
OMF Site	4	2	11 <sup>7</sup>
<b>Residential Displacements</b>			
Mainline <sup>3</sup>	N/A	TDLE Preferred Alt: 47 TDLE Design Option: 59	TDLE Preferred Alt: 47 TDLE Design Option: 59
OMF Site	0	14	20
<b>Land Use</b>			
<b>Area of land, in acres, converted to transportation use</b>			
Mainline <sup>3</sup>	N/A	35	45
OMF Site	71	62	59
<b>Consistency with zoning and comprehensive plan designations</b>			
Mainline <sup>3</sup>	N/A	Primarily through a residential zone	Primarily through a residential zone
OMF Site	Yes, generally consistent. Conditionally allowed under existing zoning; would exceed city of Kent impervious surface allowances due to area of buildings and structures	Yes, generally consistent. Would exceed city of Federal Way block perimeter limits and require removal of 20th Avenue S	Yes, generally consistent. Would exceed city of Federal Way block perimeter limits and require removal of several streets
<b>Economics</b>			
<b>Estimated number of employees displaced<sup>8</sup></b>			
Mainline <sup>3</sup>	N/A	0	31
OMF Site	43	94	217
<b>Percentage of land value removed from city's tax base</b>			
Mainline <sup>3</sup>	N/A	0.26%	0.52%
OMF Site	0.12%	0.21%	0.38%

3. The mainline is the principle track that connects stations and OMFs. The mainline in Federal Way is planned to be constructed as a part of TDLE and therefore would be built regardless of which OMF South alternative is selected.

7. Includes GarageTown, comprised of approximately 60 owners.

8. The number of displaced employees is an estimation based on the business building size and type of business activity and not on an actual survey of businesses.

## Executive Summary

Key Characteristics and Impacts	Midway Landfill Alternative	South 336th Street Alternative	South 344th Street Alternative
<b>Estimated economic output from employment and spending during construction</b> (In billions of 2019 dollars)			
Mainline <sup>3</sup>	N/A	\$0.4	\$0.6
Total	Platform: \$4.2 Hybrid: \$3.4 Full Excavation: \$3.2	\$1.9	\$2.0
<b>Social Resources, Community Facilities, and Neighborhoods</b>			
<b>Displaced social and community resources</b>			
Total	None	1 church and associated school and daycare center	3 churches
<b>Visual and Aesthetics</b>			
<b>Level of Visual Impact</b>			
Mainline <sup>3</sup>	N/A	Medium – High	Medium – High
OMF Site	Medium	Medium	Medium
<b>Noise</b>			
<b>Receptors affected by noise / after mitigation</b>			
Mainline <sup>3</sup>	N/A	TDLE Preferred Alt: 3 / 0 TDLE Design Option: 4 / 0	TDLE Preferred Alt: 3 / 0 TDLE Design Option: 4 / 0
OMF Site	0	0	0
<b>Ecosystem Resources</b>			
<b>Stream and stream buffer impacts</b>			
Mainline <sup>3</sup>	N/A	Relocate or otherwise permanently impact 1,700 to 1,800 linear feet of East Hylebos Creek Tributary; impact 4.4 to 5 acres of buffer	Relocate or otherwise permanently impact 1,600 to 1,700 linear feet of East Hylebos Creek Tributary; impact 6.4 to 7.7 acres of buffer
OMF Site	0	Relocate 800 linear feet of East Hylebos Tributary; impact 600 feet of West Fork Hylebos Creek Tributary; impact 5.9 acres of buffer	Relocate 1,200 linear feet and daylight 800 linear feet of East Hylebos Creek Tributary; impact 5.4 acres of buffer

3. The mainline is the principle track that connects stations and OMFs. The mainline in Federal Way is planned to be constructed as a part of TDLE and therefore would be built regardless of which OMF South alternative is selected.



Key Characteristics and Impacts	Midway Landfill Alternative	South 336th Street Alternative	South 344th Street Alternative
<b>Area, in acres, of impacts to mature native forest / other native forest</b>			
Mainline <sup>3</sup>	N/A	3 / 3	4 / 5 to 6
OMF Site	0 / 4	12 / 3	6 / 6
<b>Area, in acres, of impacts to wetland / wetland buffers</b>			
Mainline <sup>3</sup>	N/A	1.4 / 4.0 to 4.5	1.5 / 6.1 to 6.9
OMF Site	0 / 0	3.5 / 7.7	1.4 / 6.6
<b>Water Resources</b>			
<b>Area, in acres, of increased impervious surface</b>			
Mainline <sup>3</sup>	N/A	+8 to +9	+10 to +12
OMF Site	+45	+19	+14
<b>Area, in acres, of increased pollution-generating impervious surfaces</b>			
Mainline <sup>3</sup>	N/A	+3 to +5	+2 to +4
OMF Site	+14	0	-1
<b>Geology and Soils</b>			
<b>Amount, in cubic yards, of export / import of material</b>			
Total	Platform: 670,000 / 0 Hybrid: 2,560,000 / 1,240,000 Full Excavation 2,920,000 / 1,610,000	330,000 / 60,000	310,000 / 200,000
<b>Hazardous Materials</b>			
<b>High risk for contaminated material</b>			
Total	Yes	No	No

3. The mainline is the principle track that connects stations and OMFs. The mainline in Federal Way is planned to be constructed as a part of TDLE and therefore would be built regardless of which OMF South alternative is selected.

### Comparison of Alternatives

Environmental impacts would be similar and minor among the build alternatives for impacts related to air quality and greenhouse gases, public services, utilities, energy, electromagnetic fields, historic and archaeological resources, and parks and recreational resources.

### Indirect and Cumulative Impacts

Indirect impacts from OMF South would be primarily related to any changes to existing land use that could result from increased traffic, noise, and visual impacts around the facility or from changes to transportation patterns; however, OMF South is not anticipated to result in any adverse indirect impacts. Conversely, OMF South would allow for more efficient operations of existing and future expansions of the light rail system than would occur without the facility. Improved light rail transportation serving Kent and Federal Way could increase convenience and desirability of the surrounding areas and reduce congestion, emissions, and energy use to the extent that people choose to use the light rail system for trips instead of driving in general traffic.

Cumulative impacts are those past, present, and reasonably foreseeable future actions that could interact with the impacts of OMF South alternatives. Past actions within the OMF South study areas include urbanization and the development of large transportation facilities such as I-5 and SR 99, which have substantially modified the natural environment over time, resulting in the degradation of ecosystem resources, air quality, and water quality. Of the reasonably foreseeable future actions evaluated, the actions with the most potential for cumulative impacts with OMF South are the FWLE, TDLE, and Federal Way City Center projects.

As described above, there would be impacts associated with TDLE that would overlap with OMF South, particularly from the mainline tracks for the South 336th Street and South 344th Street alternatives. TDLE would introduce additional LRVs travelling at higher speeds, which would result in greater noise impacts. This would require additional mitigation in the form of longer noise barriers as well as mitigation for some vibration impacts. FWLE and TDLE, combined with OMF South, could have cumulative visual impacts due to additional elevated tracks, large structures, and clearing of trees and vegetation, particularly for the mainline alignments adjacent to I-5. Lastly, these projects, coupled with OMF South, would contribute cumulatively to reductions in the amount and function of ecosystem resources in the study area.

Operation of OMF South, however, would facilitate operation of regional light rail and contribute to a shift of some vehicle trips to light rail transit, thereby reducing demand on traffic and bus transit movement. This would contribute to a reduction of impacts on air quality, noise levels, water quality, and energy consumption compared with future conditions projected under the No-Build Alternative. Therefore, OMF South would reduce the adverse cumulative impacts on these resources to levels below what they would be without the project.



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

Sound Transit will comply with applicable federal, state, and local environmental regulations during project construction and operation and will apply reasonable avoidance, minimization, and mitigation measures to reduce adverse impacts. These measures will be refined through final design and permitting.

The design of OMF South includes a variety of avoidance and minimization measures to reduce the impacts to environmental resources, such as altering the site footprint to avoid sensitive resources where possible or including landscaping and vegetation to minimize visual impacts. Construction activities would include best management practices to minimize noise and air quality impacts, as well as prevent erosion and water quality impacts. However, where avoidance and minimization measures would not be sufficient to reduce impacts, mitigation measures may be necessary. The following is a summary of select avoidance, minimization, and mitigation measures proposed for OMF South.

### ***Transportation***

Mitigation would be needed for the Midway Landfill Alternative due to level of service impacts forecast for employee access at the intersection of S 246th Street and SR 99 during the AM peak period. Mitigation could include opting to not construct the southbound left-turn lane access into the OMF site at S 246th Street, which would route employees and visitors to the site via a U-turn at S 252nd Street. Other options could include signalization of the S 246th Street intersection or allowing employee access through multiple locations. For all build alternatives, a construction transportation management plan addressing site access, traffic control, hauling routes, construction employee parking, and pedestrian and bicycle control in the area would be prepared per city of Kent or city of Federal Way requirements, and in

coordination with the Washington State Department of Transportation (WSDOT) and FHWA, as applicable.

### ***Visual and Aesthetic Resources***

Sound Transit would adhere to development standards that govern building setbacks, height and massing, and landscaping to avoid and minimize visual and aesthetic impacts. The project would incorporate context-sensitive design measures that would be developed and refined during final design with input from the affected communities and cities. The design measures could include additional plantings and landscaping to minimize adverse visual impacts, along with retaining wall and building façade treatments. Sound Transit would refine the landscaping, aesthetic treatments, or other features to help screen views of the mainline from residences as the project design is further developed and feedback from reviewing agencies and the public is received.

Sound Transit would consult with WSDOT staff to develop appropriate site-specific measures and mitigate impacts to Resource Conservation Areas adjacent to I-5 with replacement property or with other measures agreed to by WSDOT and FHWA, consistent with the WSDOT Roadside Policy Manual.

For visual impacts associated with construction, Sound Transit would place screens or barriers to limit the visibility of work areas from sensitive receptors. Sound Transit would reduce the glare during any nighttime construction by directing or shielding light sources away from sensitive receptors.

### ***Noise and Vibration***

Noise barriers would be necessary to mitigate noise impacts from train operation along the mainline track for the South 336th Street and South 344th Street alternatives. The noise barriers would be located along the elevated mainline track through Belmor Park Golf

## **Executive Summary**

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& Country Club (Belmor) for approximately 600 feet. The exact location would depend on the mainline design option chosen. There would be no vibration impacts requiring mitigation.

### **Ecosystem Resources**

Both the South 336th Street and South 344th Street alternatives would have impacts on wetlands, streams, and their respective buffers. Several design changes have been made to avoid and minimize impacts to streams and wetlands, including reducing fill footprints and using retaining walls on the east side of the facility in certain specific locations. However, permanent impacts to ecosystem resources cannot be avoided, resulting in stream relocation, wetland fill, and loss of forested riparian buffer habitat. Sound Transit would develop a compensatory mitigation plan during the permitting phase in accordance with applicable federal, state, and local requirements and guidelines.

The project would adhere to the mitigation requirements specified during permitting through the U.S. Army Corps of Engineers, Washington State Department of Ecology (Ecology), Washington Department of Fish and Wildlife, city of Federal Way, and tribal review. Mitigation could include use of an approved mitigation bank, such as the Port of Tacoma Upper Clear Creek Mitigation Bank, or in-lieu fee programs, like the King County Mitigation Reserves Program. Impacts on streams would also be mitigated through onsite and offsite restoration actions developed in collaboration with federal, state, city of Federal Way, and tribal biologists and regulators.

### **Geology and Soils**

Any of the subsurface construction design options for the Midway Landfill Alternative would require Ecology and/or U.S. Environmental Protection Agency (EPA) approval to confirm that the project would maintain the commitments currently in place for the landfill, which has been federally designated as a Superfund cleanup site. These commitments are memorialized in

an Ecology Cleanup Action Plan and an EPA Record of Decision and include continued operation and maintenance of site remedial actions, including the low permeability cap, the landfill gas extraction and monitoring system, and the surface water management system. As the current owner of the site, the city of Seattle is required to operate and maintain these remedial actions and provide an annual review of groundwater quality downgradient of the landfill. The Cleanup Action Plan and Record of Decision may both need to be amended to confirm that the project would maintain the commitments currently in place for the landfill.

Construction of the Midway Landfill Alternative may require the management of contaminated groundwater in addition to contaminated soil, described further under Hazardous Materials. Options could include hauling the contaminated groundwater to a commercial facility offsite or treating the ground water onsite and discharging to the local stormwater system.

Depending on design requirements, dewatering and groundwater management may be needed due to shallow groundwater in the vicinity of the South 336th Street and South 344th Street alternatives. For all alternatives, groundwater management methods could include localized dewatering and groundwater injection methods, installing groundwater containment walls, or freezing the soil underground to effectively create a groundwater barrier.

### **Hazardous Materials**

To avoid or minimize potential impacts from all potential hazardous material sites, Sound Transit would perform due diligence appropriate to the size and presumed past use at any properties in the study areas and, if necessary, further site investigations. To the extent practicable, Sound Transit would limit construction activities that might encounter contaminated groundwater or soil, recognizing that may not be possible for the Midway Landfill



Alternative. Plans for the management of contaminated media and hazardous construction debris would be developed in conjunction with the appropriate regulatory agencies; a project-wide contaminated media management plan may also be developed.

Mitigation measures for the three subsurface construction design options for the Midway Landfill Alternative would vary depending on which was built. Any of the subsurface construction design options for the Midway Landfill would require Ecology and/or EPA approval to amend the existing Ecology Cleanup Action Plan and EPA Record of Decision to confirm that the project would maintain the commitments currently in place for the landfill. Common to the three subsurface construction design options would be the replacement of the landfill cap to prevent surface water and stormwater from entering any remaining portion of landfill. Replacement or upgrade of the landfill gas extraction system and the continuation of the landfill gas monitoring system would be required for the Platform and Hybrid subsurface construction design options and may be required for the Full Excavation subsurface construction design option.

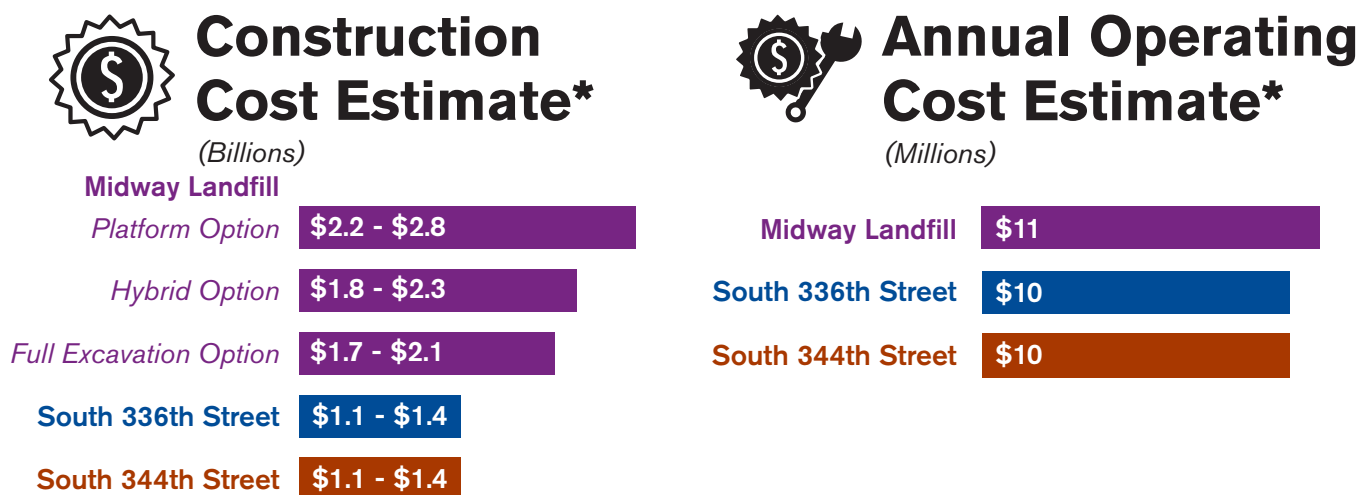
## Differentiating Impacts and Characteristics of the Alternatives

As shown in Table ES-1 and described above, the OMF South build alternatives are anticipated to have similar impacts to many of the elements of the natural and built environment. However, there are some impacts and characteristics that clearly distinguish the alternatives from each other, which are discussed in the following section.

### **Preliminary Capital and Operating Cost Estimates**

Based on the conceptual design, the Midway Landfill Alternative is estimated to have the highest capital and annual operating costs of the three OMF build alternatives. The current conceptual capital cost estimates for the three subsurface construction design options are approximately \$2.4 billion for the Platform option, approximately \$1.9 billion for the Hybrid option, and approximately \$1.8 billion for the Full excavation option. The capital cost estimates for the South 336th

**Figure ES-8:** Illustrated Metrics: Preliminary Capital and Operating Costs Estimates



Some numbers have been rounded from the Draft EIS findings for simplicity.

\*Estimates are to be used for comparisons between alternatives only. The South 336th Street and South 344th Street estimates are for the sites only.

Executive Summary

Street and South 344th Street alternatives are the same, at approximately \$1.2 billion. Further, due to the conceptual level of design and the limited subsurface exploration that has been completed, the unknown subsurface conditions at the landfill pose a greater cost risk for the Midway Landfill Alternative.

At \$11 million, the annual operating cost estimates for the Midway Landfill Alternative are approximately \$1 million higher than for the South 336th Street or South 344th Street alternative. The Midway Landfill Alternative is expected to require additional annual expenses to mitigate for potential risks posed by settlement and methane gas over the lifespan of the facility.

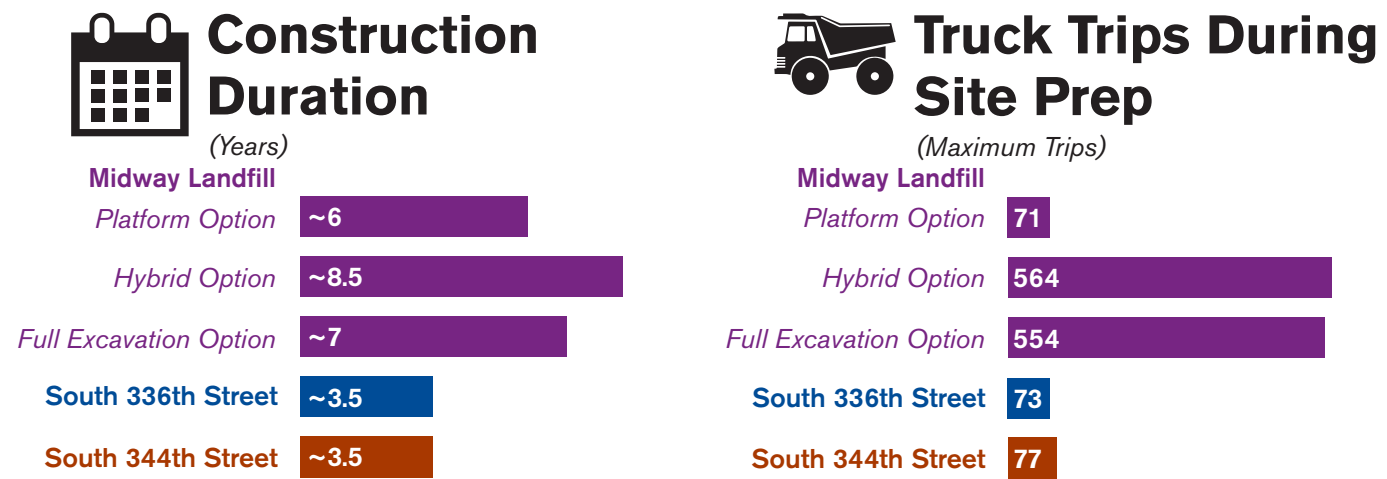
Construction Duration and Traffic

The Midway Landfill Alternative would require extensive preparation work to address concerns over site contamination and stability, as previously described. As a result, the overall construction period for the Midway Landfill Alternative is anticipated to range from 6 to 8.5 years, depending on the subsurface construction design option chosen, nearly double to more than double the time anticipated for either of the South 336th Street or South 344th

Street alternatives. Construction of the OMF itself is expected to be the same for all build alternatives, with the exception of the Full Excavation and Hybrid subsurface construction design options for the Midway Landfill Alternative, which could take approximately 6 to 10 months longer, respectively.

The extensive site preparation work required for the Midway Landfill Alternative subsurface construction design options would expose the surrounding community to construction impacts over a longer period of time. In particular, it would result in much higher volumes of construction traffic for exporting and importing the vast quantities of fill material. The Hybrid and Full Excavation subsurface construction design options are estimated to require up to approximately 570 daily truck trips over their 4.5- to 5.5-year site preparation phase, as compared to 80 or fewer daily truck trips for the other alternatives. It is important to note, however, that these estimates represent a worst-case scenario during the site preparation phase and not a daily average of truck trips over the entire construction period. While I-5 and the arterials surrounding the Midway Landfill Alternative should accommodate the additional truck traffic, the substantial number of daily truck trips necessary for

Figure ES-9: Illustrated Metrics: Construction Duration and Traffic



Some numbers have been rounded from the Draft EIS findings for simplicity.



those subsurface construction design options could exacerbate existing congestion in some locations and be perceived as an adverse impact.

Should OMF South be located at the Midway Landfill Alternative site, it would need to connect to the FWLE mainline tracks between the landfill and I-5. Construction of FWLE is underway and scheduled to be complete for the start of service in 2024 and will not preclude selection of the OMF South site at the Midway Landfill. If OMF South were to connect to the FWLE mainline tracks after they are operational, it could result in shutdowns of revenue service for periods of time during construction. In addition, connecting the OMF South lead tracks to the FWLE mainline could result in a potential need to pay back a portion of any federal dollars already expended for FWLE as a result of the retrofitting of track and associated infrastructure that were built with federal funds as part of the FWLE project.

### **OMF South Opening Schedule**

Compared to the South 336th Street and South 344th Street alternatives, the Midway Landfill Alternative would result in a later year of opening for OMF South. The additional LRV maintenance and

storage capacity provided by OMF South needs to be available with sufficient time to accept delivery of and commission new LRVs for expansion projects like TDLE and West Seattle Link Extension (WSLE) and to store existing LRVs. In order to meet projected ridership demand for TDLE and WSLE when service begins, 6-minute peak headways for TDLE and 12-minute peak headways for WSLE are planned. To operate the expanded system with these headways, 92 new LRVs are needed.

Table ES-2 shows the current planned opening dates for the three OMF South build alternatives. The planned opening date for both the South 336th Street and South 344th Street alternative is 2029. Specific to the Midway Landfill Alternative subsurface construction design options, planned opening dates are 2031 for the Platform subsurface construction design option, 2034 for the Hybrid subsurface construction design option, and 2032 for the Full Excavation subsurface construction design option. Included in these opening estimates is an 18-month testing and commissioning period for the OMF.

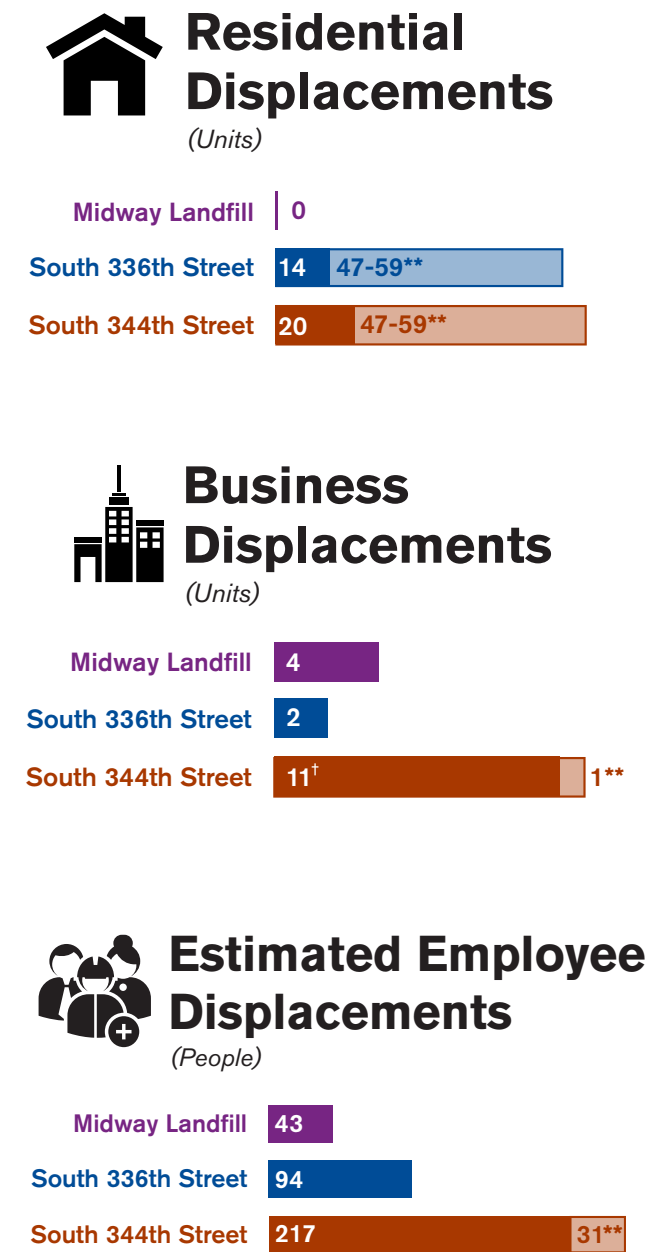
Following the OMF South opening, the facility would begin receiving new LRVs. Completing delivery,

**Table ES-2: OMF South Construction Durations and Planned Opening Dates**

Key Characteristics and Impacts	Midway Landfill Alternative	South 336th Street Alternative	South 344th Street Alternative
Construction Duration	Platform: 6 years, 2 months Hybrid: 8 years, 8 months Full excavation: 7 years, 1 month	3 years, 4 months	3 years, 5 months
OMF South Opening Date	Platform: 2031 Hybrid: 2034 Full excavation: 2032	2029	2029

*OMF South opening date includes 18 months for testing and commissioning.*

Figure ES-10: Illustrated Metrics: Acquisitions, Land Use, and Economics



Key Site Mainline

Some numbers have been rounded from the Draft EIS findings for simplicity.

\*\*The mainline in Federal Way is planned to be constructed as part of TDLE and therefore would be built regardless of which OMF South alternative is selected.

†Includes GarageTown, comprised of approximately 60 owners.

testing and commissioning for all 92 LRVs is anticipated to take about 3 years after the planned OMF South opening date. Minimum operating segments and opening year service levels for TDLE and WSLE may not require all 92 vehicles. The TDLE and WSLE light rail extensions would be ready for revenue service after vehicle delivery, testing and commissioning. Project schedules will be refined as project development advances and are not final until projects are baselined in final design. Projects and schedules may change due to program realignment decision making by the Sound Transit Board.

Acquisitions, Land Use, and Economics

Due to their locations within developed urban areas, the South 336th Street and South 344th Street alternatives would cause the greatest number of displacements, particularly for residents and employees, as compared to the Midway Landfill Alternative, which is primarily undeveloped. The majority of the residences displaced by the South 336th Street and South 344th Street alternatives are due to the mainline tracks through Belmor, which would displace between 47 and 59 mobile homes, depending on the alignment design option. The Midway Landfill Alternative would not displace any residences, and none of the alternatives are anticipated to disproportionately impact environmental justice populations. It is important to note, however, that the residential displacements due to mainline construction in Belmor would occur as a result of planned construction of TDLE and therefore would occur regardless of which OMF South alternative is selected.

The South 336th Street Alternative would displace the Christian Faith Center, which includes a church, school, and daycare. The Christian Faith Center would be uniquely difficult to relocate because it consists of over 200,000 square feet of building space and numerous parking lots on an approximately 25-acre



campus. The South 344th Street Alternative would displace the greatest number of businesses and employees, including the Ellenos Yogurt manufacturing facility and GarageTown, which includes approximately 60 owners. These properties may also be difficult to relocate due to their lot size and specialized facility requirements. The South 344th Street Alternative would displace three religious facilities: Cross Life Community Church and Family Life Community Church (located in the same building) and Voice of Hope Church. However, there are comparable properties available in the study area to relocate these churches.

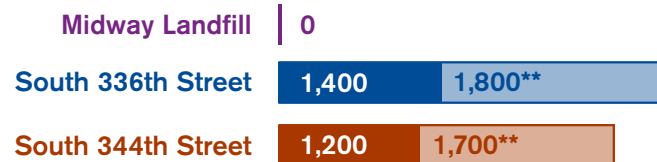
Sound Transit would provide compensation, relocation expenses, and assistance to all property owners, business owners, residents, and tenants who would be displaced. Even so, individuals whose residence, business, or place of employment are being relocated may perceive these impacts to be substantial. The property acquisition and relocation process can be lengthy because it takes time to identify suitable properties, negotiate fair compensation, and relocate people and facilities, particularly for properties such as the Christian Faith Center, Ellenos Yogurt, and GarageTown.

### Ecosystem Resources

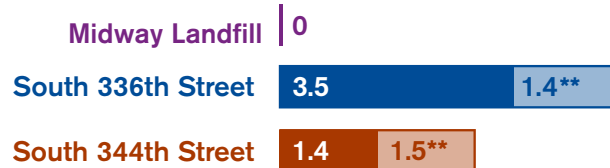
The Midway Landfill Alternative is located in an area with few natural resources and therefore would have minimal impacts to ecosystem resources. Both the South 336th Street and South 344th Street alternatives are situated near tributaries of Hylebos Creek, including associated forested riparian habitat and wetlands that provide a range of ecological functions. The South 336th Street Alternative would have the greatest impacts to ecological resources, including streams, wetlands, and mature native forest, in part due to permanent impacts to a stormwater detention facility and wetland through which the West Fork Hylebos Creek Tributary flows. This combined

**Figure ES-11:** Illustrated Metrics: Ecosystem Resources

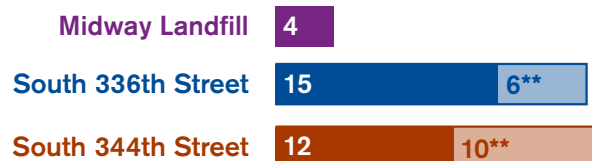
### Stream Impacts (Linear Feet)



### Wetland Impacts (Acres)



### Forest Impacts (Acres)



#### Key Site Mainline

Some numbers have been rounded from the Draft EIS findings for simplicity.

\*\*The mainline in Federal Way is planned to be constructed as part of TDLE and therefore would be built regardless of which OMF South alternative is selected.

stormwater pond/wetland area is surrounded by mature native forest, and impacts to this vegetation could result in the degradation or elimination of habitat areas that provide resting cover, hiding cover, or travel corridors for wildlife.

The South 336th Street and South 344th Street alternatives both propose relocating portions of East Fork Hylebos Creek Tributary, which would cause permanent impacts to adjacent wetland and forested riparian habitat. Some of the riparian habitat along the East Fork Hylebos Creek Tributary is also considered mature forested habitat. The mainline tracks for the South 336th Street and South 344th Street alternatives would impact the same area of wetland, but the South 344th Street Alternative mainline tracks would impact more wetland buffer areas near the south end of the site due to the greater length of the tail tracks. Impacts to the East Fork Hylebos Creek Tributary would occur from the construction of the TDLE and therefore would be built regardless of which OMF South alternative is selected.

While fish are not currently known or expected to be present in the East or West Fork Hylebos Creek tributaries, these streams are designated as essential fish habitat for Pacific salmon because of their potential to support fish use. As a result, the streams, wetlands, and habitat within the South 336th Street and South 344th Street alternative study areas are of great interest to natural resource agencies, tribes, and other stakeholders. To mitigate for impacts to ecosystem resources, Sound Transit would develop a compensatory mitigation plan in collaboration with federal, state, local, and tribal biologists.

The project size, degree of impacts, complexity of identifying mitigation opportunities, and mitigation requirements may require the use of several sites and mitigation approaches. This could pose a risk to

both the schedule and budget of the South 336th Street and South 344th Street alternatives given this complexity and the extent of negotiations likely needed over mitigation measures with federal, state, local, and tribal agencies during the permitting phase.

### ***Hazardous Materials***

The Midway Landfill Alternative poses unique risks that are not of concern for the South 336th Street and South 344th Street alternatives. As a Superfund site, the Midway Landfill is covered by a protective cap and is under active monitoring and reporting to ensure that the cleanup measures continue to function as planned. These protective and monitoring systems would need to be replaced or upgraded to varying degrees depending on the subsurface construction design option chosen. Further, the landfill waste is decomposing and has been settling at different rates, which creates engineering challenges as well as concerns for safety during construction and long-term operation and maintenance. The continuation of the landfill monitoring systems and mitigation for potential risks posed by settlement and methane gas over the lifespan of the facility would add to additional operating complexities and costs.

In addition to ground settlement and human health risks, the Midway Landfill Alternative would require Ecology and/or EPA approval to amend the existing Ecology Cleanup Action Plan and EPA Record of Decision to confirm that the project would maintain the environmental cleanup and protection commitments currently in place for the landfill. This approval process could be lengthy and poses risk to the project schedule and cost. Further, acquisition of and construction within the Midway Landfill would cause Sound Transit to incur potential liability under state law (the Model Toxics Control Act) and federal law (the Comprehensive Environmental Response, Compensation and Liability Act).



## Significant Unavoidable Adverse Impacts

With the avoidance, minimization, and potential mitigation measures described in Chapter 3, Affected Environment, Environmental Impacts, and Potential Mitigation Measures, significant adverse impacts could be avoided for most elements of the environment.

The South 336th Street and South 344th Street alternatives would have varying degrees of impacts to mature forest and other native vegetation, which would result in a loss of habitat. Further, the addition of the elevated mainline tracks through Belmor would cause visual impacts by removing residences and vegetation. The loss of mature forested habitat, including adjacent to the I-5 corridor, would result in longer-term ecological and visual impacts that may not be immediately mitigable by replacement vegetation or landscaping. The impacts of the mainline through Belmor would occur as a result of planned TDLE construction and therefore would occur regardless of which OMF South alternative is selected.

## Public and Agency Involvement

### **Public Outreach**

Sound Transit began public outreach efforts for OMF South in 2018. To ensure widely available, accessible project information, Sound Transit uses a variety of communications tools and methods, including a project website, in-person public and online open houses, fact sheets and information materials, press releases, media advertisements, and email updates. Sound Transit disseminated project updates and information throughout each outreach period as described below:

**Early Scoping** (April 2, 2018, through May 3, 2018): Outreach during early scoping focused on providing information about the TDLE and OMF South projects (at that point, the two projects were being considered together) and gathering public feedback to inform

the project scope, schedule, and budget. Sound Transit asked members of the public to comment on the purpose and need of the project and potential benefits, alternatives, and impacts of proposed route alignments and stations.

**September 2018 Outreach Activities** (September 1, 2018, through September 21, 2018): Between early scoping and scoping outreach, Sound Transit focused on inclusive outreach with community groups, organizations, residents, businesses, and underrepresented populations along the TDLE corridor. Although OMF South was not the focus of this outreach and no feedback was sought for the project, staff was available to answer questions and provide updates about the project. A display was presented at the three open houses and the online open house and provided general updates on the siting process since early scoping.

**SEPA Scoping Activities** (February 19, 2019, through April 1, 2019): Unlike early scoping, which addressed both the OMF South and TDLE projects, the SEPA Environmental Impact Statement scoping process described here solely addressed the OMF South project. During scoping, Sound Transit asked for comments on the proposed range of alternatives, the purpose and need for the project, the environmental effects and benefits to be analyzed, the probable significant adverse impacts, mitigation measures, and licenses or other approvals that may be required.

**Public Outreach during Draft Environmental Impact Statement Development** (November 13, 2019, through December 6, 2019): Sound Transit held a series of drop-in sessions to provide the public opportunities to learn more about both TDLE and OMF South. There was also an online open house available from November 13 through December 6, 2019. More than 250 people attended the drop-in sessions, and over 1,600 users participated in the online open house.

### **Agency and Tribal Coordination**

**Elected Leadership Group (ELG):** The Elected Leadership Group serves as an advisory group for both TDLE and OMF South and is composed of elected officials representing the Puyallup Tribe of the Puyallup Reservation (Puyallup Tribe of Indians); the mayors of the cities of Federal Way, Milton, Fife, and Tacoma; Sound Transit Board members; and WSDOT. Once Sound Transit determined that OMF South would need to be located in South King County to meet operational criteria, limiting the geographic scope north of Pierce County, the City of Kent mayor was invited to attend all Elected Leadership Group meetings where OMF South updates were discussed.

**Interagency Group (IAG):** Sound Transit is working closely to coordinate with agencies and governments as this project moves forward at a technical level, ensuring consistency with other city, agency, and tribal plans and projects. The OMF South Interagency Group is made up of representatives from the Puyallup Tribe of Indians; Muckleshoot Indian Tribe, cities of Kent, Federal Way, and Seattle; Seattle Public Utilities; Bonneville Power Administration; Federal Highway Administration; WSDOT; EPA; Ecology; and King County Metro Transit.

**Tribal Coordination:** Sound Transit has coordinated with and provided briefings for staff of the Puyallup Tribe of Indians and the Muckleshoot Indian Tribe regarding ecosystems, cultural resources, and other issues related to the OMF South project. As noted, the Puyallup Tribe of Indians is on the project ELG, and both tribes sit on the IAG.

### **Local Jurisdiction Input during Alternatives**

**Development:** Sound Transit has met with the cities of Kent and Federal Way on an ongoing basis to coordinate the development of alternatives to gain a better understanding of local land use, permitting, and other perspectives.

**Regulatory Agency Coordination:** Sound Transit coordinated with the Washington Department of Archaeology and Historic Preservation over its recommendations for eligibility for historic properties and archaeological resources. On September 2, 2020, Sound Transit also participated in a pre-application meeting with the U.S. Army Corps of Engineers, Ecology, Washington Department of Fish and Wildlife, and Muckleshoot Tribe to discuss the project alternatives, potential impacts to wetlands and streams, and permitting requirements under Section 404 of the Clean Water Act. The Puyallup Tribe of Indians was also invited but unable to attend.

**Additional Coordination:** During the development of the Draft Environmental Impact Statement, Sound Transit hosted two landfill settlement workshops: August 13 and October 3, 2019. Attendees included staff from Seattle Public Utilities, WSDOT, city of Kent, city of Federal Way, and consultant teams. The workshops were centered on analyzing and brainstorming geotechnical solutions for a potential OMF South on the Midway Landfill.

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

The following are known areas of controversy and issues to be resolved. Others may be identified as a result of comments on the Draft Environmental Impact Statement or as the project advances.

The COVID-19 pandemic is reducing the tax revenue Sound Transit relies on to expand the regional transit system. Through a process called realignment, the Board of Directors is working to determine which plans and timelines for Sound Transit 3 projects will need to change. The Board decisions on realignment, influenced by COVID-19 and increased project cost estimates, may have an impact on the future project schedule.

**Midway Landfill Alternative**

Sound Transit has identified four major risks that are unique to the site's prior use as a disposal facility and classification as a Superfund site: (1) ground settlement, (2) human health and safety, (3) legal, and (4) regulatory coordination. Ground settlement is addressed in the Conceptual Landfill Site Reuse plan (Appendix D3). Human health and safety risks are addressed in the Midway Landfill Human Health Risk Assessment technical memo (Appendix D4). Legal risk includes incurring potential liability under state law (the Model Toxics Control Act) and federal law (the Comprehensive Environmental Response, Compensation, and Liability Act) through purchase or lease of any portion of the landfill or through construction within the landfill. Regulatory risks include impacts to the project schedule due to the additional approvals needed before construction.

**South 336th Street and South 344th Street Alternatives**

Federal Way has expressed concern over the closure of 20th Avenue S and the effect that it may have on the response time of emergency service providers. This concern is discussed in more detail in Section 3.14, Public Services, and, with regard to the effect on traffic circulation, Section 3.2, Transportation. Sound Transit will continue to work with the Federal Way and South King Fire and Rescue to address those concerns.

The removal of street segments within the proposed South 336th Street and South 344th Street alternatives to create a contiguous facility may not comply with Federal Way development regulations concerning the size of blocks within the street network. Federal Way Revised Code Section 19.135.251, Block Perimeters, requires block perimeters to be no greater than 2,640 feet. However, this requirement and other general criteria may be modified if street connections cannot be made due to

topographical constraints, environmentally sensitive areas, or adjacent development not being conducive. In addition, the Federal Way public works director may modify, defer, or waive Chapter 19 Zoning and Development Code requirements for various reasons, such as unusual physical conditions, the requirement not being harmonious with existing street improvements, or the project being part of the city's adopted 6-year transportation improvement program.

As mentioned above, both the South 336th Street and South 344th Street alternatives would impact ecosystem resources, specifically wetlands and streams. This could pose a risk to both the schedule and budget of the South 336th Street and South 344th Street alternatives, given the potential complexity and extent of negotiations related to the environmental permitting process and development of a comprehensive mitigation approach acceptable to federal, state, local, and tribal agencies during the permitting phase.

For example, should either the South 336th Street or South 344th Street alternative be selected, the U.S. Army Corps of Engineers will require an Individual Permit under Section 404 of the Clean Water Act because the anticipated impacts to wetlands and streams exceed the threshold for the more commonly issued Nationwide Permit. As part of this process, Sound Transit would need to prepare an alternative analysis for review and approval by the Corps.



**Table ES-3:** Project Schedule

Preliminary Design and Environmental Review	Time Period <sup>1</sup>
Early Scoping and Public Outreach	Spring to Fall 2018
Environmental Scoping	Spring 2019
Sound Transit Board Identifies Draft EIS Alternatives	May 2019
Draft EIS Published	March 2021
Draft EIS Comment Period	45 days
Sound Transit Board Identifies Preferred Alternative for Final EIS	Summer to Fall 2021
Final EIS Published	Mid 2022
Sound Transit Board Selects Project to Build	Mid to late 2022
NEPA Environmental Review (if necessary)	Late 2022 to early 2023
<b>Final Design, Construction, and Operation Targets</b>	
Final Design and Permitting	Mid to late 2022 through 2023
Construction	2024 to 2029 or later, depending on alternative selected
OMF South Opens	2029 to 2034, depending on the alternative selected

1. Sound Transit Board decisions on realignment, influenced by COVID-19 and increased project cost estimates, may have an impact on the future project schedule.

## Next Steps

The following next steps are anticipated after the publication of the Draft Environmental Impact Statement:

### **Draft Environmental Impact Statement Review and Comment:**

Sound Transit is circulating the Draft Environmental Impact Statement to affected local jurisdictions, state and federal agencies, tribes, community organizations, other interest groups, and interested individuals. The document is available online and in other formats by request. An extended 45-day formal public comment period from the date of issuance of the document is being provided in accordance with SEPA regulations.

**Board Identifies Preferred Alternative:** The Board is expected to identify a preferred alternative after the Draft Environmental Impact Statement is issued and

public, agency, and tribal comments are received and considered.

**Final Environmental Impact Statement:** Sound Transit will prepare a Final Environmental Impact Statement that analyzes the Preferred Alternative along with the other alternatives evaluated in the Draft Environmental Impact Statement. The Final Environmental Impact Statement will include and respond to substantive comments received on the Draft Environmental Impact Statement

**Project Decision and Approval:** After the Final Environmental Impact Statement is published, the Board will select the project alternative to be built.

Table ES-3 above shows the anticipated schedule for the environmental review, design, construction, and opening of OMF South.

# ***CONTACT US***

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