

**Tacoma Dome Link Extension** 

## **Alternatives Guide**



## Tacoma Dome Link Extension (TDLE)



Included in Sound Transit 3 (ST3) plan.



Approximately 10 miles of light rail service on mostly elevated tracks that will extend across the ancestral and reservation lands of the Puyallup Tribe of Indians and will serve four new stations located in South Federal Way, Fife, and two in Tacoma (Portland Avenue and near the Tacoma Dome).



Connections to other regional transit services like Sounder, T Line, ST Express, King County Metro, Pierce Transit, and Amtrak.



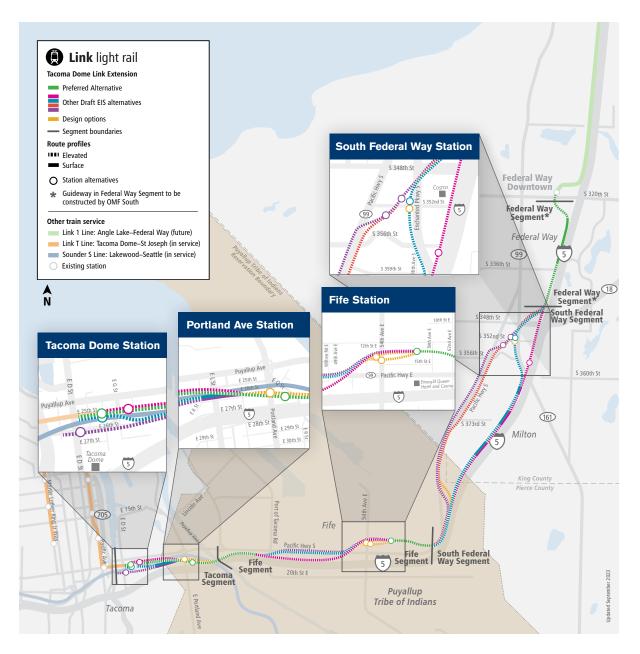
Elevated guideway (rail alignment) at Northgate Station. Sound Transit 2022.

## **INTRODUCTION & PURPOSE**

This guide summarizes key trade-offs of the alternatives evaluated in the TDLE Draft Environmental Impact Statement (EIS). After consideration of the Draft EIS analysis, comments received, and other factors, the Sound Transit Board (the Board) will confirm or modify the Preferred Alternative. The Board will identify a Preferred Alternative in areas where one is not currently identified. The Preferred Alternative and the other Draft EIS alternatives will be studied in the Final EIS. The final decision on the project to be built will be made after publication of the Final EIS.

The project is made up of four segments: Federal Way (FW), South Federal Way (SF), Fife, and Tacoma. Tables summarize the performance of each alternative compared to the others on key impacts and benefits. Higher performing alternatives generally have less potential impacts and more benefits. Lower performing alternatives generally have more potential impacts and less benefits.

## **DRAFT EIS ALTERNATIVES OVERVIEW**



### What is included in an alternative?

Alternatives include the light rail route for the guideway (rail alignment) and associated features such as stations, emergency access, power substations, and stormwater facilities.

### What is a Design Option?

Design options are different configurations of the light rail route along a portion of the alignment and may include different configurations of a station.

### What is a Station Option?

Station options locate components, such as the platform, parking facilities, or bus bays in a different configuration or location.

## **PROJECT TIMELINE**



#### WE ARE HERE



# **PLANNING** 2018-2027



# **DESIGN**2027-2029 **CONSTRUCTION**2029-2035

FORECASTED IN-SERVICE

2035





2018-2019 -

### **Environmental review**

2019-2027 \_\_\_\_\_



# Draft Environmental Impact Statement (2024)

ST Board confirms/modifies preferred alternative

Final Environmental Impact Statement

ST Board selects project to be built

Federal Record of Decision

**PUBLIC INVOLVEMENT** 

Final route design

Final station designs

Construction contract procurement

Permitting

Begin property acquisition

PUBLIC INVOLVEMENT

Groundbreaking

Periodic construction updates

Safety education

Testing and preoperations

**PUBLIC INVOLVEMENT** 



## **MEANINGFUL PUBLIC ENGAGEMENT**

As part of Sound Transit's commitment to diversity, equity and inclusion, TDLE is implementing a Racial Equity Tool that addresses potential negative impacts to communities of color, and the historically excluded, by understanding the importance of historic past harms and current demographic data.

One of the goals of this tool is meaningful public engagement. Sound Transit is taking actions to reach communities along the corridor including, but not limited to:

- Puyallup Tribe of Indians and other affected Tribal Nations
- Historically under-resourced groups
- Nearby multi-family housing communities
- Religious institutions and faith-based communities
- Local businesses and community-based organizations

## DRAFT EIS ENGAGEMENT AND COMMENT PERIOD

Sound Transit began public outreach efforts for TDLE in 2018. Outreach milestones to date have included early scoping, scoping, and several other engagement periods with online and in-person outreach activities as well as communications through the project website, fact sheets, and email updates. Community input received was used to inform the continuing development of alternatives in the Draft EIS.

The Draft EIS comment period is December 13, 2024 to February 10, 2025. Following the comment period, the Sound Transit Board will confirm or modify the preferred alternative. The Preferred Alternative and other Draft EIS alternatives will be studied in the Final EIS.

The Draft EIS, along with information about the Draft EIS comment period and ways to submit public comments, is available on the project's website: <a href="mailto:soundtransit.org/tdlink">soundtransit.org/tdlink</a>

## **COMPARATIVE COST**

	South Federal Way Segment	Fife Segment	Tacoma Segment
COST RANGE FOR ALL ALTERNATIVES INCLUDES LOWEST AND HIGHEST COMPARATIVE COST NUMBER IN EACH SEGMENT	\$1.56 billion -	\$0.97 billion -	\$1.11 billion -
	\$1.75 billion	\$1.15 billion	\$1.51 billion

### Notes:

- Comparative costs are subject to change.
- Comparative costs are intended to serve as a basis for comparing various design alternatives and options; they are not intended to represent the project budget. At this early phase of project development (10 percent design), the representation of cost in this document is for comparative purposes only. Sound Transit has developed the high-level conceptual comparative costs for all alternatives under evaluation in the Draft EIS.
- A project baseline budget is typically established at approximately 60 percent design (depending on the delivery method) prior to the start of construction. A more detailed estimate, applying a "bottoms up" cost methodology will be developed in the future.
- Comparative costs include one-time capital costs and construction costs (including parking), anticipated/estimated mitigation, right-of-way/property acquisition costs, engineering costs, equipment costs, and contingency, but not the cost of additional light rail vehicles needed to operate the project.
- In the South Federal Way Segment and the Fife Segment, provision of a new parking garage at each station represents the higher end of the comparative cost range whereas provision of new surface parking at each station represents the lower end of the range.

## PERFORMANCE EVALUATION DEFINITIONS

The purpose of the Performance Evaluation rating is to identify key trade-offs between the alternatives.

PERFORMANCE RATING KEY

LOWER PERFORMING ALTERNATIVES/ STATIONS HAVE GREATER IMPACTS







HIGHER PERFORMING ALTERNATIVES/ STATIONS HAVE FEWER IMPACTS

### In Alternative Comparison tables:

- Residential and business displacements, historic and cultural resources, and ecosystems identify the amount of impacts to these resources.
- Cultural resources include but are not limited to historic buildings, artifacts, archaeological sites, and sacred sites.
- Transportation impacts include looking at the local roadway, nonmotorized, and transit operations in comparison to changes that could occur with the respective alternatives.
- Visual impacts consider proximity to sensitive viewers, such as residences and the context of the surrounding landscape.
- Construction impacts consider where notable closures and access restrictions may cause disruptions.

### In Station Comparison tables:

- Transit access, transit connections, and nonmotorized access consider the existing transit services and infrastructure (such as sidewalks) around each location.
- Transit oriented development considers the land use, access, and barriers that may impact or benefit potential development.
- Construction impacts consider where station locations may have notable closures



SEGMENT

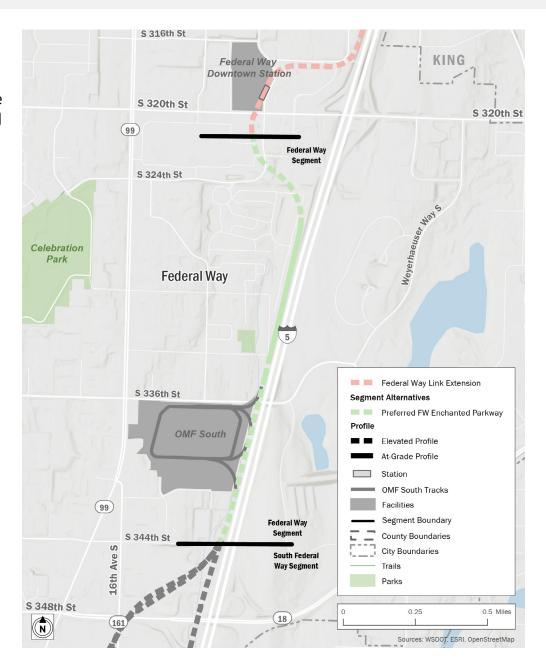
# **FEDERAL WAY**

#### FEDERAL WAY SEGMENT

## **Segment Map**

The Federal Way (FW) Segment extends from the Federal Way Downtown Station to approximately S 344th Street.

The guideway (rail alignment) in this segment is planned to be constructed by the Operations and Maintenance Facility (OMF) South project per the June 27, 2024 Board action selecting the 336th Street Alternative (Preferred Alternative) as the OMF South project to be built. The facility will meet ST's need to store, maintain, and operate an expanded fleet of light rail vehicles to support the expansion of the Link light rail system as part of ST3. Therefore, the Federal Way Segment is not discussed for the remainder of the Alternatives Guide.





SEGMENT

# **SOUTH FEDERAL WAY**

## **Alternative Comparison**

The South Federal Way Segment extends from S 344th Street to the border of Fife and Unincorporated Pierce County. There are four alternatives:

### **SF Enchanted Parkway Alternative**

includes SF Enchanted Parkway Station or 352nd Span Station Option

#### SF I-5 Alternative

only paired with SF I-5 Station

#### SF 99-West Alternative

includes SF 99-Enchanted Station or SF 99-352nd Station

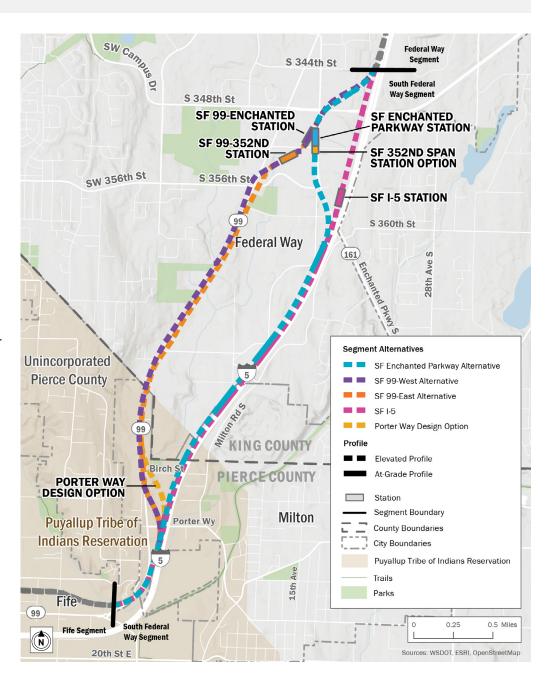
### SF 99-East Alternative

includes SF 99-Enchanted Station or SF 99-352nd Station

### **Porter Way Design Option**

The Porter Way Design Option could be paired with either the SF 99-West or SF 99-East alternatives.

This design option would begin curving back to I-5 north of Birch Street and reaches the west side of I-5 north of Porter Way.



## **Ridership and Accessibility**

The station in South Federal Way would include up to 500 parking spaces in either a garage or surface parking configuration. Parking could be delayed until 2038, depending on funding, approximately three years after light rail operations begin.

Ridership, the number of people boarding at the station in South Federal Way, would be the same for all alternatives and is summarized in the table to the right.

PM PEAK (3.5 HRS) RIDERSHIP		AVERAG	E WEEKDAY RIDE	RSHIP	
NORTHBOUND	SOUTHBOUND	TOTAL	NORTHBOUND	SOUTHBOUND	TOTAL
50	120	170	1,400	400	1,800



Angle Lake Station. Sound Transit 2024.

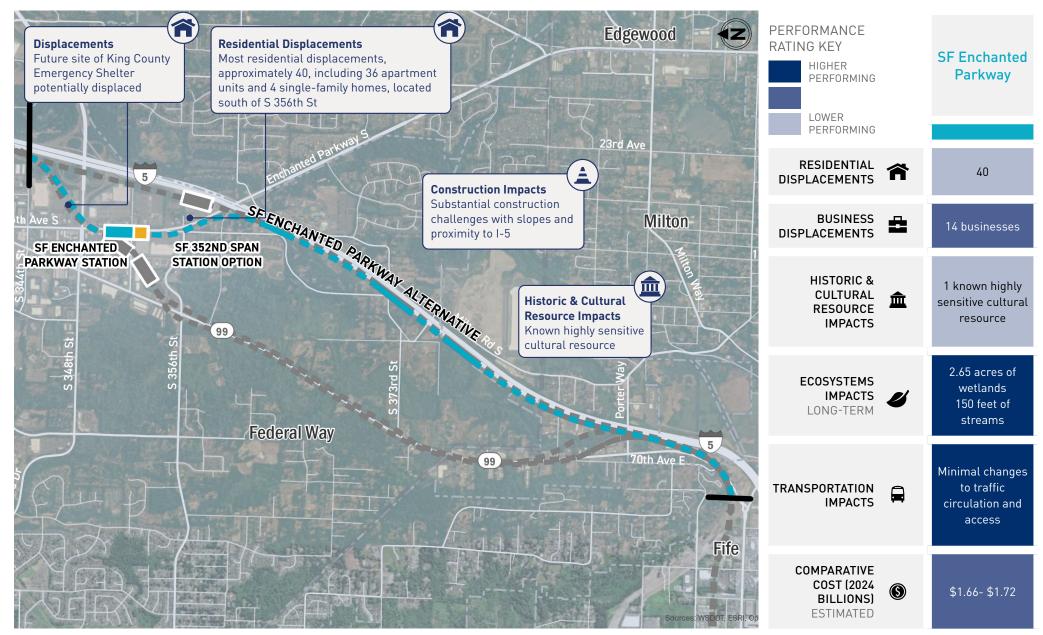
## **Alternative Comparison**

PERFORMANCE RATING KEY  LOWER PERFORMING  HIGHER PERFORMING	SF Enchanted Parkway	SF I-5	SF 99-West (Porter Way Design Option)	SF 99-East (Porter Way Design Option)
RESIDENTIAL DISPLACEMENTS	40	3	17	2
BUSINESS DISPLACEMENTS	14 businesses	7 businesses	25 businesses (23 businesses)	25 businesses (24 businesses)
HISTORIC & CULTURAL RESOURCE IMPACTS	1 known highly sensitive cultural resource	1 known highly sensitive cultural resource	4 historic resources	2 historic resources
ECOSYSTEMS IMPACTS LONG-TERM	2.65 acres of wetlands 150 feet of streams	3.76 acres of wetlands 950 feet of streams	6.31 <i>(6.68)</i> acres of wetlands 600 <i>(750)</i> feet of streams	7.33 <i>(7.75)</i> acres of wetlands 600 <i>(700)</i> feet of streams
TRANSPORTATION IMPACTS	Minimal changes to traffic circulation and access	Minimal changes to traffic circulation and access	Left-turn restrictions at Pacific Highway and 70th Ave E (Minimal access impacts)	Left-turn restrictions on Pacific Highway; no left turn at intersections with 70th Ave E and Birch St (Left-turn restrictions on Pacific Highway to Birch St)
COMPARATIVE COST (2024 BILLIONS) S ESTIMATED	\$1.66 - \$1.72	\$1.57 - \$1.60	\$1.56 - \$1.62 (\$1.57 - \$1.63)	\$1.71 - \$1.75 (\$1.70 - \$1.74)

#### Notes:

- 1. The SF Enchanted Parkway Alternative impacts would be the same with either the SF 99 Enchanted Station or the SF 352nd Span Station Option.
- 2. Information in (parentheses) is applicable to the Porter Way Design Option for the SF 99-West and SF 99-East alternatives. Where there are no additional details in parentheses, the impacts are identical.
- 3. Comparative cost estimates are for comparing design alternatives and options; they are not to serve as a method for establishing the project budget. Comparative cost estimates are based on early design and will be refined as design advances.

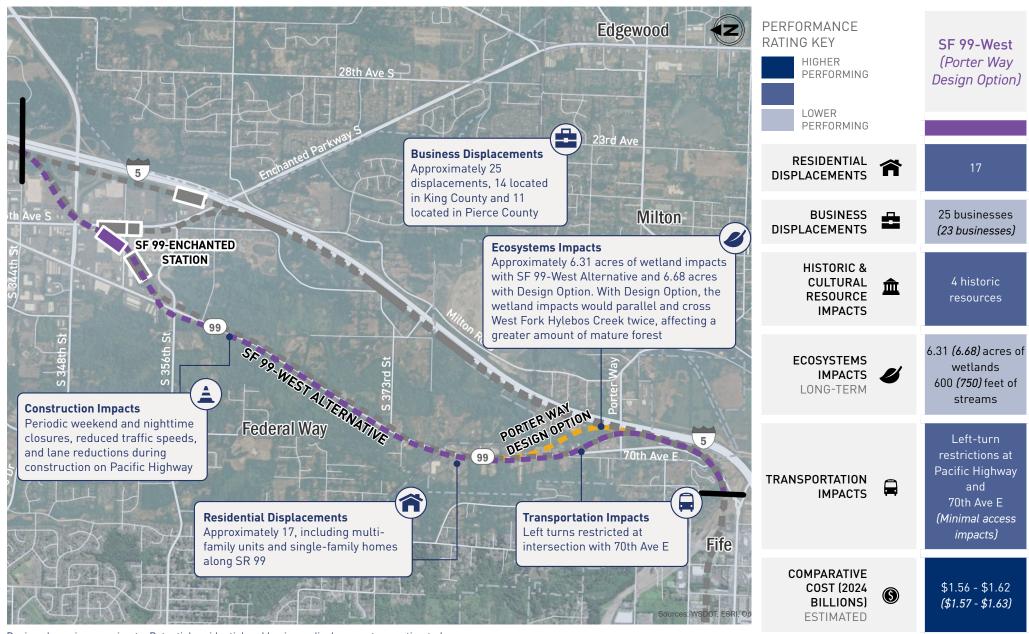
## **SF Enchanted Parkway Alternative**



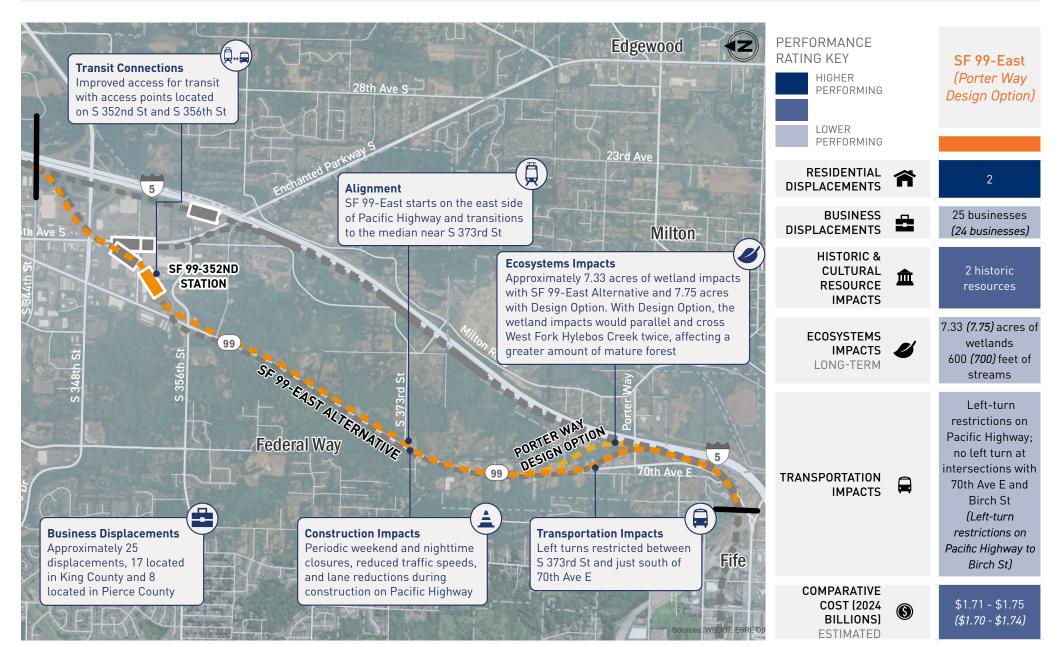
### **SF I-5 Alternative**



## SF 99-West Alternative and Porter Way Design Option

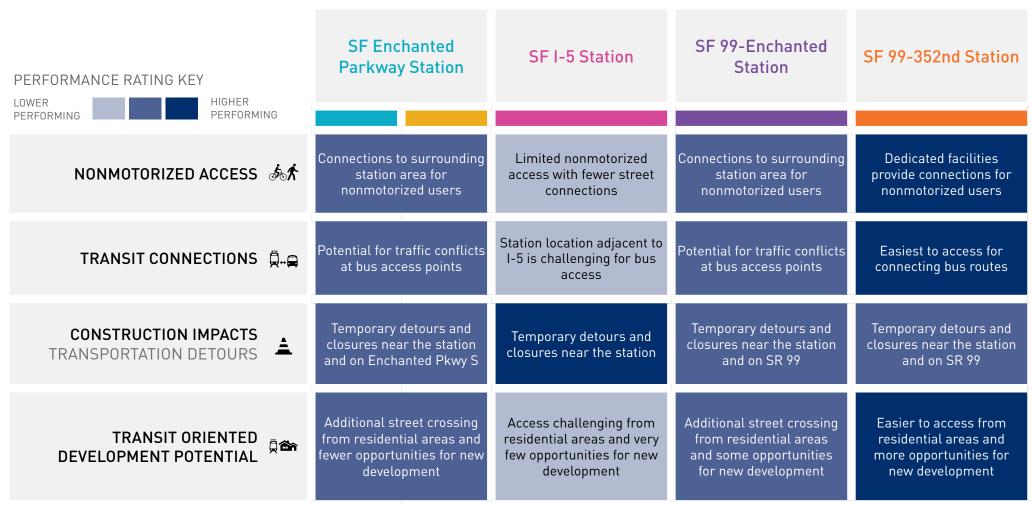


## SF 99-East Alternative and Porter Way Design Option



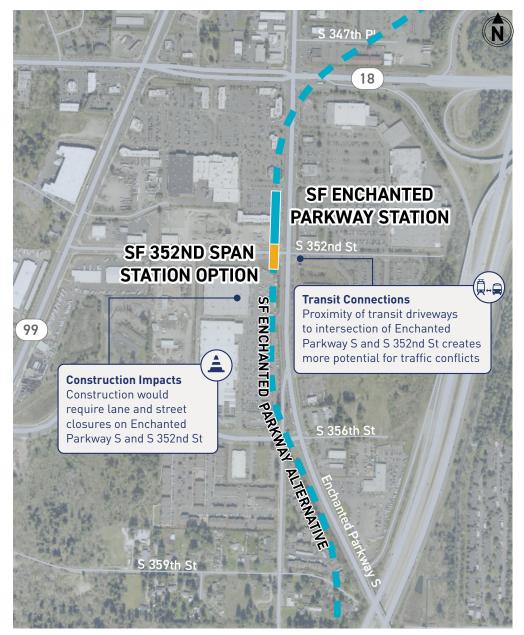
## **Station Comparison**

The SF Enchanted Parkway Alternative includes the SF Enchanted Parkway Station or the 352nd Span Station Option. The SF I-5 Alternative only pairs with the SF I-5 Station. The SF 99-West and SF 99-East alternatives could pair with either the SF 99-Enchanted or SF 99-352nd station locations.



Note: The SF Enchanted Parkway Alternative Impacts would be the same with either the SF 99 Enchanted Station or the SF 352nd Span Station Option.

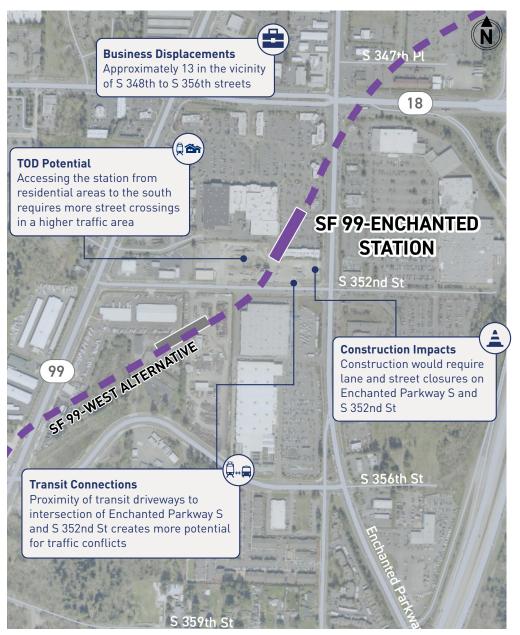
## SF Enchanted Parkway Station, SF 352nd Span Station Option, and SF I-5 Station

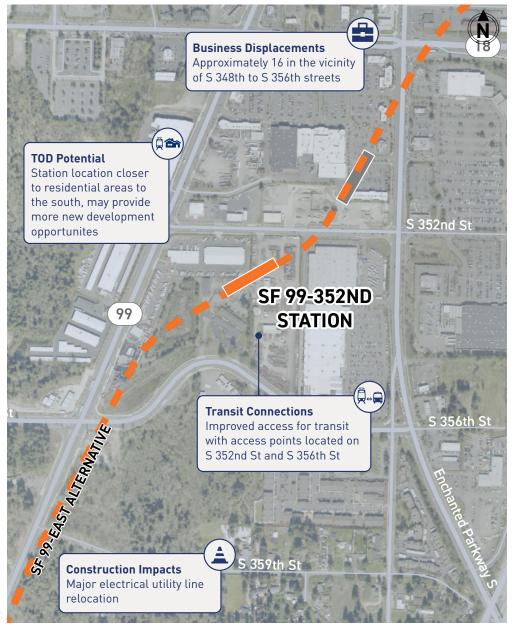




Design shown is approximate.

## SF 99-Enchanted Station and SF 99-352nd Station





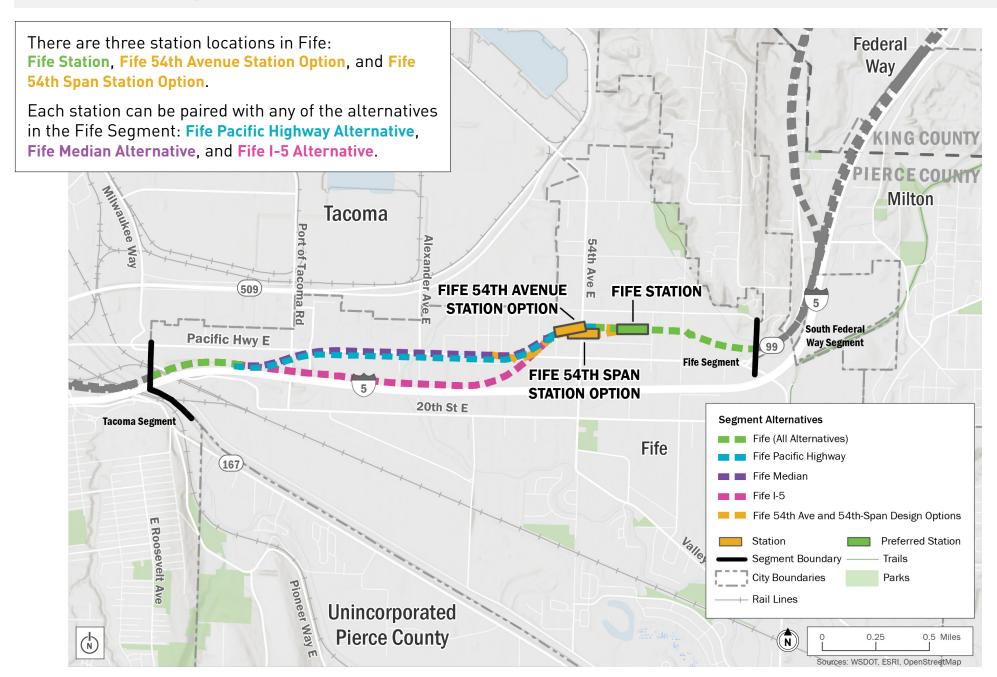
Design shown is approximate. Potential residential and business displacement are estimated.



SEGMENT

# **FIFE**

## **Alternative Comparison**



## Ridership and Accessibility

The station in Fife would include up to 500 parking spaces in either a garage or surface parking configuration. Parking is expected to be available in 2038.

Ridership at the station in Fife would be the same for all alternatives, summarized in the table to the right.

PM PEAK (3.5 HRS) RIDERSHIP		AVERAG	E WEEKDAY RIDE	RSHIP	
NORTHBOUND	SOUTHBOUND	TOTAL	NORTHBOUND SOUTHBOUND TO		
360	340	700	1,700	900	2,600



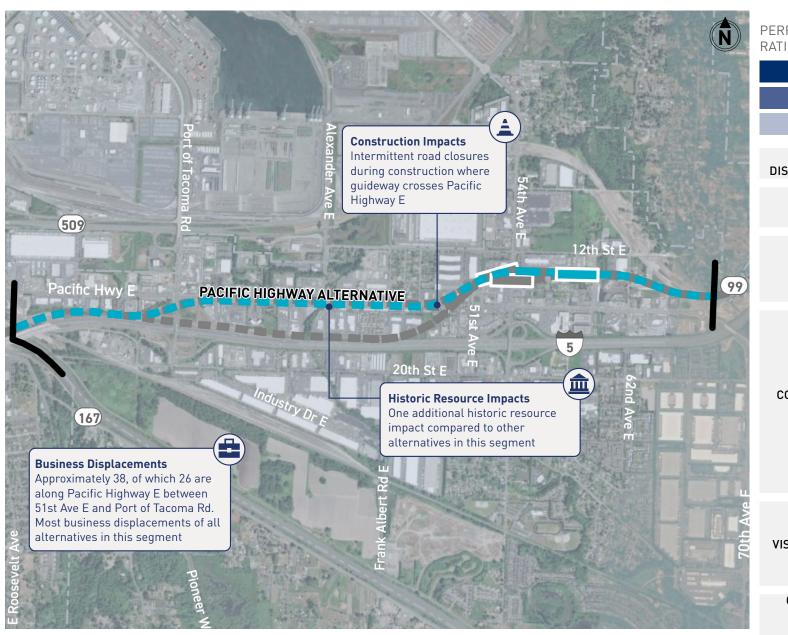
Angle Lake Station. Sound Transit 2024.

## **Alternative Comparison**

PERFORMANCE RATING KEY  LOWER PERFORMING  HIGHER PERFORMING	Fife Pacific Highway	Fife Median	Fife I-5	
BUSINESS DISPLACEMENTS PERMANENT IMPACTS	Fife Station: 38 Fife 54th Ave Station Option: 50 Fife 54th Span Station Option: 54	Fife Station: 12 Fife 54th Ave Station Option: 24 Fife 54th Span Station Option: 28	Fife Station: 17 Fife 54th Ave Station Option: 34 Fife 54th Span Station Option: 40	
HISTORIC RESOURCE IMPACTS 🏦	2 historic resources	1 historic resource	1 historic resource	
ECOSYSTEMS IMPACTS LONG-TERM	2.24 acres of wetland 450 feet of streams	2.24 acres of wetland 450 feet of streams	3.16 acres of wetland 350 feet of streams	
CONSTRUCTION IMPACTS 🛕	Temporary access restrictions, roadway/lane closures, reduced visibility, and parking impacts to businesses along Pacific Highway	Temporary access restrictions, roadway/lane closures, reduced visibility, and parking impacts to businesses along Pacific Highway	Fewer temporary access restrictions. Reduced visibility and temporary parking impacts to businesses adjacent to I-5	
VISUAL IMPACTS 💿	Close to some residences. Visual changes on Pacific Highway	Close to some residences. Visual changes on Pacific Highway	Close to more residences. Changes to sign visibility from I-5	
COMPARATIVE COST (2024 BILLIONS)  ESTIMATED	\$0.97 - \$1.05	\$1.07 - \$1.15	\$0.97 - \$1.05	

Note: Comparative cost estimates are for comparing design alternatives and options; they are not to serve as a method for establishing the project budget. Comparative cost estimates are based on early design and will be refined as design advances.

## **Pacific Highway Alternative**



**PERFORMANCE** RATING KEY

**HIGHER** 

PERFORMING

LOWER **PERFORMING** 

BUSINESS **DISPLACEMENTS** 



38 businesses

Fife Pacific

Highway

**HISTORIC RESOURCE IMPACTS** 



2 historic resources

**ECOSYSTEM** IMPACTS LONG-TERM



2.24 acres of wetland 450 feet of streams

CONSTRUCTION **IMPACTS** 



Temporary access restrictions. roadway/ lane closures, reduced visibility, and parking impacts to businesses along Pacific Highway

VISUAL IMPACTS (



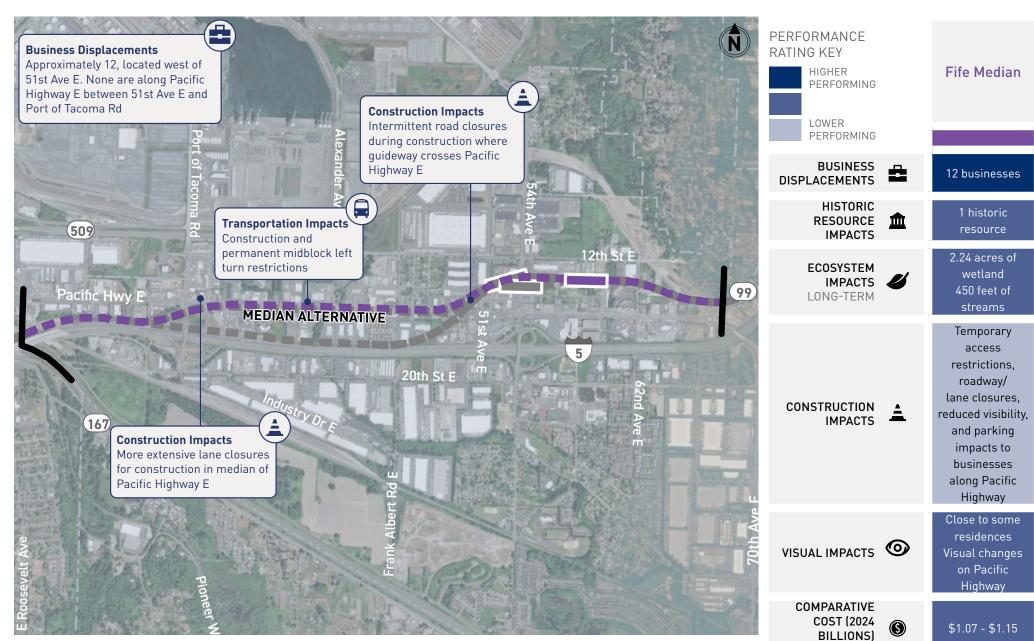
(3)

Close to some residences Visual changes on Pacific Highway

**COMPARATIVE** COST (2024 **BILLIONS**) **ESTIMATED** 

\$0.97 - \$1.05

### **Median Alternative**

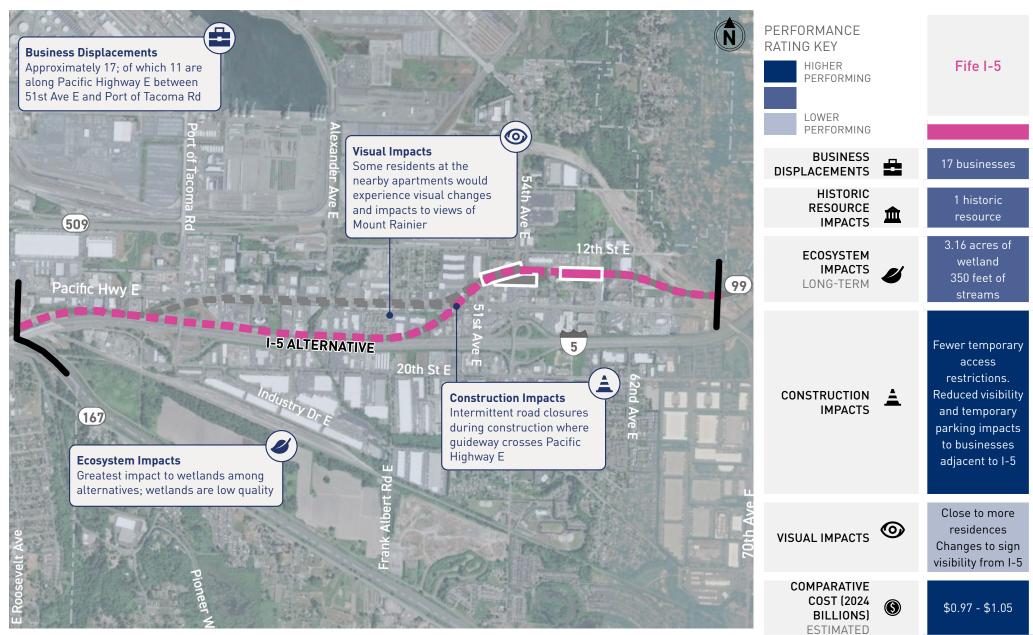


Design shown is approximate. Potential residential and business displacement are estimated.

Note: Comparative cost estimates are for comparing design alternatives and options; they are not to serve as a method for establishing the project budget. Comparative cost estimates are based on early design and will be refined as design advances.

**ESTIMATED** 

### **I-5 Alternative**

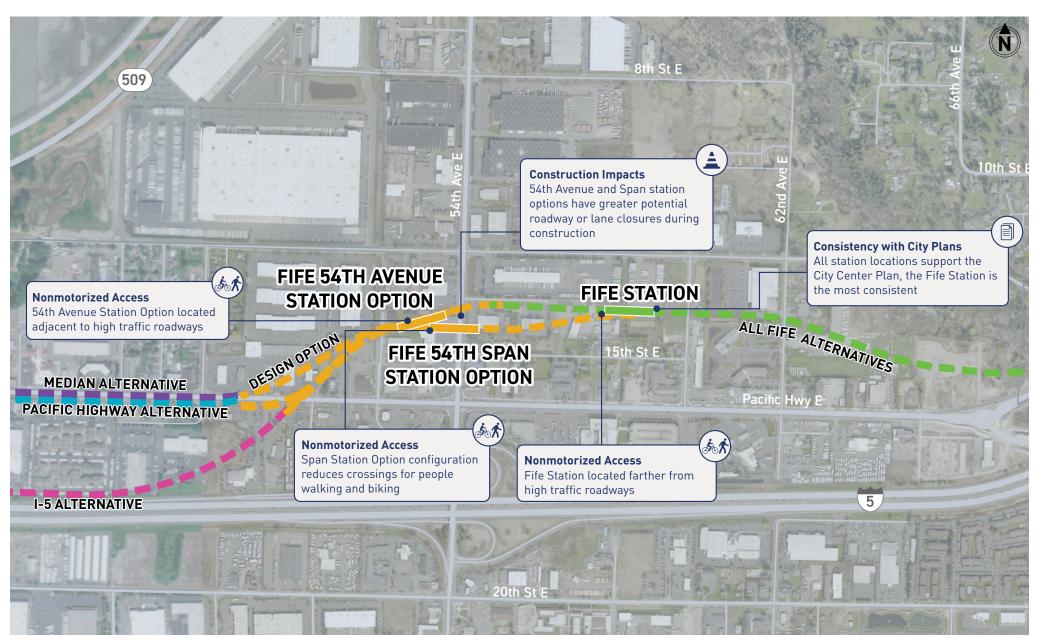


## **Station Comparison**

PERFORMANCE RATING KEY LOWER HIGHER	Fife Station	Fife 54th Avenue Station Option	Fife 54th Span Station Option	
PERFORMING PERFORMING				
NONMOTORIZED ACCESS ﴿	Pedestrian access to streets with lower traffic volumes	Access from multiple streets, but from the east would require crossing 54th Ave E	Fewer street crossings to access the station from either side of 54th Ave E	
FLOOD RISK 🇳	Potential for future flood risk at this location due to low-lying topography, sea level rise and other risk factors; within the FEMA floodplain	Potential for future flood risk at this location due to low-lying topography, sea level rise and other risk factors; outside of the FEMA floodplain	Potential for future flood risk at this location due to low-lying topography, sea level rise and other risk factors; outside of the FEMA floodplain	
CONSTRUCTION IMPACTS 🛕	Minimal temporary roadway closures of 54th Ave E requiring detours	Fewer temporary roadway closures of 54th Ave E requiring detours	More frequent and extensive temporary roadway closures of 54th Ave E requiring detours	
CONSISTENCY WITH CITY PLANS FIFE CITY CENTER PLAN	More consistent with Fife Center City Plan	Less consistent with, but supports Fife Center City Plan	Less consistent with, but supports Fife Center City Plan	
BUSINESS DISPLACEMENTS* PERMANENT IMPACTS	Fife Pacific Highway: 38 Fife Median: 12 Fife I-5: 17	Fife Pacific Highway: 50 Fife Median: 24 Fife I-5: 34	Fife Pacific Highway: 54 Fife Median: 28 Fife I-5: 40	

<sup>\*</sup>Note: Business displacements are for the entire Fife Segment, including the station and guideway.

## Fife Station, Fife 54th Avenue Station Option, and Fife 54th Avenue Span Station Option



Design shown is approximate.



SEGMENT

# **TACOMA**

## **Alternative Comparison**

The Tacoma Segment extends from the Puyallup River to the end of the line (between East D Street/I-705). There are four alternatives in the Tacoma Dome Station Area:

#### **Tacoma 25th Street-West**

includes the Portland Avenue Station and Tacoma Preferred 25th Street-West Station

#### Tacoma 25th Street-East

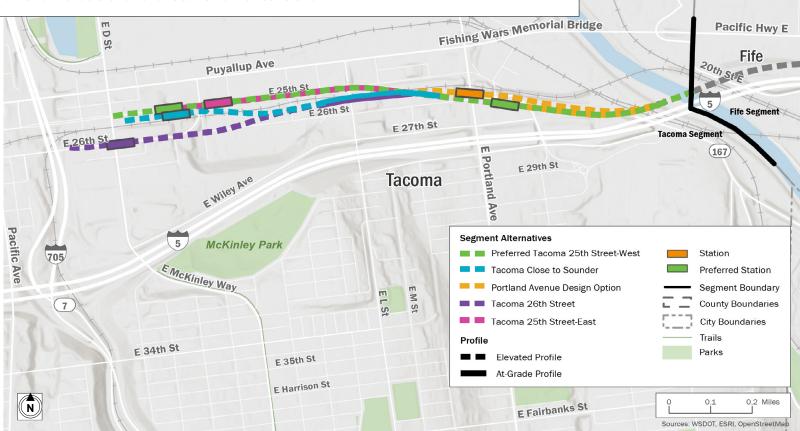
includes the Portland Avenue Station and Tacoma 25th Street-East Station

#### **Tacoma Close to Sounder**

includes the Portland Avenue Station and Tacoma Close to Sounder Station

#### **Tacoma 26th Street**

includes the Portland Avenue Station and Tacoma 26th Street Station



(509)

## **Ridership and Accessibility**

Ridership at the station in the Tacoma Dome area would be the same for all alternatives, summarized in the table to the right.

PM PEAK (3.5 HRS) RIDERSHIP		AVERAG	E WEEKDAY RIDE	RSHIP	
NORTHBOUND	SOUTHBOUND	TOTAL	NORTHBOUND SOUTHBOUND TO		
1,090	N/A	1,090	10,800	N/A	10,800



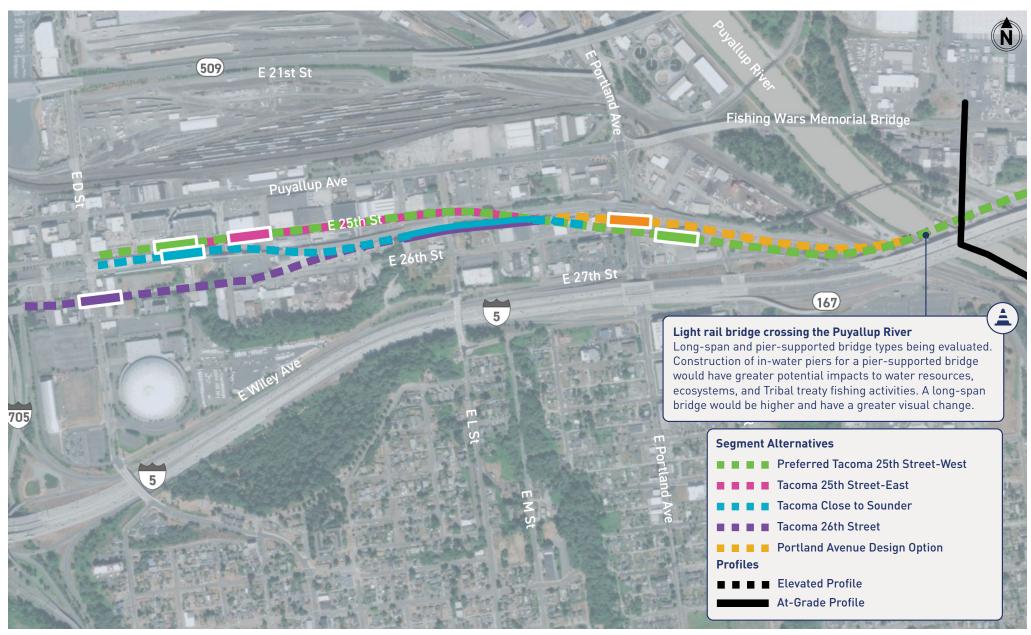
SeaTac/Airport Station. Sound Transit 2024.

## **Alternative Comparison**

PERFORMANCE RATING KEY  LOWER PERFORMING  HIGHER PERFORMING	Tacoma 25th Street-West	Tacoma 25th Street-East	Tacoma Close to Sounder	Tacoma 26th Street
BUSINESS DISPLACEMENTS PERMANENT IMPACTS	9 businesses	9 businesses	43 businesses (includes Freighthouse Square)	13 businesses
VISUAL IMPACTS 💿	Guideway may create "tunnel effect" on E 25th St	Guideway may create "tunnel effect" on E 25th St	Moderate visual changes near the station	Visual changes on E 26th St, altered views from Tacoma Dome and LeMay Stadium
CONSTRUCTION IMPACTS TRANSPORTATION IMPACTS	Temporary full closure of E 25th St and potential T Line closures	Temporary full closure of E 25th St and potential T Line closures	Temporary full closure of L Street bridge and rebuild Amtrak and Sounder station	Temporary full closure of L Street bridge and E 26th St
CONSTRUCTION IMPACTS ACCESS RESTRICTIONS	Access restrictions on E 25th St including Freighthouse Square	Access restrictions on E 25th St including Freighthouse Square	Fewer construction access impacts on E 25th St	Access restrictions on E 26th St and E 27th St
CONSTRUCTION IMPACTS UTILITY IMPACTS	More utilities impacts, with overhead impacts along E 25th St	More utilities impacts, with overhead impacts along E 25th St	Fewest impacts to existing utilities	Fewer utilities impacts, with some on E 26th St
COMPARATIVE COST (2024 BILLIONS)  ESTIMATED	\$1.25 - \$1.51	\$1.18- \$1.44	\$1.11 - \$1.36	\$1.21 - \$1.47

Note: Comparative cost estimates are for comparing design alternatives and options; they are not to serve as a method for establishing the project budget. Comparative cost estimates are based on early design and will be refined as design advances.

### **Tacoma Alternatives**



Design shown is approximate.

## **Station Comparison**

PERFORMANCE RATING KEY  LOWER PERFORMING  HIGHER PERFORMING	Portland Avenue Station	Portland Avenue Span Station Option	
TRANSIT ACCESS	Bus bays located on E 26th St	Bus bays located on E Portland Ave, a major freight route	
NONMOTORIZED ACCESS ﴾  ∱	Closer to lower traffic undercrossing at E Bay St	Fewer intersection crossings for people accessing the station with entrances on both sides of E Portland Ave	
PASSENGER EXPERIENCE	Side platforms create more challenging station navigation	Center platform provides easier navigation and track operations	
CONSTRUCTION IMPACTS	Fewer temporary street closures on E Portland Ave	More frequent temporary street closures on E Portland Ave	

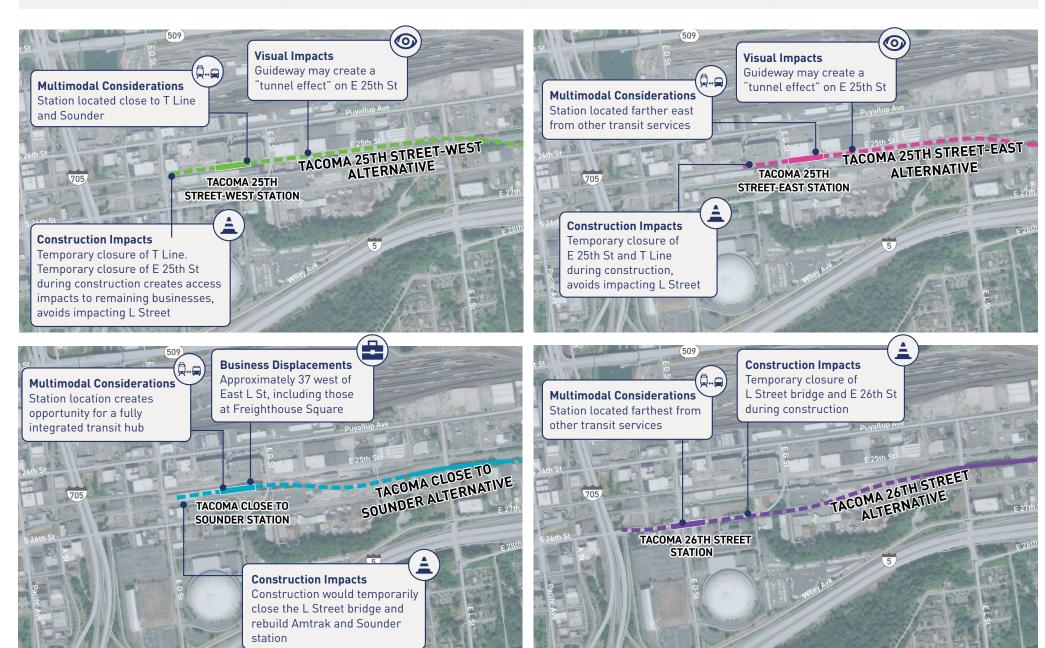
## Portland Avenue Station and Portland Avenue Span Station Option



## **Station Comparison**

PERFORMANCE RATING KEY  LOWER PERFORMING  HIGHER PERFORMING	Tacoma 25th Street-West Station	Tacoma 25th Street-East Station	Tacoma Close to Sounder Station	Tacoma 26th Street Station
PEDESTRIAN EXPERIENCE 🏌	Close connections to other transit modes, parking garage, and Tacoma Dome	Connections to other transit modes, parking garage, and Tacoma Dome are farther east	Close connections to other transit modes, parking garage, and Tacoma Dome	Closest to Tacoma Dome but farthest for connections to other transit modes and parking
CONSTRUCTION A	Temporary relocation or closure of the T Line station across from Freighthouse Square	Temporary relocation or closure of the T Line station across from Freighthouse Square	Would require rebuilding Amtrak and Sounder station	Construction would not temporarily relocate other transit stations
MULTIMODAL INTEGRATION 🗒 🖨	Close to Sounder and T Line stations	Farther east of Sounder and T Line stations	Potential for fully integrated transit hub	Farthest from Sounder and T Line stations

## 25th Street-West Station, 25th Street-East Station, Close to Sounder Station, and 26th Street Station



Design shown is approximate. Potential residential and business displacement are estimated.

#### TACOMA DOME LINK EXTENSION

## **NEXT STEPS**

Information about TDLE is available on the project's website: <a href="mailto:soundtransit.org/tdlink">soundtransit.org/tdlink</a>

Following the Draft EIS comment period, the Sound Transit Board will confirm or modify the Preferred Alternative and they will identify the Preferred Alternative in areas where there is not currently one.

Once the Final EIS is published, the Sound Transit Board will select the project to be built.

Sound Transit's forecasted in-service date for TDLE is 2035.

Comments may be submitted by email to: tdlinkdeis@soundtransit.org

Or mailed to:

Attention: Elma Borbe, Senior Environmental Planner Sound Transit 401 S Jackson Street Seattle, WA 98104

