

Federal Way Link Extension

Draft EIS Summary

Route & station alternatives and impacts



Link Light Rail System Map

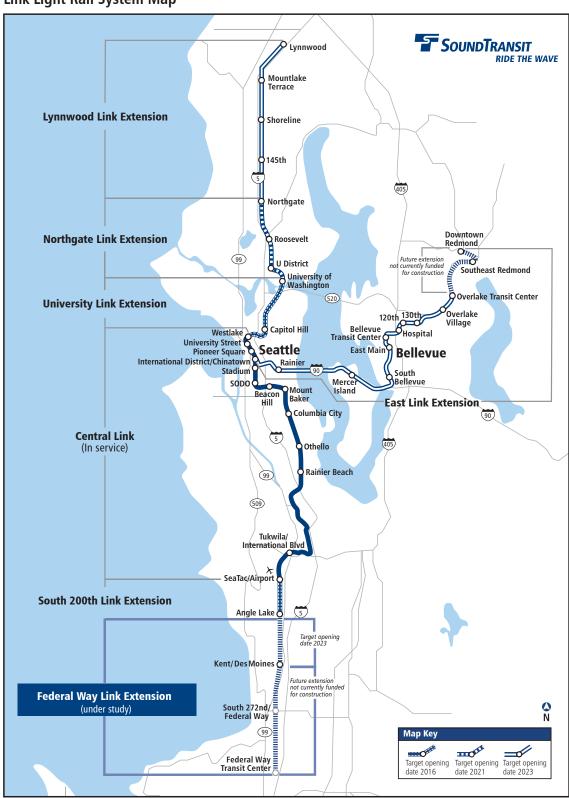
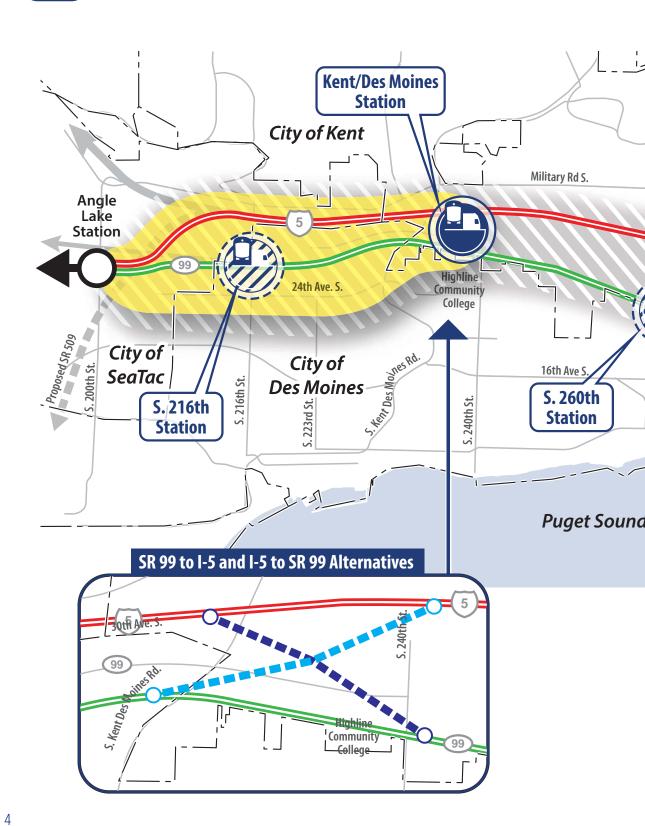




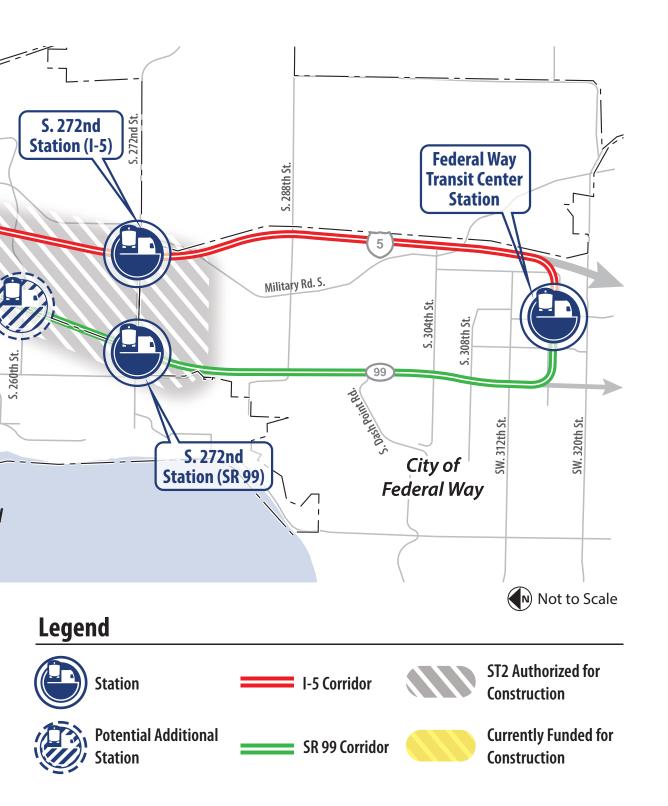
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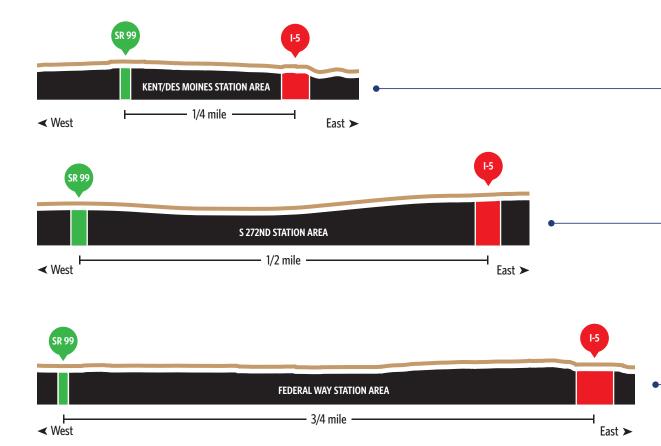
Project Overview



The Federal Way Link Extension is part of the voter-approved Sound Transit 2 (ST2) Plan to extend mass transit throughout the region. This project will extend light rail from the Angle Lake station in SeaTac to Kent/Des Moines by 2023. It will also develop a shovel-ready plan to reach the Federal Way Transit Center when additional funding is secured.

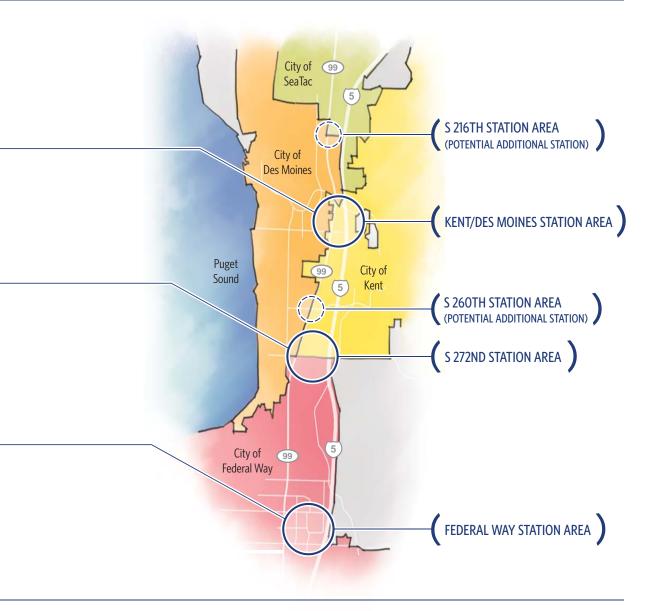


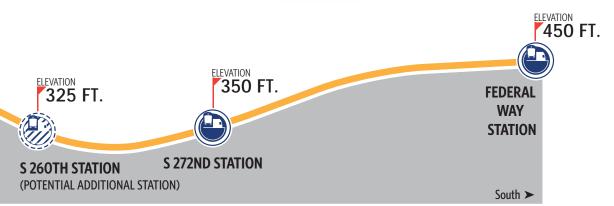
Project Context





The distance between SR 99 and I-5 varies throughout the corridor ranging from one-quarter mile in the Kent/Des Moines area to three-quarters of a mile near the Federal Way Transit Center. The potential alignments and station locations overlap jurisdictional boundaries and the topography along the corridor is hilly, which affects guideway and station design, costs, and environmental impacts.





Project Timeline

Alternatives Analysis

Environmental Review

Final Design

Oct 2012

Early Scoping

Public comment

Jun 2013

Alternatives Analysis Report

Jun 2013

EIS Scoping

Public comment

Sep 2013

Sound Transit Board identifies EIS alternatives **Early 2015**

Draft EIS

Public comment

2017 - 2018

We are here

Mid 2015

Sound Transit Board identifies preferred alternative

Mid 2016

Final EIS

Late 2016

Sound Transit Board selects project to build

Late 2016

Federal Transit
Administration issues
Record of Decision

The Draft Environmental Impact Statement (Draft EIS) public comment period is April 10 to May 26. The Sound Transit Board will identify a preferred alternative based on the results of the Draft EIS and input received during the public comment period.



Testing & Pre-operations

Start of Service to Kent/ Des Moines

2019 - 2022

2022 - 2023

2023





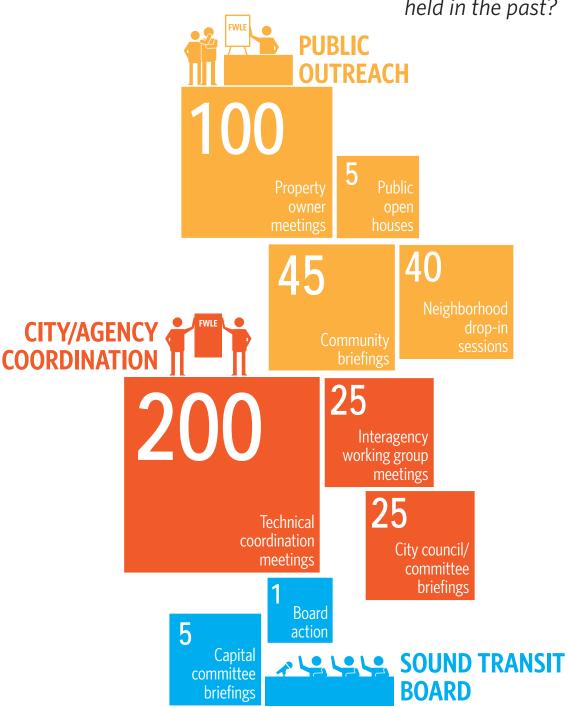


Stakeholder Outreach

What are some of the

Stakeholder Outreach Activities

held in the past?

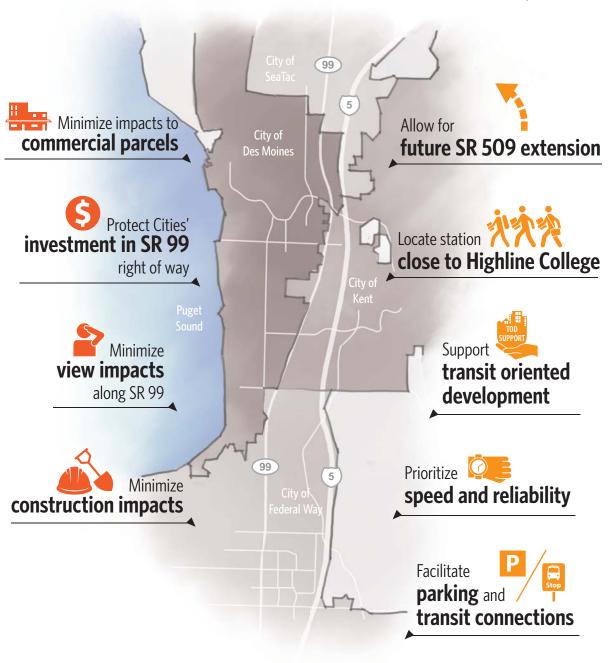


Sound Transit has been working with stakeholders along the project corridor since the environmental analysis began in 2012. Through open houses, neighborhood and community briefings and technical coordination meetings, Sound Transit has provided information to the public, cities and agencies and has received valuable input to help inform the design and environmental analysis.

What are some of the

Key Stakeholder Concerns

we have learned so far?



Alternatives

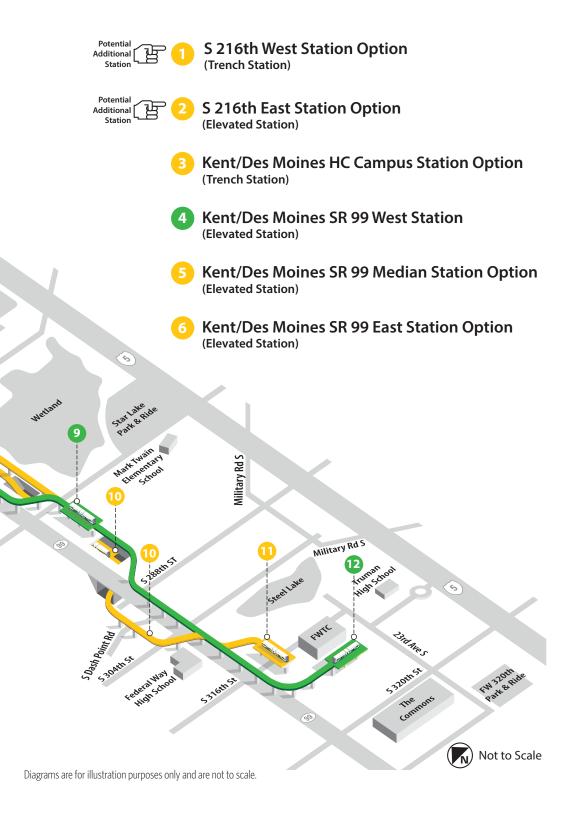
SR 99 ALTERNATIVE



12 Federal Way Transit Center Station

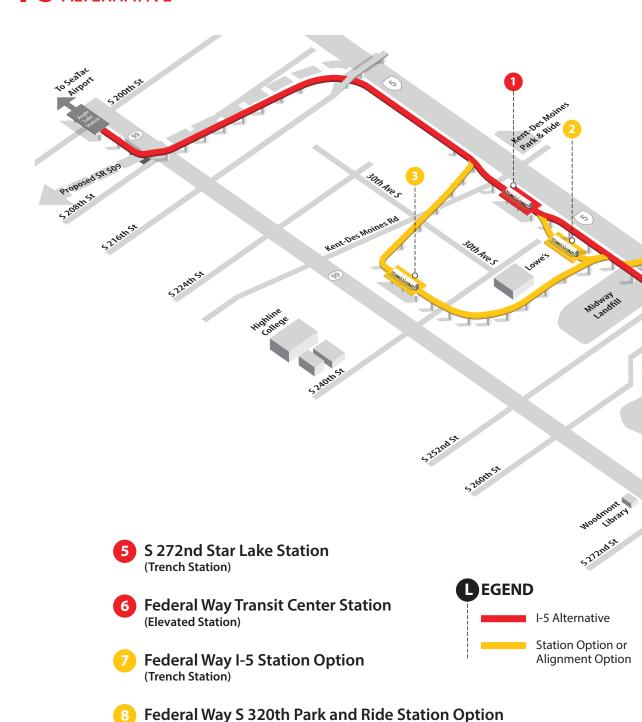
(Elevated Station)

The SR 99 Alternative would extend south from the Angle Lake Station on an elevated guideway, mostly in the median of SR 99. This alternative includes the Kent/Des Moines SR 99 West Station, S 272nd Redondo Station and Federal Way Transit Center Station. A number of station options were also evaluated in these areas, as were potential additional stations near South 216th Street and South 260th Street.



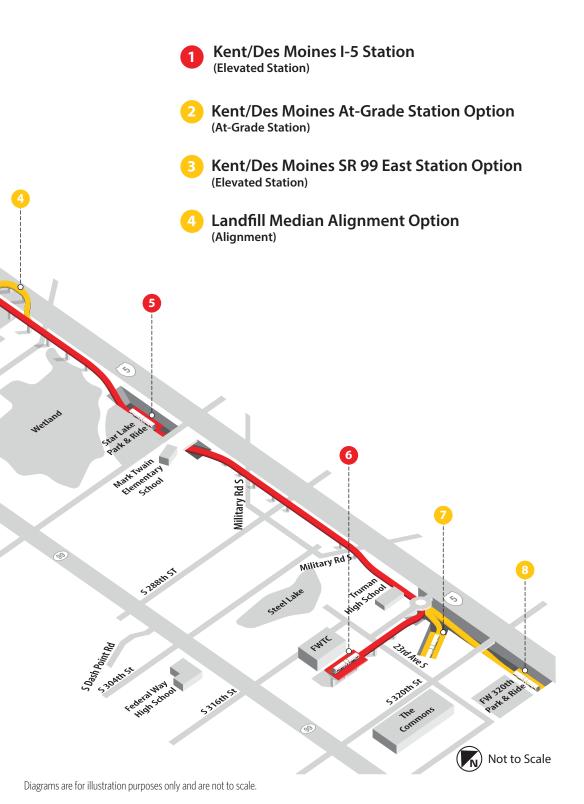
Alternatives

I-5 ALTERNATIVE



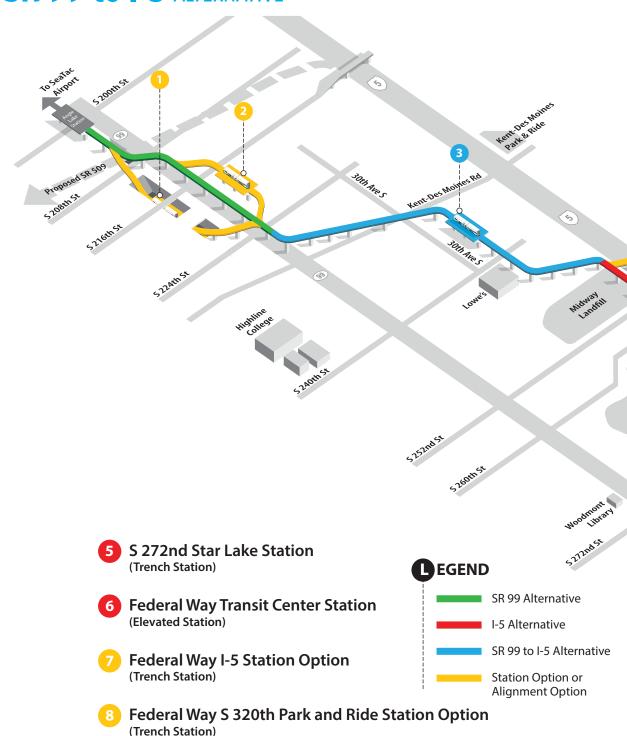
(Trench Station)

From the Angle Lake Station, the I-5 Alternative would cross SR 99 and continue along the south edge of the future SR 509 alignment to I-5. It would then turn south and follow the west side of I-5 to Federal Way. This alternative includes the Kent/Des Moines I-5 Station, the S 272nd Star Lake Station, and the Federal Way Transit Center Station. An alignment option and several station options were also evaluated.

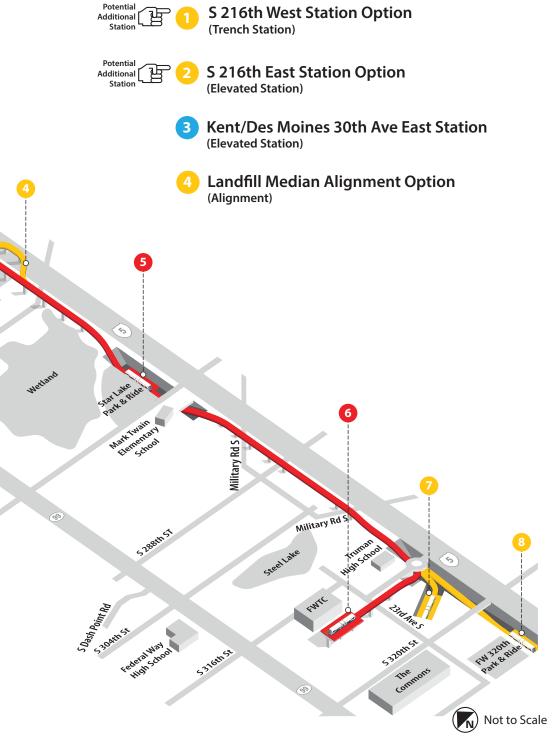


Alternatives

SR 99 to I-5 ALTERNATIVE



The SR 99 to I-5 Alternative would be similar to the SR 99 alignment north of Kent-Des Moines Road. South of Kent-Des Moines Road the alignment would transition to the I-5 alignment. This alternative would include the Kent/Des Moines 30th Avenue East Station in the transition area between SR 99 and I-5.



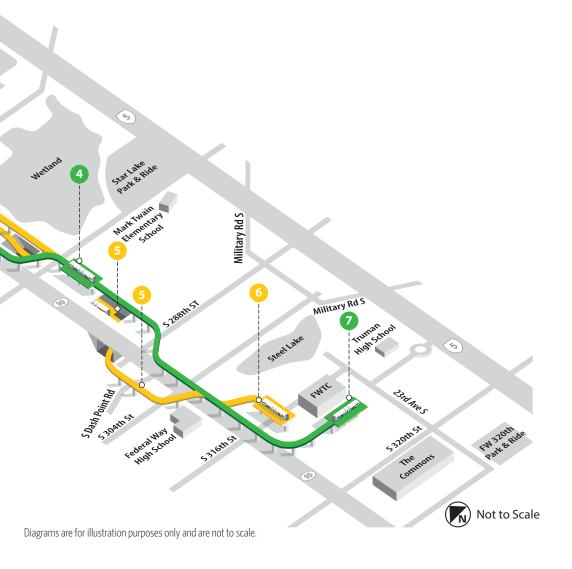
Alternatives

I-5 to SR 99 ALTERNATIVE



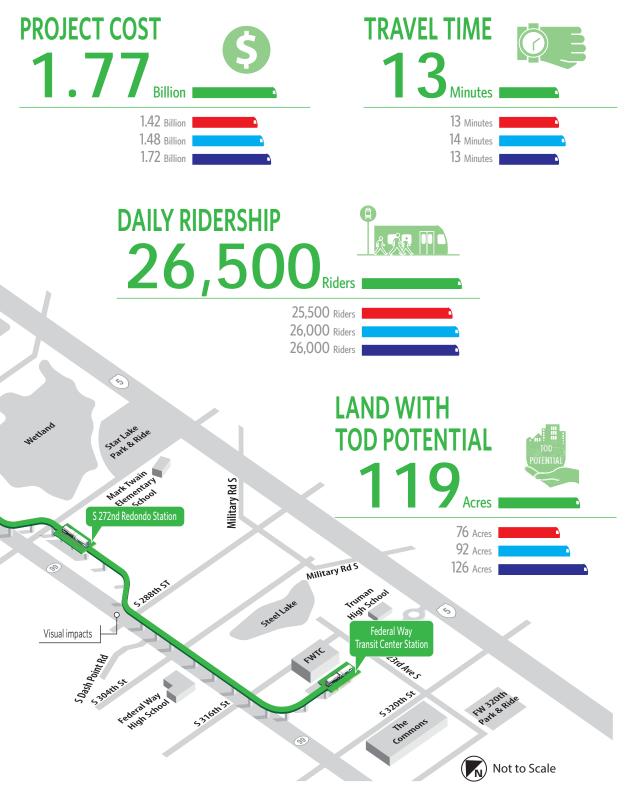
The I-5 to SR 99 Alternative would be similar to the I-5 alignment north of Kent-Des Moines Road. South of Kent-Des Moines Road the alignment would transition to the SR 99 alignment. This alternative would include the Kent/Des Moines 30th Avenue West Station in the transition area between I-5 and SR 99.





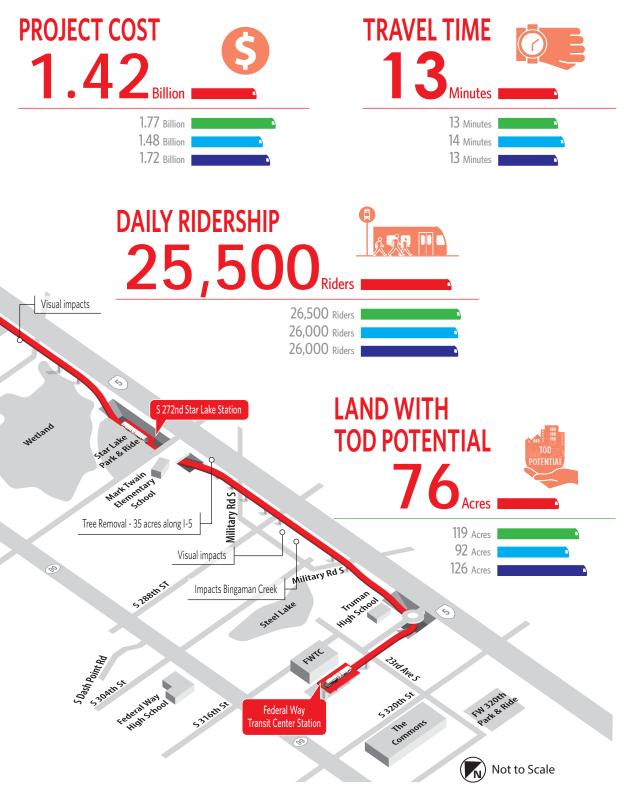


The SR 99 Alternative would have the highest cost, similar travel time and similar ridership compared to other alternatives. It would have the greatest number of business displacements and would create more disruption to local traffic during construction than other alternatives. It would also displace the fewest residences and would be the most supportive of transit-oriented development (TOD).



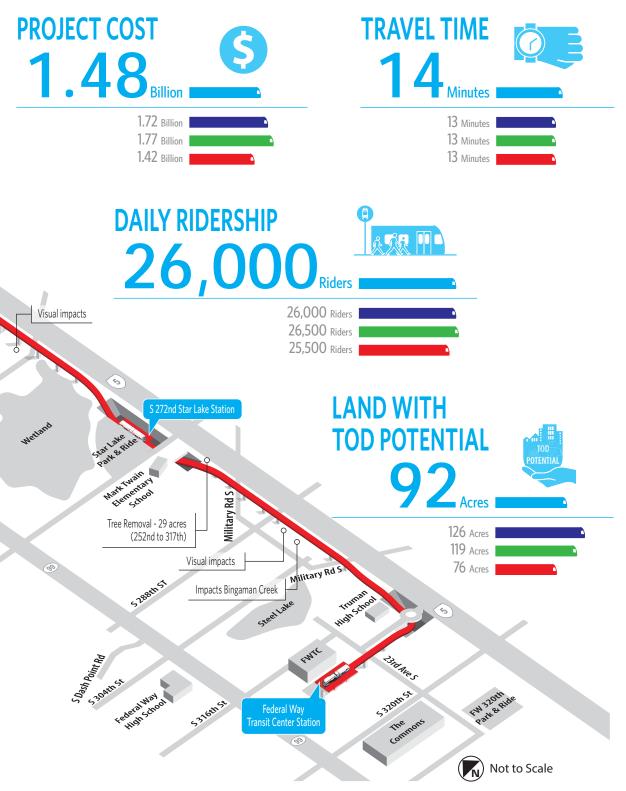


The I-5 Alternative would have the lowest cost and similar travel time and ridership. It would have the highest number of residential displacements, primarily north of Kent-Des Moines Road and would remove trees along the freeway right of way. The I-5 Alternative would have the fewest business displacements, but would be the least supportive of TOD due to its proximity to I-5.



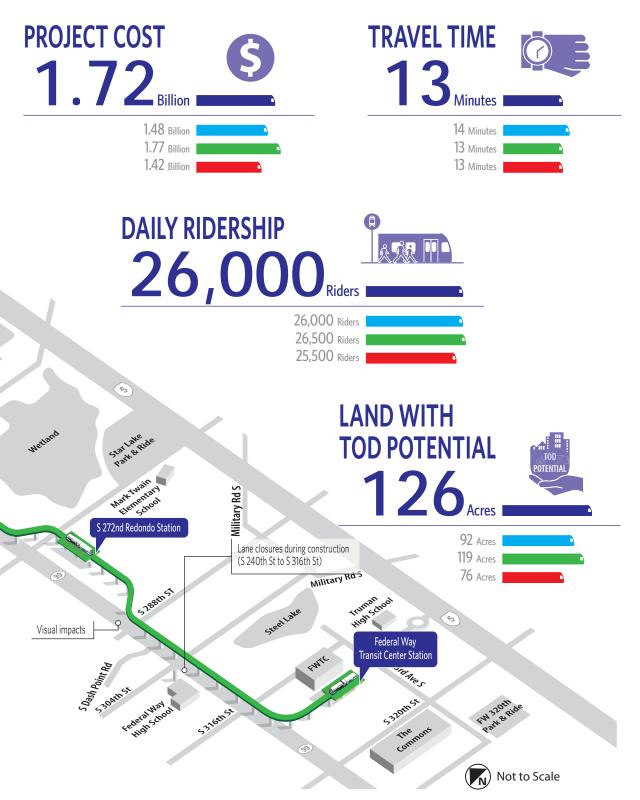


The SR 99 to I-5 Alternative would cost slightly more than the I-5 Alternative. It would avoid many of the business displacements associated with the SR 99 Alternative and residential displacements associated with the I-5 Alternative. Disruptions to local traffic during construction would be similar to the SR 99 Alternative north of Kent-Des Moines Road.



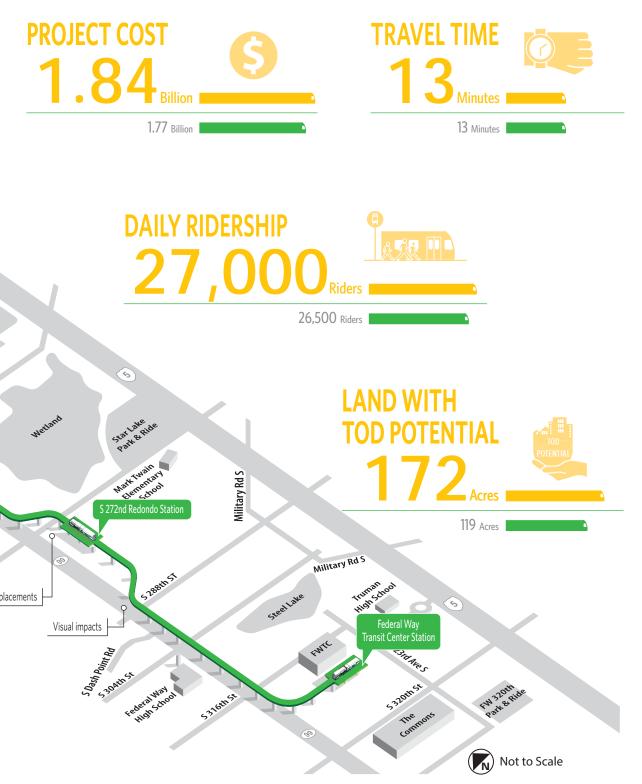


The I-5 to SR 99 Alternative would cost slightly less than the SR 99 Alternative. This alternative would avoid some of the residential displacements associated with the I-5 Alternative but would have nearly as many business displacements as the SR 99 Alternative. Disruptions to local traffic during construction would be similar to the SR 99 Alternative south of Kent-Des Moines Road.



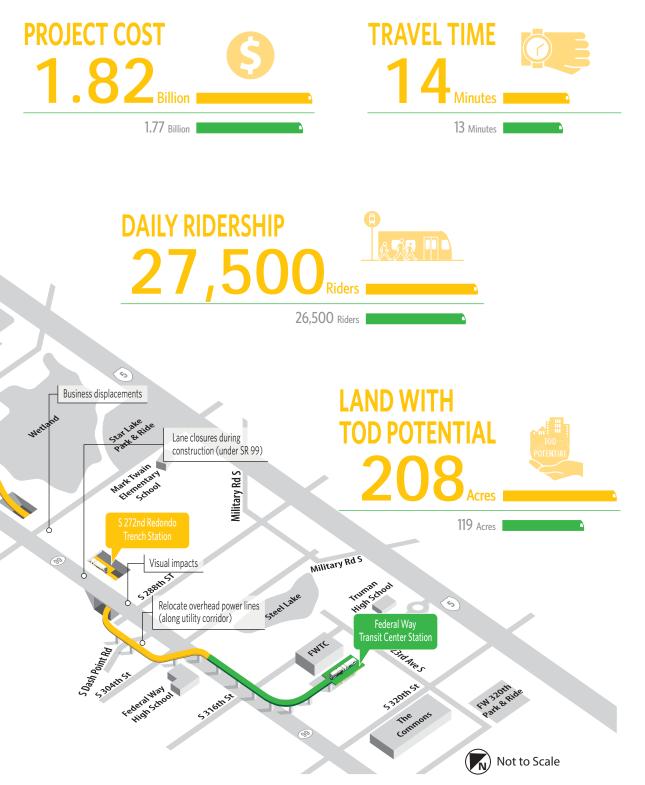


This scenario is similar to the SR 99 Alternative, but includes an additional station at S 216th. This station was not part of the voter-approved ST2 Plan. Including the S 216th West Station increases the project cost with minimal change to travel time and ridership compared to the SR 99 Alternative. This scenario would displace more businesses, but would also be more supportive of TOD.



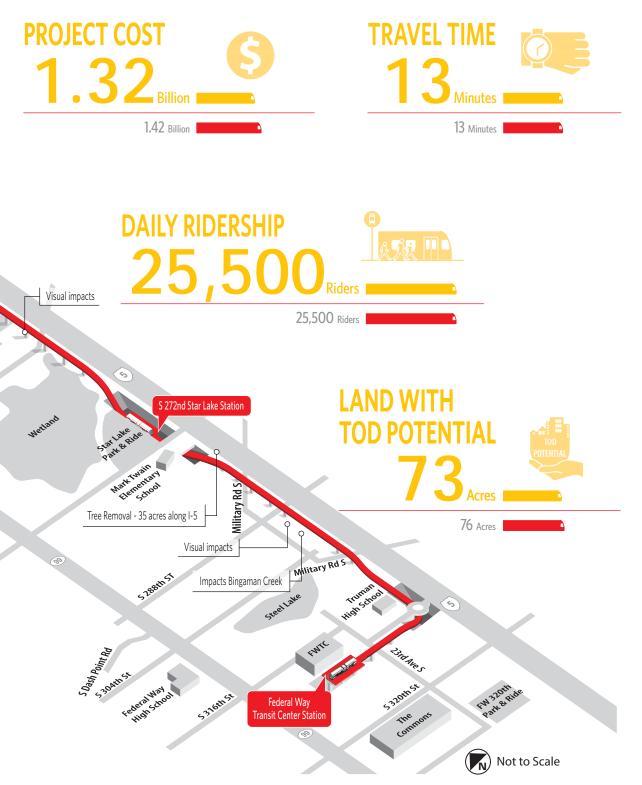


This scenario includes additional stations at S 216th and S 260th (not part of ST2) and incorporates the Kent/Des Moines Highline College Campus Station and the S 272nd Redondo Trench Station options. Compared to the SR 99 Alternative, this scenario would cause less disruption along SR 99 and would be more supportive of TOD, but would displace more businesses and residences and increase project cost.



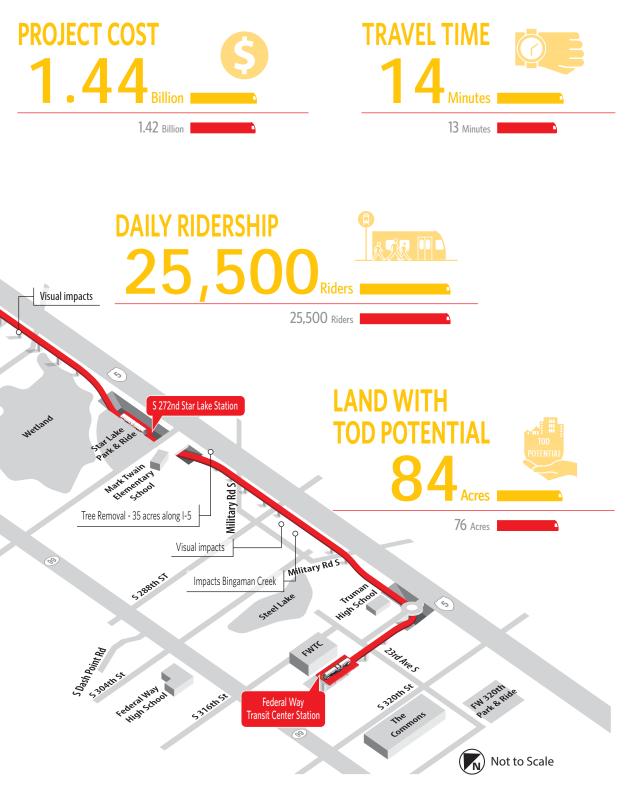


The scenario is similar to the I-5 Alternative, but would include an at-grade station at Kent/Des Moines. This alignment would cost less and have fewer residential displacements than the I-5 Alternative, but would also be less supportive of TOD.



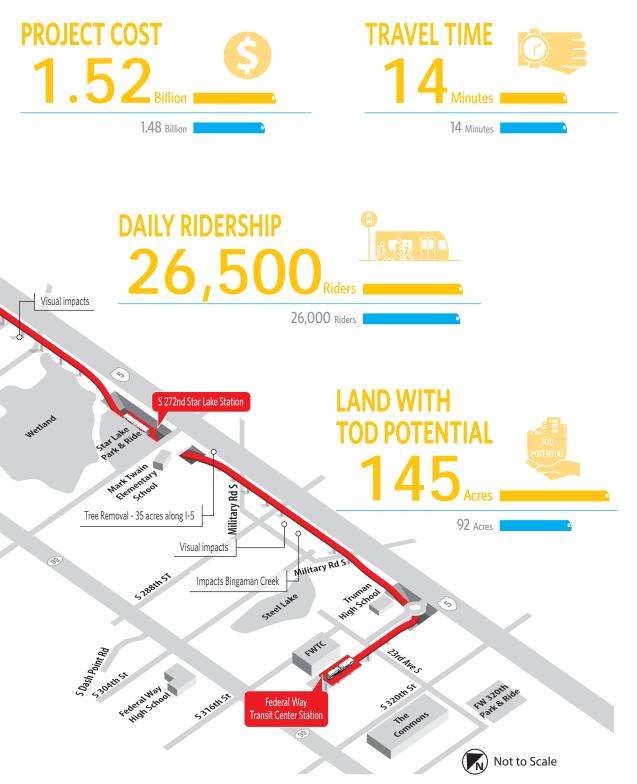


This scenario is similar to the I-5 Alternative, but includes a station at Kent/Des Moines near SR 99. This scenario would cost slightly more than the I-5 Alternative, but would provide a more direct connection to Highline College and RapidRide bus service. There would be fewer residential displacements but more business displacements and the station location would be more supportive of TOD.





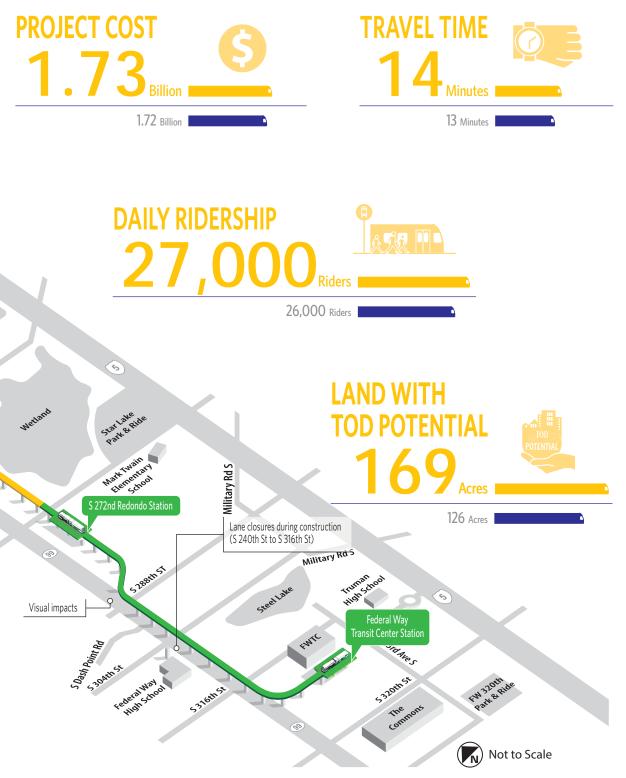
This scenario is similar to the SR 99 to I-5 Alternative, but includes an additional station at S 216th. This station was not part of the voter-approved ST2 Plan. Including the S 216th West Station increases the project cost with minimal change to travel time and ridership, compared to the SR 99 to I-5 Alternative. This scenario would displace more businesses, but would also be more supportive of TOD.



Results



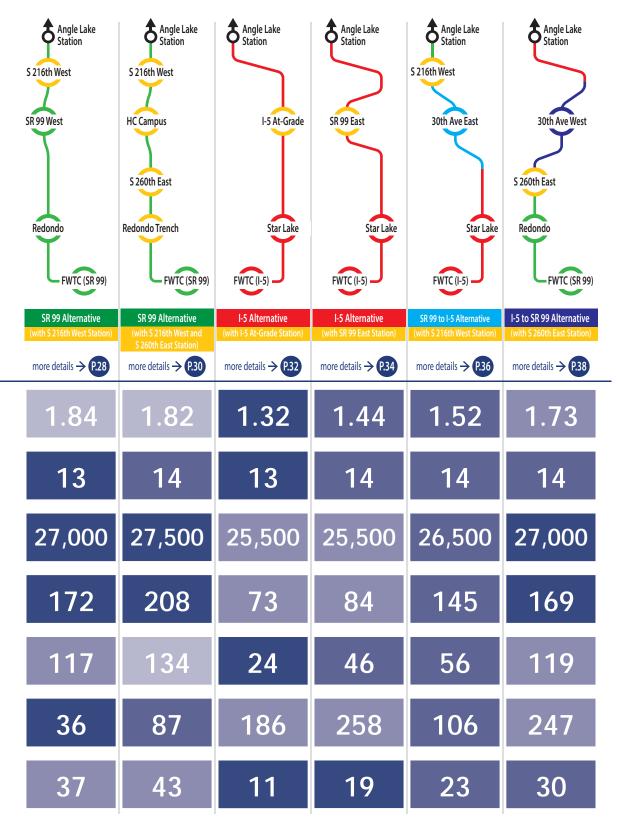
This scenario is similar to the I-5 to SR 99 Alternative, but includes an additional station at S 260th. This station was not part of the voter-approved ST2 Plan. Including the S 260th East Station slightly increases the project cost with minimal change to travel time and ridership, compared to the I-5 to SR 99 Alternative. This scenario would displace more businesses, but would also be more supportive of TOD.



Results

Summary	Angle Lake Station	Angle Lake Station	Angle Lake Station	Angle Lake Station
S 216th Station Area 🗦				
Kent/Des Moines Station Area →	SR 99 West	I-5 Elevated	30th Ave East	30th Ave West
S 260th Station Area 🗦				
S 272nd Station Area →	Redondo	Star Lake	Star Lake	Redondo
Federal Way Station Area →	FWTC (SR 99)	FWTC (I-5)	FWTC (I-5)	FWTC (SR 99)
Performance Measures	SR 99 Alternative	I-5 Alternative	SR 99 to I-5 Alternative	I-5 to SR 99 Alternative
Lower Performing Higher Performing	more details → P.20	more details → P.22	more details → P.24	more details → P.26
Project Cost (2014 dollars in Billions)	1.77	1.42	1.48	1.72
Travel Time (Minutes)	13	13	14	13
Daily Ridership (Riders)	26,500	25,500	26,000	26,000
Land with TOD Potential (Acres)	119	76	92	126
Business Displacements (Units)	104	29	43	98
Residential Displacements (Units)	36	285	106	244
Commercial Land Acquired (Acres)	31	13	17	26

This table summarizes the tradeoffs between the alternatives and station options described in this booklet. Additional combinations of alternatives and options are possible. The Draft EIS describes the full range of alternatives and options and the costs and impacts of each. For more information, refer to the project website at federalwaylink.org.



Kent/Des Moines Terminus Station Comparisons







Kent/Des Moines SR 99 Median Station

Kent/Des Moines SR 99 East Station



DAILY RIDERSHIP

9,000Riders

PROJECT COST

DAILY RIDERSHIP 9,000 Riders PROJECT COST

DAILY RIDERSHIP 9,000 Riders PROJECT COST

DAILY RIDERSHIP

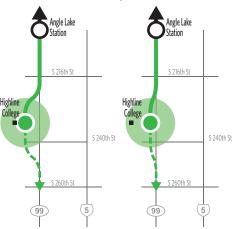
9,000 Riders

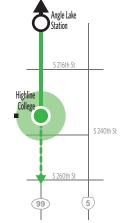
PROJECT COST

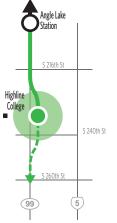
DAILY RIDERSHIP 8,500_{Riders}

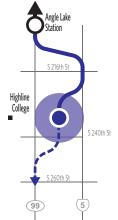
LAND WITH TOD POTENTIAL LAND WITH TOD POTENTIAL LAND WITH TOD POTENTIAL LAND WITH TOD POTENTIAL

TOD POTENTIAL







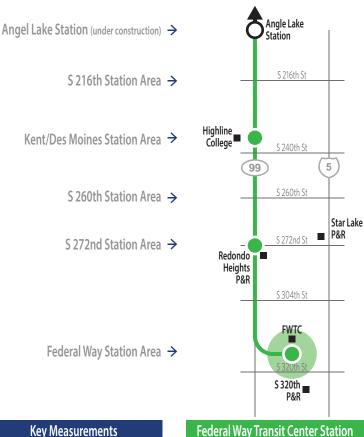


The project may be built in phases, depending on funding. The costs and impacts of an interim terminus at Kent/Des Moines would vary depending on alignment and station location. SR 99 options would cost more but have higher ridership due to proximity to RapidRide bus connections. I-5 options would cost less but have lower ridership. Options near SR 99 and 30th Avenue would be more supportive of TOD.



Results

Federal Way Terminus Station Comparisons



Federal Way Transit Center Station

PROJECT COST

RESIDENTIAL

PROJECT COST (in 2014 dollars in Billions)







RESIDENTIAL DISPLACEMENTS



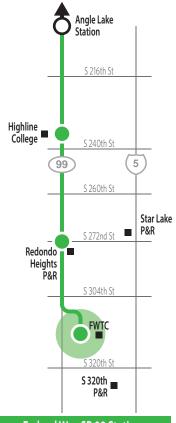


DAILY RIDERSHIP TRAVEL TIME 3_{Minutes} **26,500**Riders LAND WITH TOD **POTENTIAL**

DISPLACEMENTS DISPLACEMENTS

BUSINESS

COMMERCIAL LAND ACOUIRED



Federal Way SR 99 Station

PROJECT COST

DAILY RIDERSHIP TRAVEL TIME **25,000**Riders

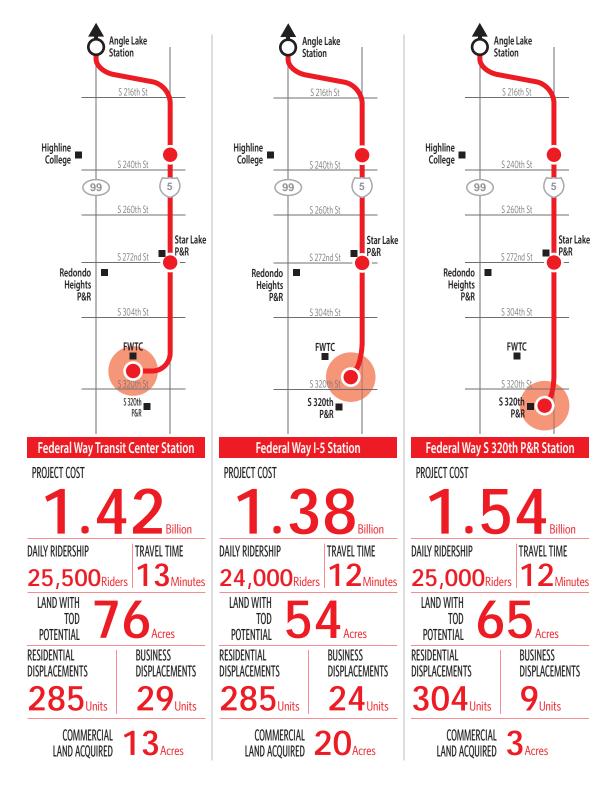
LAND WITH TOD **POTENTIAL**

BUSINESS

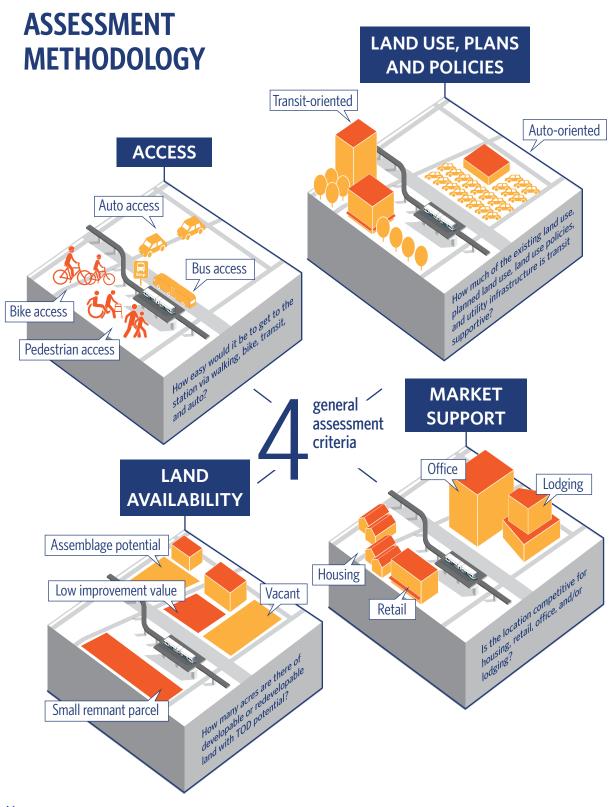
RESIDENTIAL DISPLACEMENTS

DISPLACEMENTS

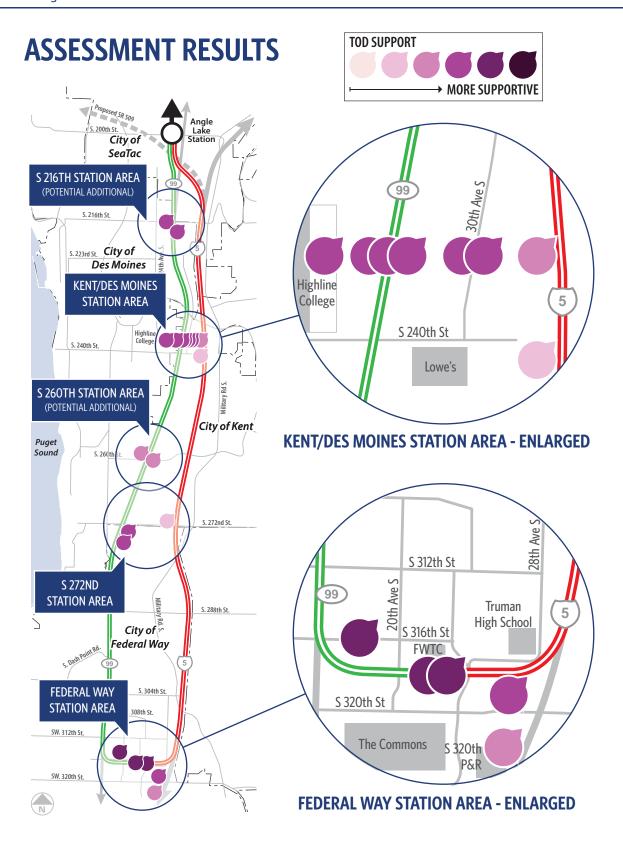
COMMERCIAL LAND ACOUIRED There are several potential terminus options in downtown Federal Way. In general, options using an SR 99 alignment would cost more than options using an I-5 alignment. However, station options closer to SR 99 would be more supportive of TOD. For either alignment, the costs and impacts would also vary depending on the specific location of the terminus station in Federal Way.



TOD Assessment



Sound Transit assessed the relative degree to which the 21 different station options could support TOD. The following four criteria were used to develop ratings: access, land use, market support, and land availability. Station locations near SR 99 were found to generally be more supportive of TOD than locations along I-5.

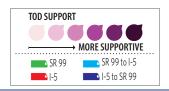


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TOD Assessment

ASSESSMENT RESULTS







S 216th West Station Option



S 216th East Station Option



Kent/Des Moines HC Campus Station Option



Kent/Des Moines SR 99 West Station



Kent/Des Moines SR 99 Median Station Option



Kent/Des Moines SR 99 East Station Option (SR 99)



Kent/Des Moines SR 99 East Station Option (I-5)



Kent/Des Moines 30th Ave West Station Option



Kent/Des Moines 30th Ave East Station Option



ent/ Des Moines 30th Ave Last Station Option



Kent/Des Moines I-5 At-Grade Station Option



S 260th West Station Option

Kent/Des Moines I-5 Station



S 260th East Station Option



S 272nd Redondo Station



S 272nd Redondo Trench Station Option



S 272nd Star Lake Station



Federal Way SR 99 Station Option



Federal Way Transit Center Station (SR 99)



Federal Way Transit Center Station (I-5)



Federal Way I-5 Station Option



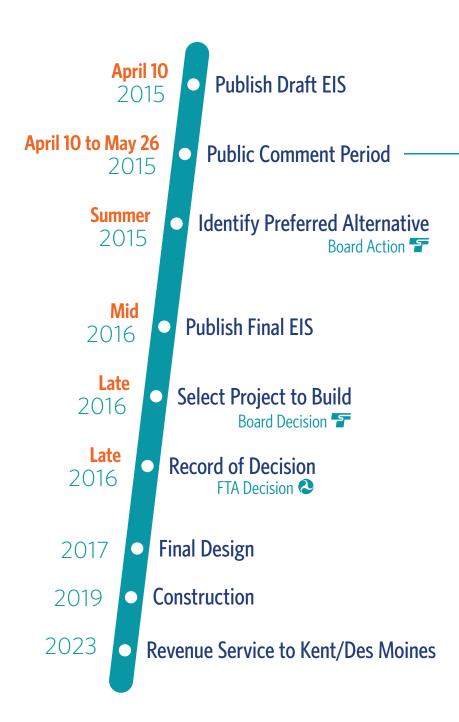
Federal Way S 320th Park & RIde Station Option



Overall, stations near the Federal Way Transit Center would be the most supportive of TOD. The Kent/Des Moines and S 272nd stations along I-5 would be the least supportive of TOD. A potential additional station as S 216th would be more supportive of TOD than an additional station at S 260th.

ACCESS	LAND USE, PLANS & POLICIES	MARKET SUPPORT	LAND AVAILABILITY
•		•	
•	•	•	•
		•	
		•	
		6	
•	•	•	
•	•	•	
	•	•	
•		•	

Next Steps



The Draft EIS public comment period is April 10 to May 26. After the comment period, the Sound Transit Board will identify a preferred alternative to be followed by preparation of a Final EIS. A final decision on the alignment and stations will be made after publication of the Final EIS in 2016. Sound Transit anticipates completion of a light rail extension to Kent/Des Moines by 2023.



Learn more about the Federal Way Link Extension



federalwaylink.org



Watch our video



Build your route



Submit your comments



Read the Draft EIS