

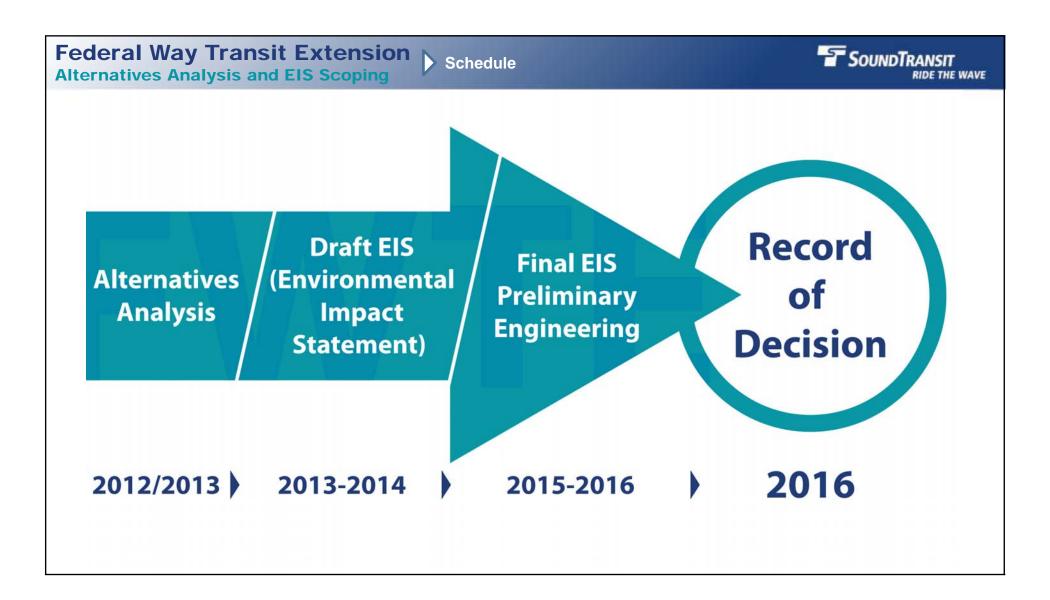
Federal Way Transit Extension

Alternatives Analysis and EIS Scoping Briefing Booklet

September 2013

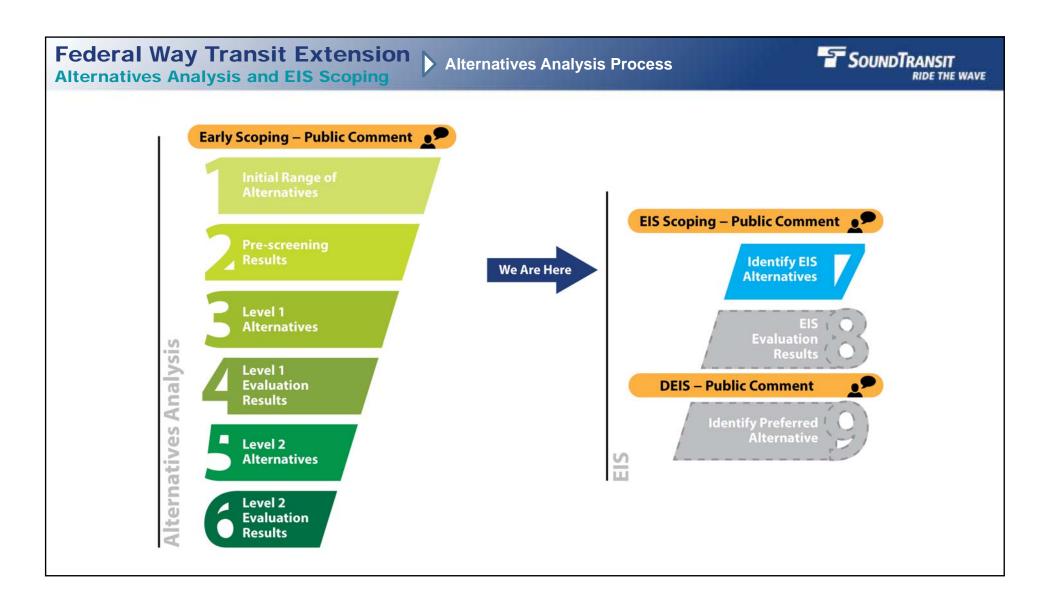


Sound Transit is evaluating alternatives to extend high capacity transit from the future Angle Lake light rail station on South 200th Street in SeaTac to the Federal Way Transit Center.



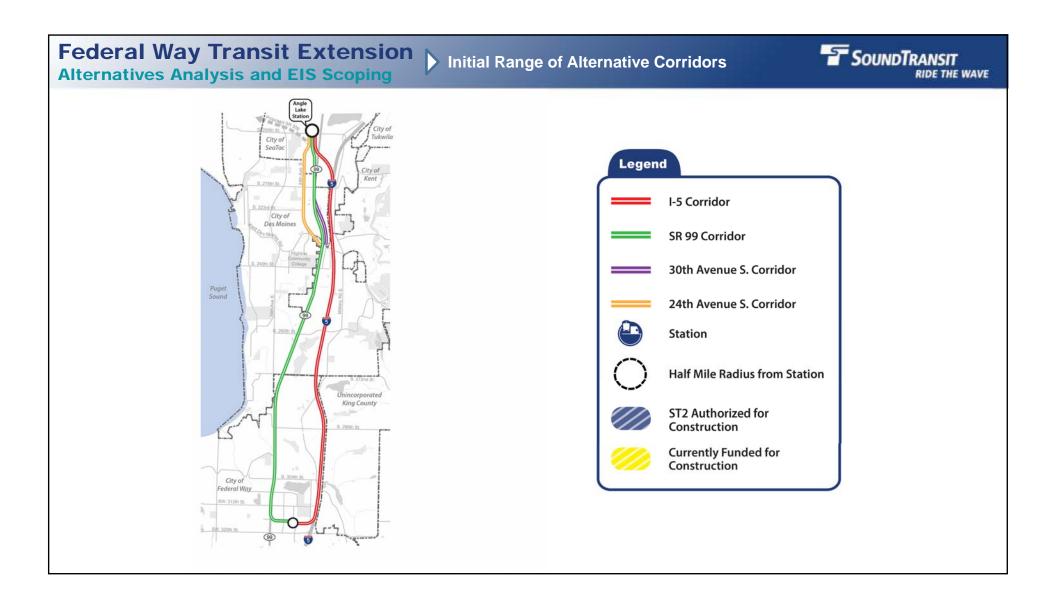


The Alternatives Analysis (AA) phase and EIS Scoping period are now complete. They will be followed by a Draft Environmental Impact Statement (EIS) phase through 2014, and a Final EIS phase through mid-2016. The environmental review process will conclude with a Record of Decision from the Federal Transit Administration in late 2016.



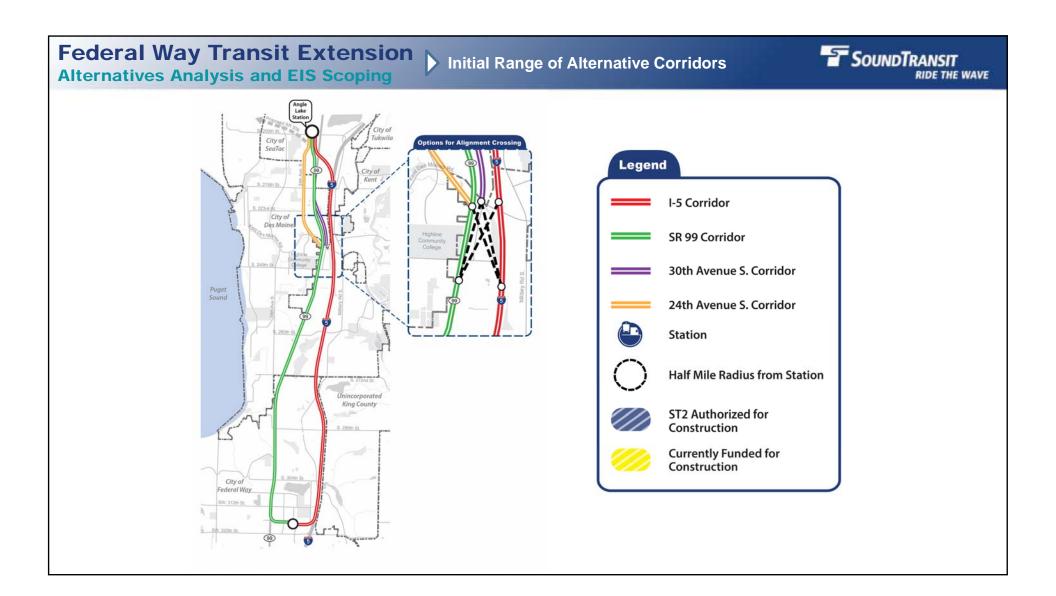


Sound Transit began the AA phase with an Early Scoping public comment period in October 2012. The Level 2 Evaluation results were presented to the public during the EIS Scoping period in June 2013. In September 2013, the Sound Transit Board will identify which alignment and station alternatives should be studied in more detail in the EIS.



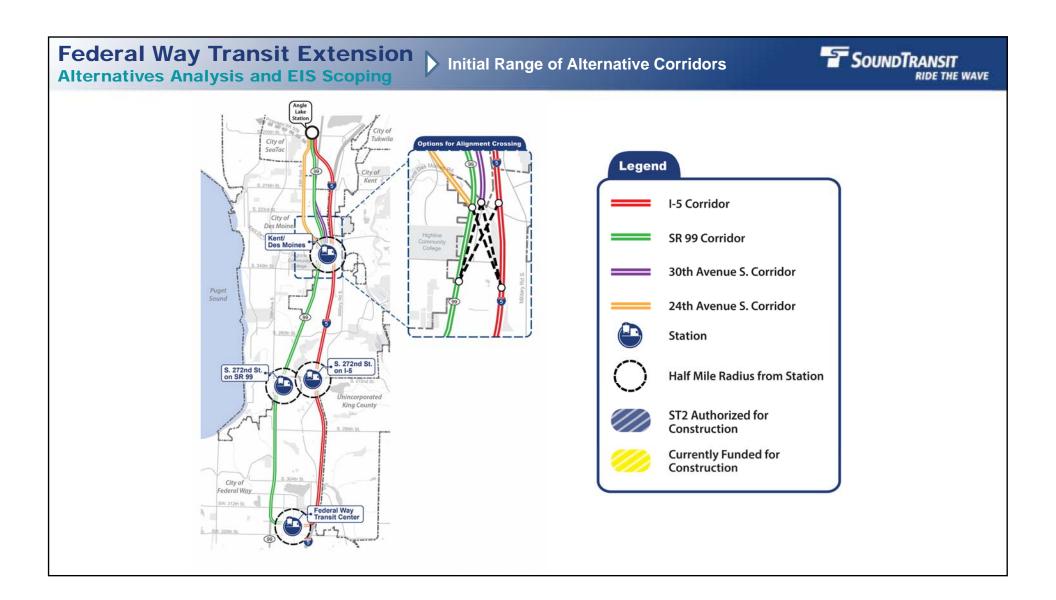


Based on public input during the Early Scoping public comment period, Sound Transit studied alternatives along the I-5 Corridor, SR 99 Corridor, as well as along 24th Avenue South and 30th Avenue South in the City of Des Moines.



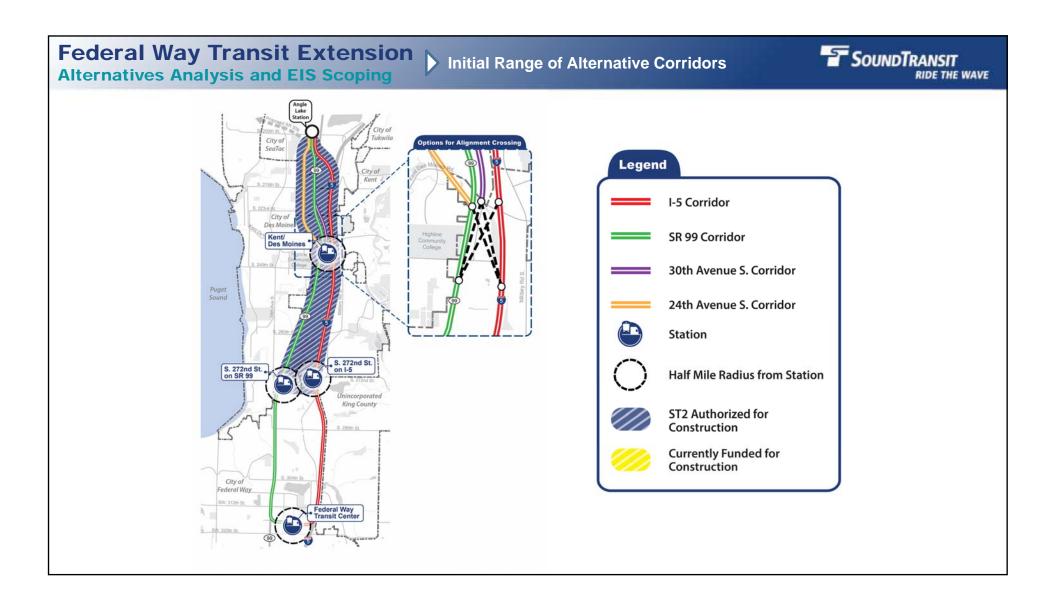


In the Kent/Des Moines area, the alignment could potentially transition from one corridor to another. The enlarged box shows potential crossing options.



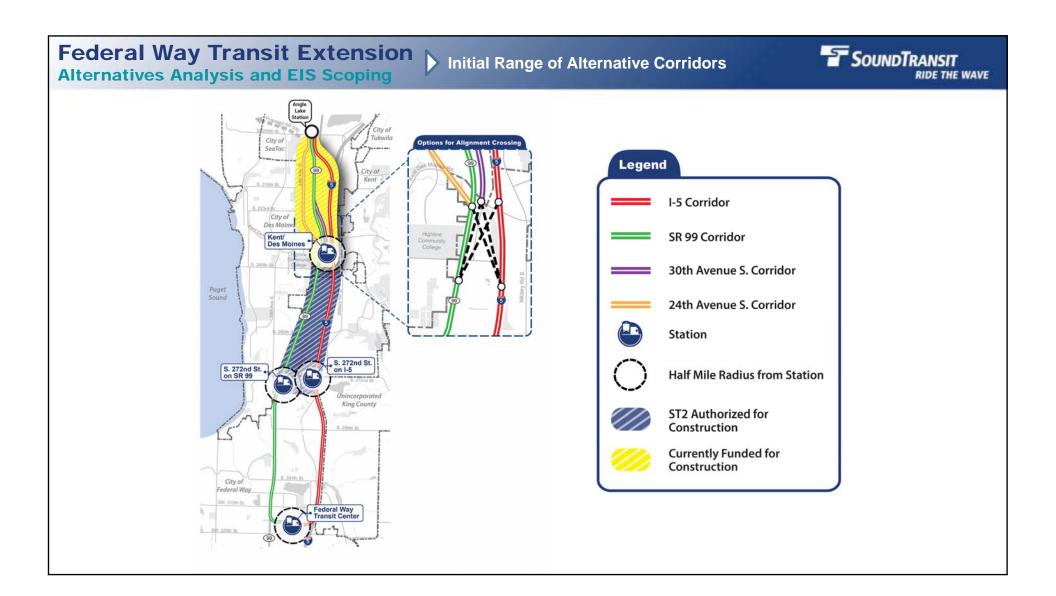


Previous planning identified potential station locations at Kent/Des Moines (in the vicinity of Highline Community College), South 272nd Street (Redondo or Star Lake park-and-rides), and the Federal Way Transit Center.



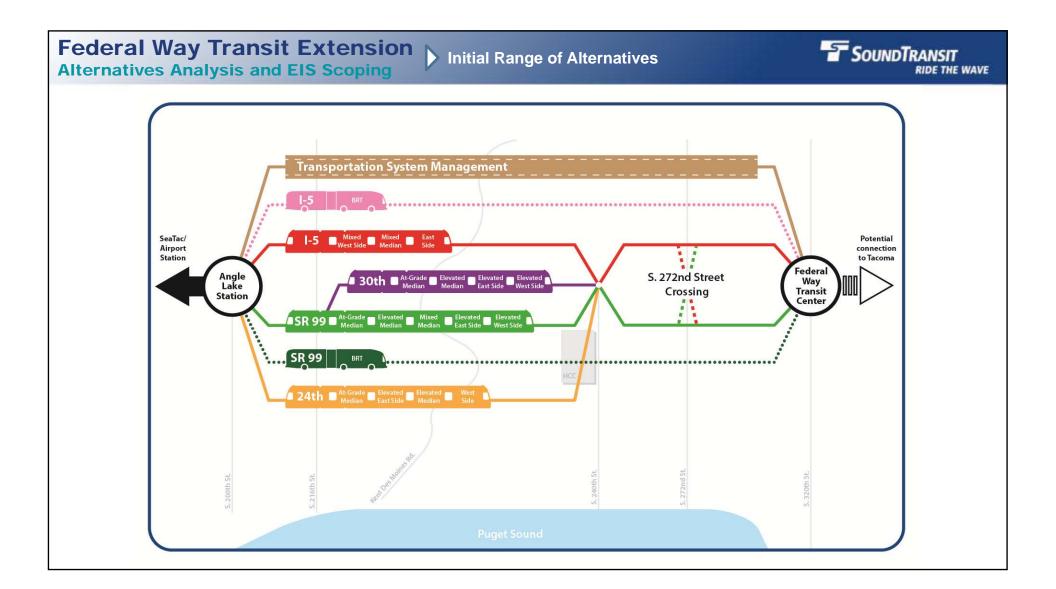


The Sound Transit 2 Plan, which was approved by the voters in 2008, included funding to build light rail as far as South 272nd Street on the border of Federal Way.



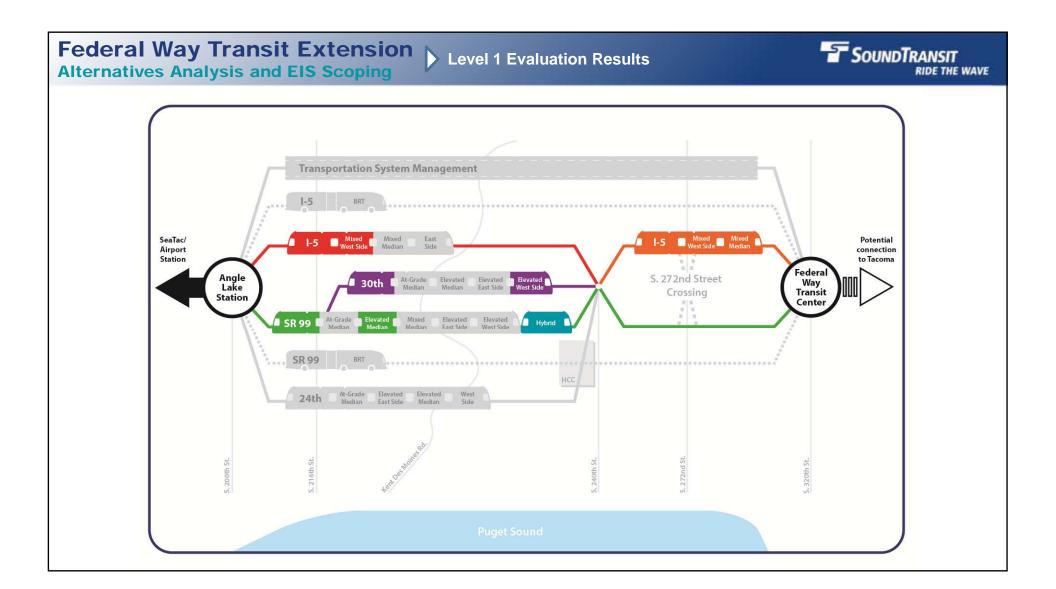


Based on current revenue forecasts, Sound Transit has enough funding to build light rail to Kent/Des Moines and is working to ensure that the segment to the Federal Way Transit Center is ready for construction once funding is secured.



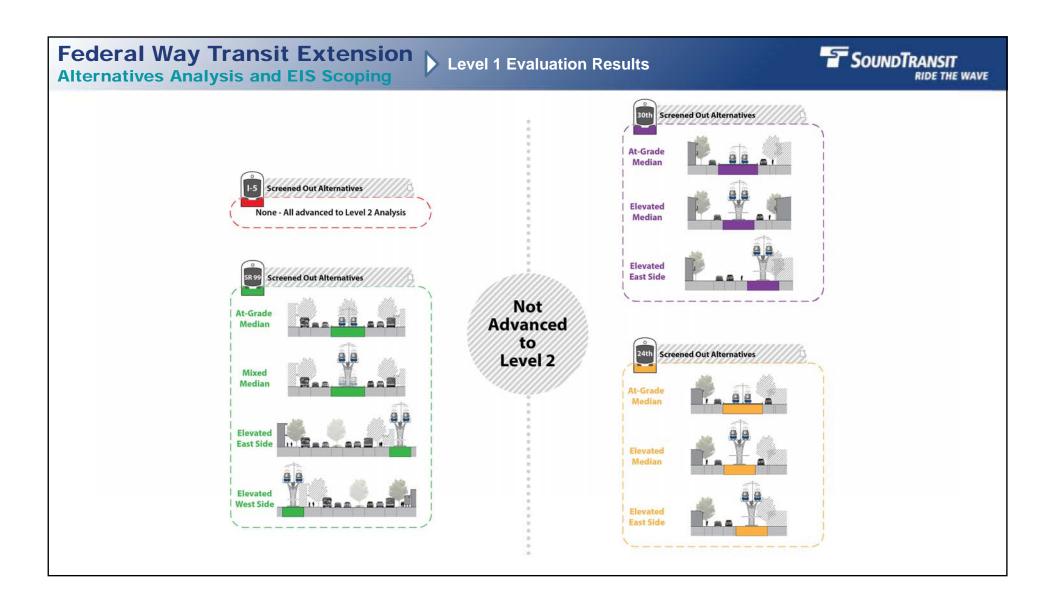


Alternatives suggested during the Early Scoping public comment period included light rail alignments on I-5, SR 99, 24th Avenue South and 30th Avenue South, as well as Bus Rapid Transit (BRT) on I-5 and SR 99, and improvements to the existing transportation system (TSM).



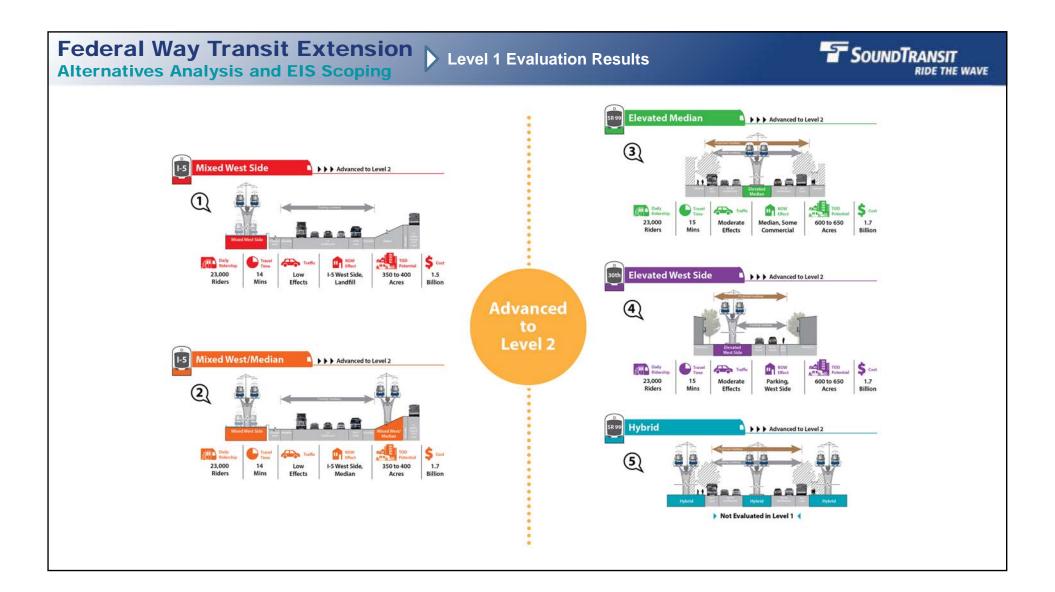


Following pre-screening of the alternatives, and a Level 1 evaluation, a number of alternatives were not advanced for further study in the Level 2 evaluation. Previous planning in the corridor, such as the Regional Transit Long Range Plan, evaluated several transit modes and recommended light rail. Bus and BRT alternatives were considered again but not advanced because they would have a slower travel time, less ridership capacity, and would not as effectively accommodate future population growth and transit demand in the corridor.



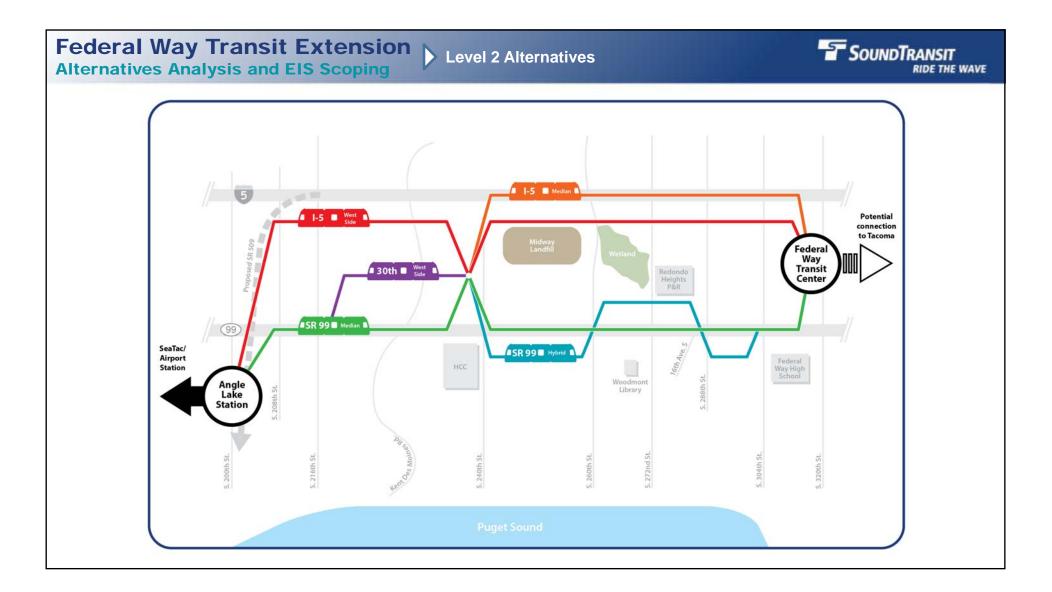


These cross sections represent the light rail alternatives that were not advanced for further study in the Level 2 evaluation, based on the key findings, the project's purpose and need, and the evaluation criteria. In general, these alternatives were not advanced as they had less ridership, a longer travel time, or had greater right-of-way effects.





These cross sections represent the five alternatives that were advanced for further study in the Level 2 evaluation, based on the key findings, the project's purpose and need, and the Level 1 evaluation criteria. They include two alternatives along I-5, one alternative on 30th Avenue, and two alternatives along SR 99. All of the alternatives would have similar ridership and travel time. The SR 99 Hybrid alternative was a new alternative that was developed based on information learned during the Level 1 evaluation.



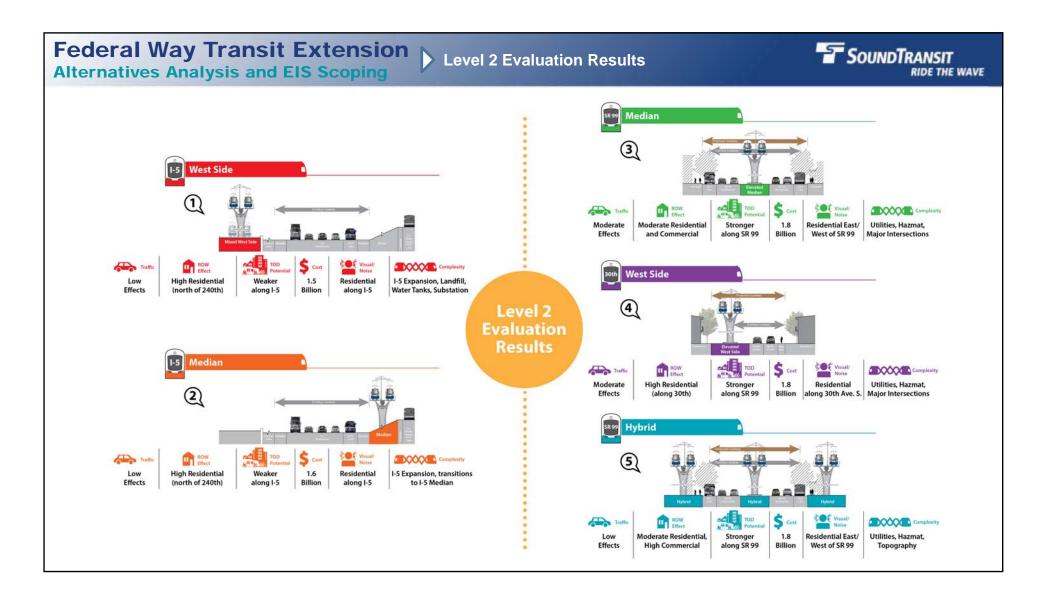


This schematic represents the five alternatives that were advanced for further study in the Level 2 evaluation. The SR 99 hybrid alternative was designed to avoid impacts to key intersections and community facilities, and was informed by considerations such as topography and convenient access to existing park-and-ride lots.



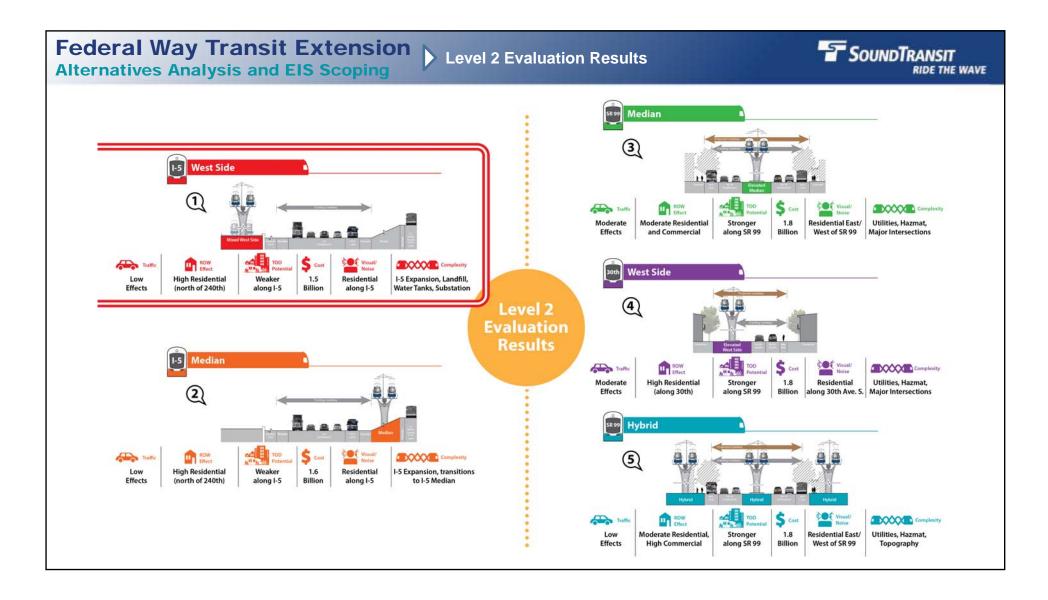


During the Level 2 evaluation, over thirty different measures were evaluated to help distinguish the pros and cons of the remaining alternatives. A number of the measures yielded results that were common to all the Level 2 alternatives. Daily ridership and travel time were expected to be about the same for all five of the Level 2 alternatives. The number of people, jobs, and households currently located within a half mile of each alignment were also similar for each alternative.



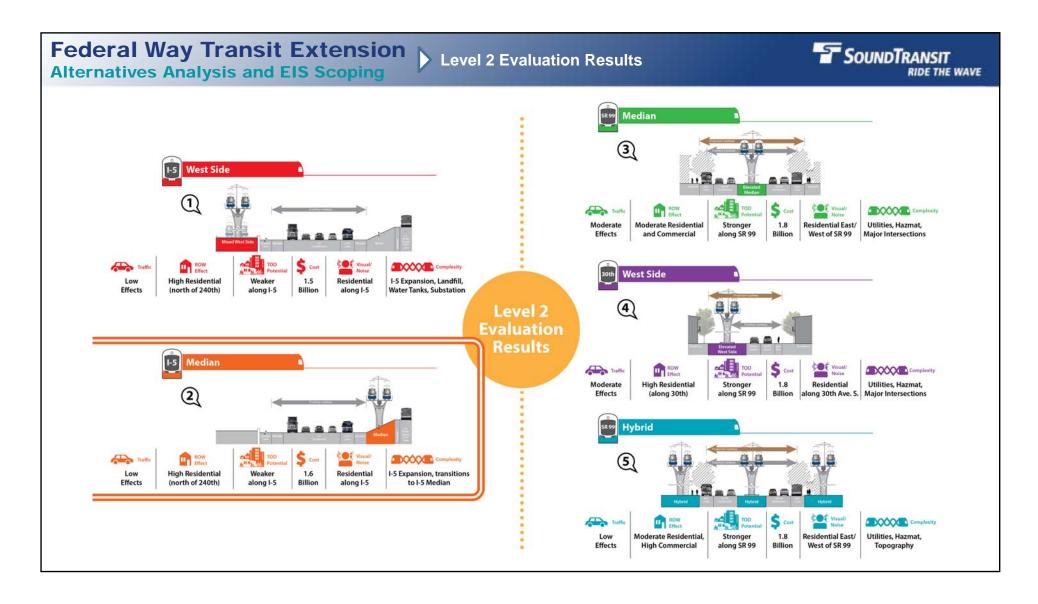


Some of the key distinguishers between the Level 2 alternatives are illustrated in this graphic. Each alternative is discussed in more detail on the following pages.



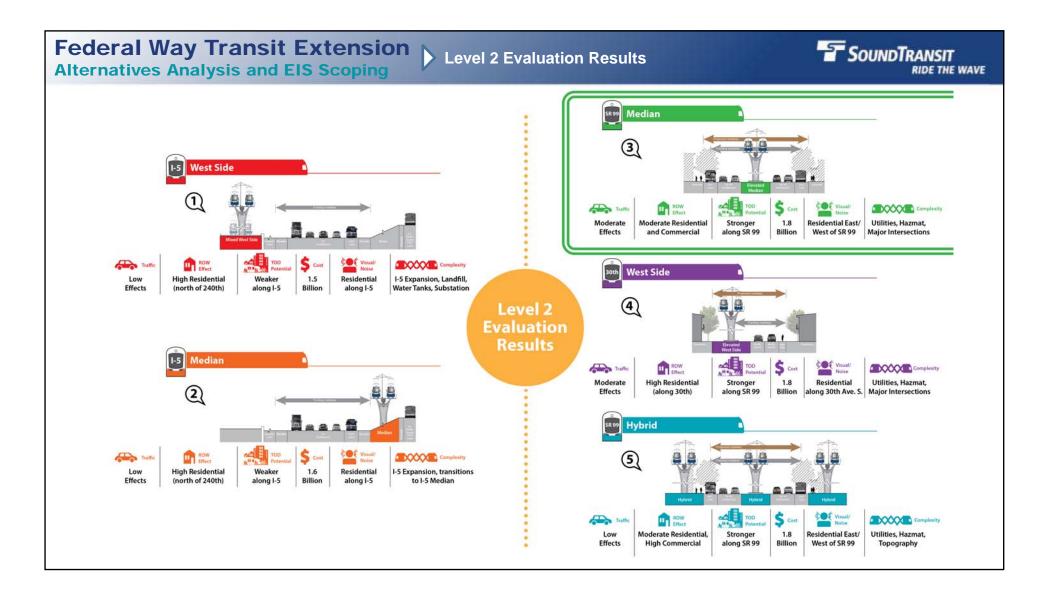


The I-5 West Side alternative would likely have high residential effects north of South 240th Street and would have weaker transit oriented development (TOD) potential. Engineering challenges could include the Midway landfill south of South 240th Street, and proximity to the Highline Water District storage tanks, and a PSE substation.



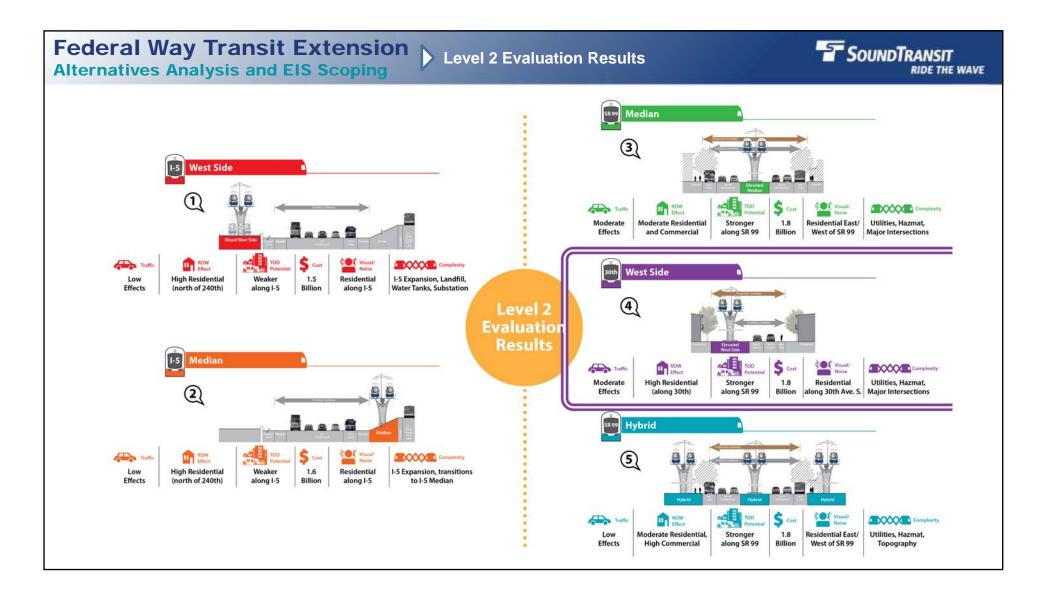


The I-5 Median alternative would also likely have high residential effects north of South 240th Street and weaker TOD potential. It would avoid the Midway landfill but would require large structures to transition to the I-5 median (south of South 240th Street) and then back to the west side at South 272nd Street and the Federal Way Transit Center. In addition, the I-5 Median alternative may be incompatible with future I-5 expansion plans in the corridor.



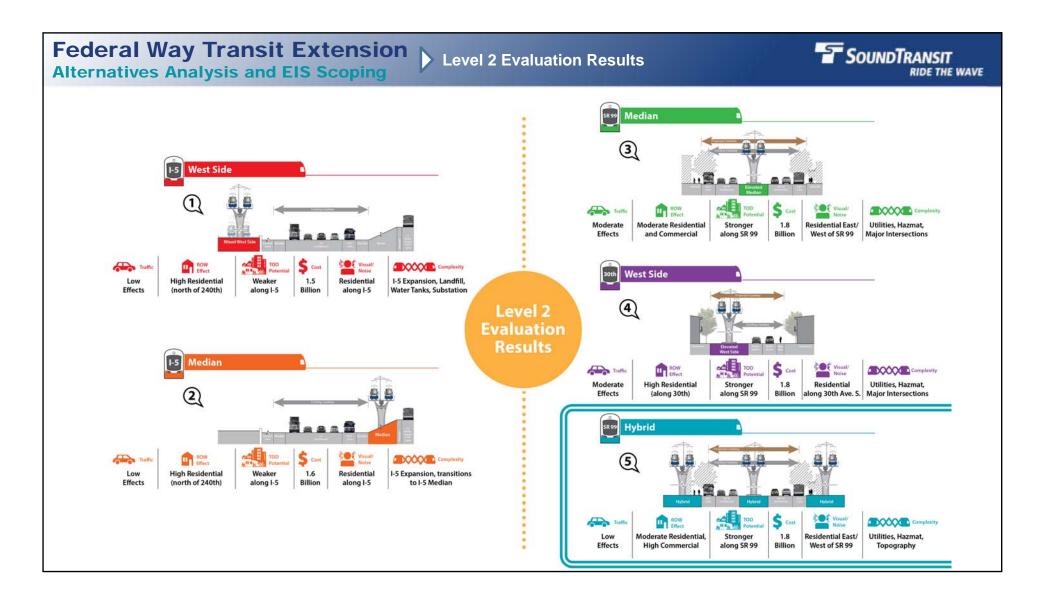


The SR 99 Median alternative would be located within the median of SR 99. It would have less effect to the roadway and adjacent buildings than other alternatives along SR 99 but would require major construction to cross key intersections along the alignment.





The 30th Avenue South West Side alternative would transition from SR 99 at about South 220th Street and then continue within the existing parking setback along 30th Avenue South. This alternative would affect commercial and residential properties at the transition point and at various locations along 30th Avenue and could have noise and visual effects.



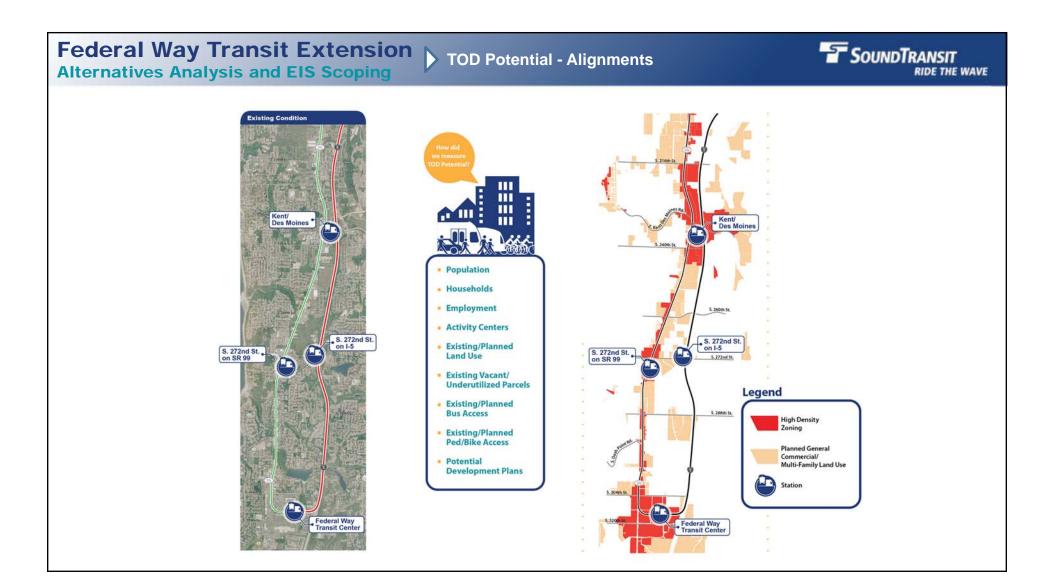


The SR 99 Hybrid alternative would affect commercial and residential properties at various locations along SR 99 but would avoid major effects to key intersections or community facilities.



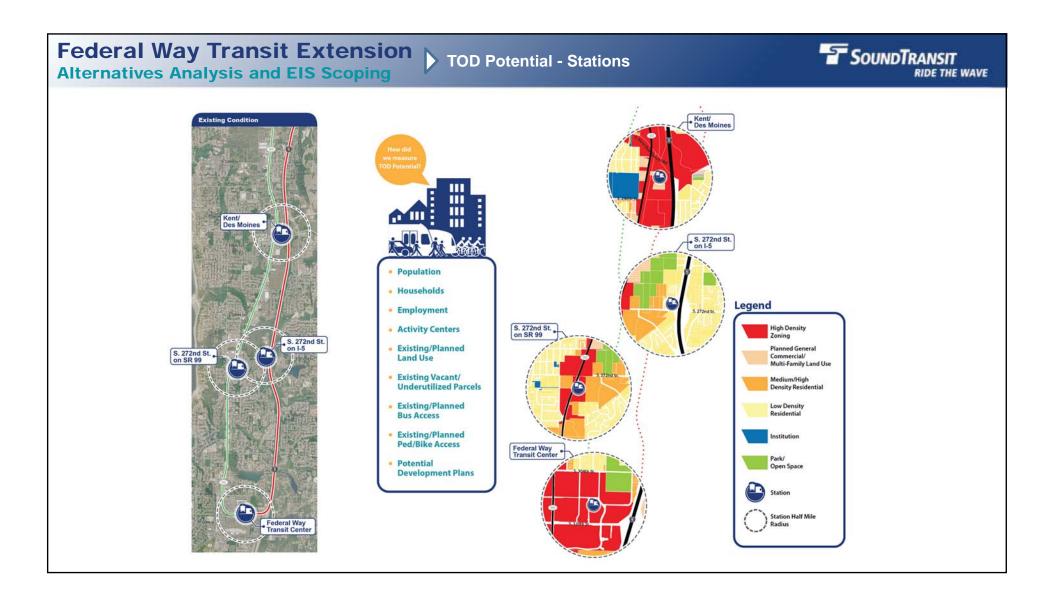


As part of the alternatives analysis, Sound Transit analyzed the transit oriented development (TOD) potential of the various alternatives. This analysis was conducted in accordance with Sound Transit's TOD policy. The assessment of TOD potential considered a range of issues. Both alignment alternatives and station location alternatives were assessed.



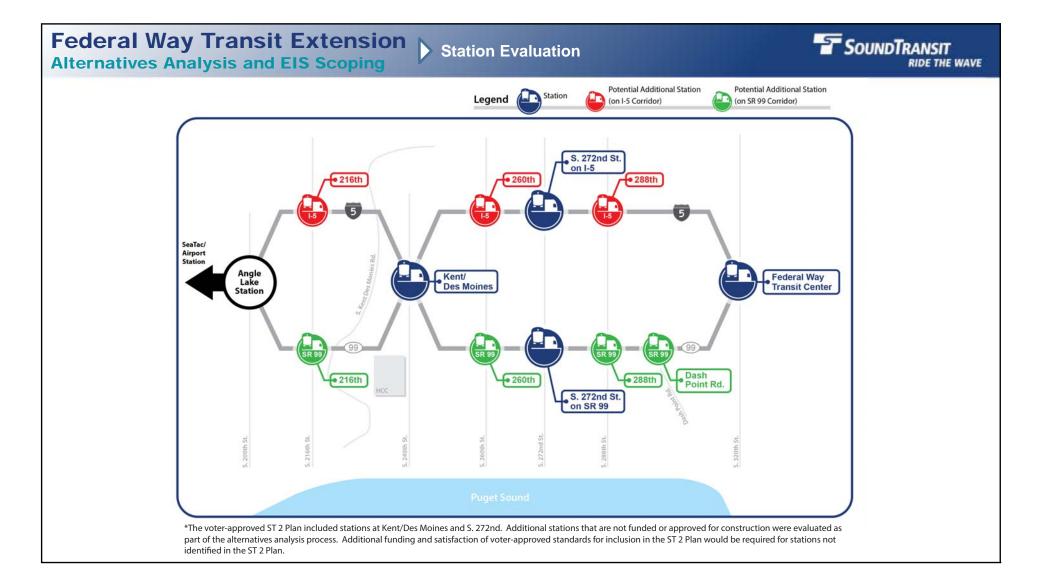


The graphic on the right illustrates the high density zoning and the planned commercial and multi-family land uses within ¼ mile of the alignment alternatives. TOD potential is generally higher along the SR 99 alignment alternatives.





The analysis of TOD potential for stations generally looked at the area within ½ mile of the station locations. The stations at Kent/Des Moines and the Federal Way Transit Center would generally be in the same location for all alternatives, but the South 272nd Street station would be in different locations for the SR 99 and I-5 alternatives. The South 272nd Street station on SR 99 would have higher TOD potential.





During the Early Scoping public comment period a number of potential additional station locations were suggested. Some were screened out because they were outside the study area, or in close proximity to existing locations. Seven locations were then evaluated in more detail (four along SR 99 and three along I-5). These additional stations were not identified in the ST2 Plan.

Federal Way Transit Extension Alternatives Analysis and EIS Scoping



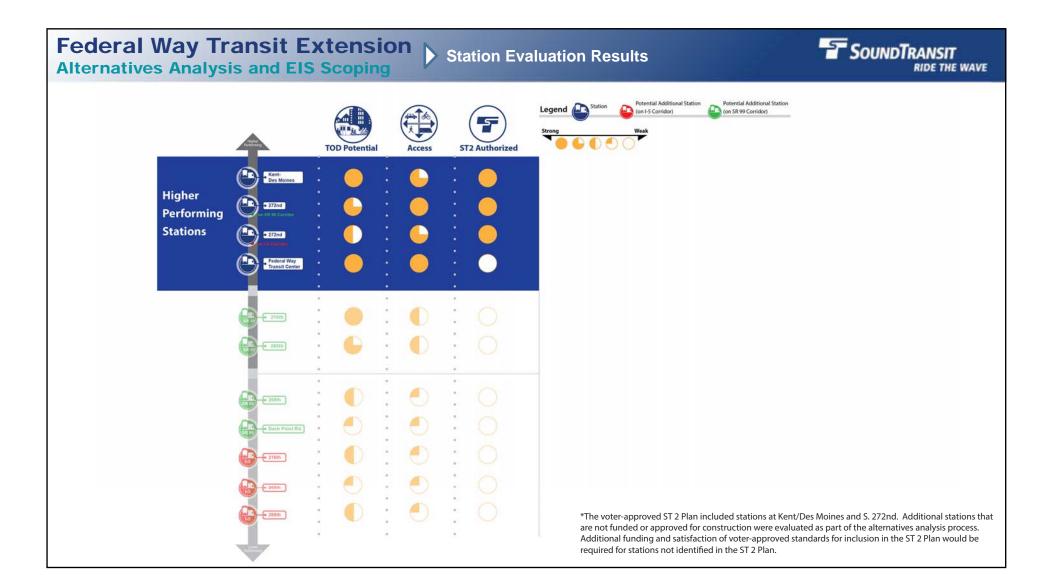




*The voter-approved ST 2 Plan included stations at Kent/Des Moines and S. 272nd. Additional stations that are not funded or approved for construction were evaluated as part of the alternatives analysis process. Additional funding and satisfaction of voter-approved standards for inclusion in the ST 2 Plan would be required for stations not identified in the ST 2 Plan.

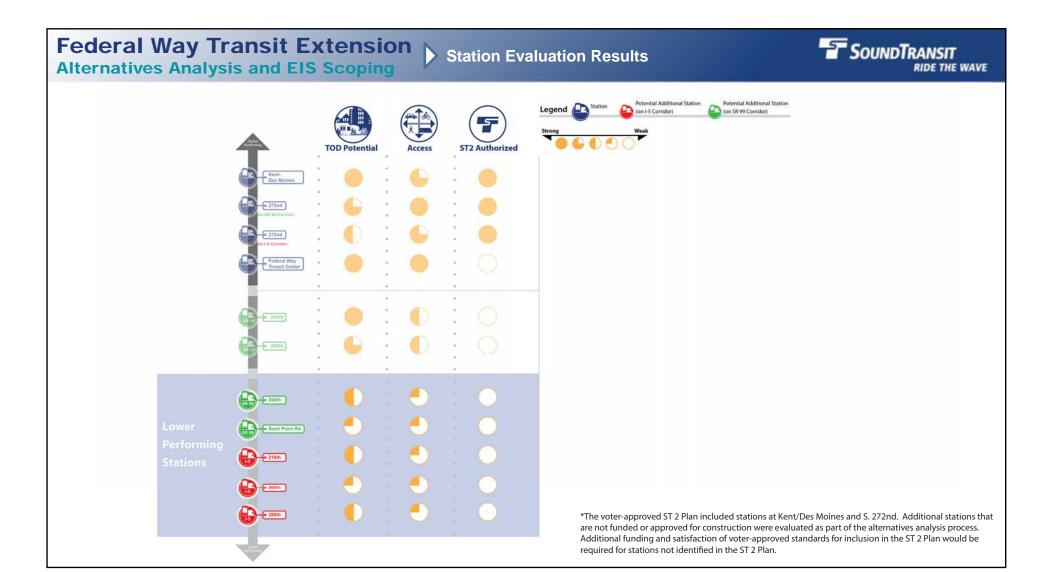


The station evaluation examined both TOD potential and multimodal access.



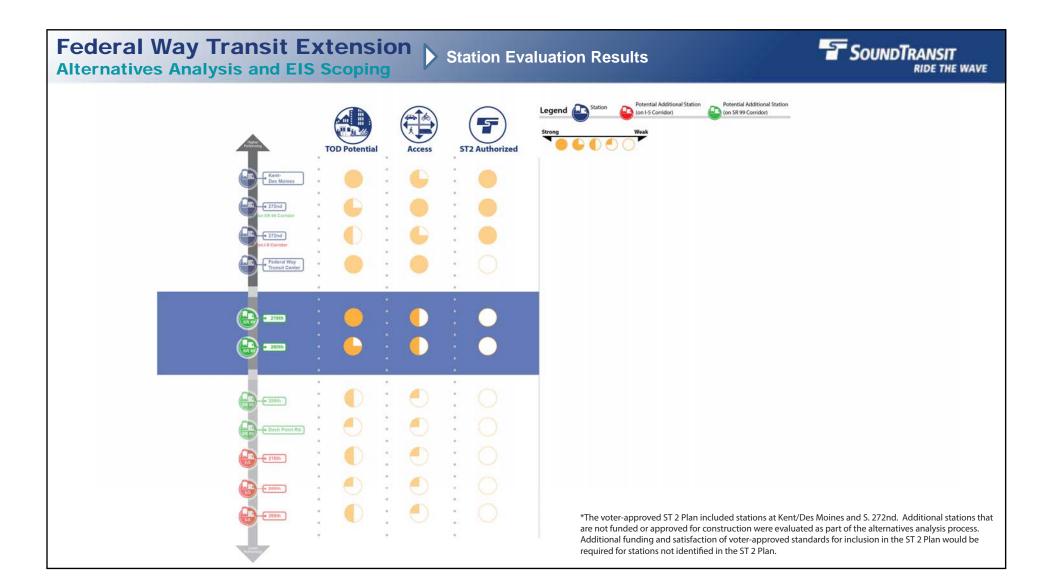


The station locations at Kent/Des Moines, South 272nd Street and the Federal Way Transit Center generally have good TOD potential and good access.



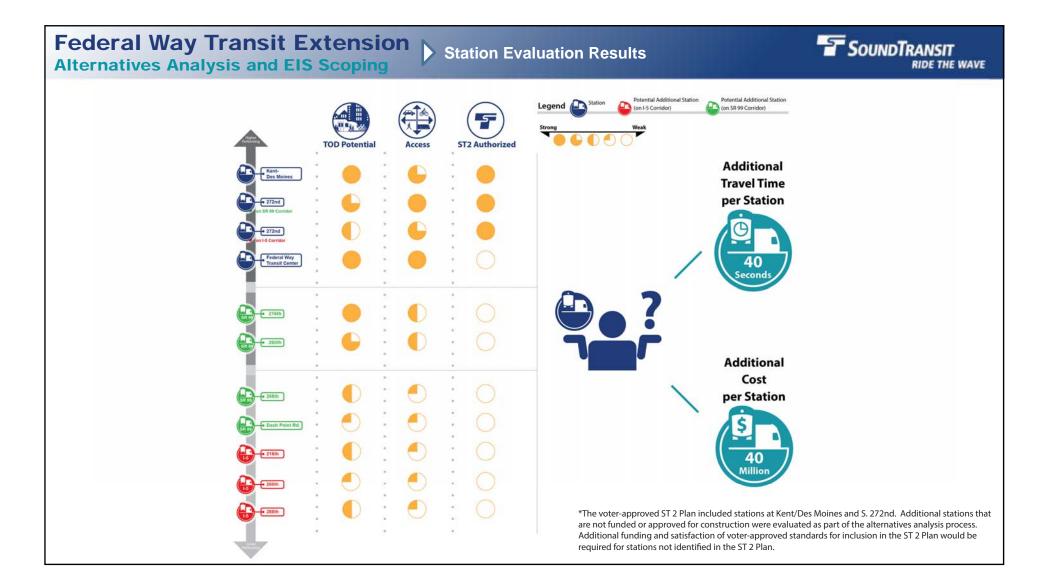


A number of the suggested additional station locations do not perform well. Generally, these locations have low density residential development around the station area and do not have good auto, bus, or pedestrian access.





Two of the suggested additional locations do perform well in terms of TOD potential (along SR 99 at South 216th Street and South 260th Street). They do not have as good access as the baseline locations.





Each additional station would increase the end-to-end travel time by about 40 seconds. The cost of constructing an additional station is about \$40 million.



Scoping Period:

June 14 - July 17, 2013





Federal Way Transit Center Plaza 31621 23rd Ave S. Federal Way, 98003





Parkside Elementary cafeteria 2104 S. 247th St. Des Moines, 98198





The results of the AA were presented to the public and agencies during the EIS Scoping period which lasted from June 14 to July 17, 2013. Public meetings were held at the locations and times noted above.



Scoping Period:

June 14 - July 17, 2013



Mail:

Kent Hale Sound Transit, 401 S Jackson St., Seattle, WA 98104



Email:

FWTE@soundtransit.org



Online:

Complete a scoping comment form at www.soundtransit.org/FWextension







Comments regarding the AA results and which alternatives should be studied further in the Draft EIS were submitted by the methods above.



Scoping meeting invitation sent to



91 Agency Staff (32 Agencies)

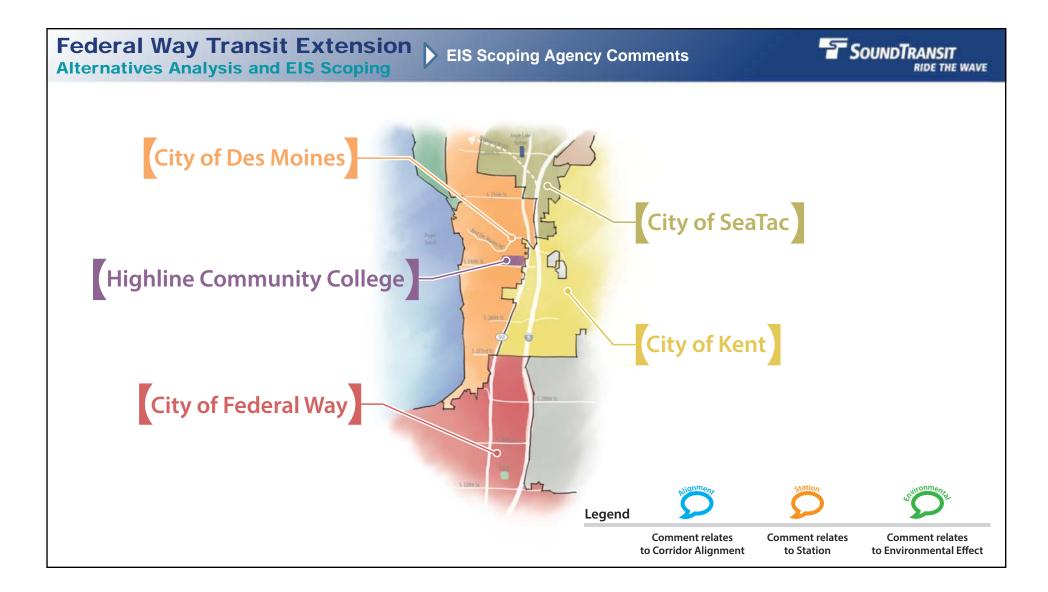
Comment letters received from



11 Public Agencies,
Jurisdictions, and Institutions

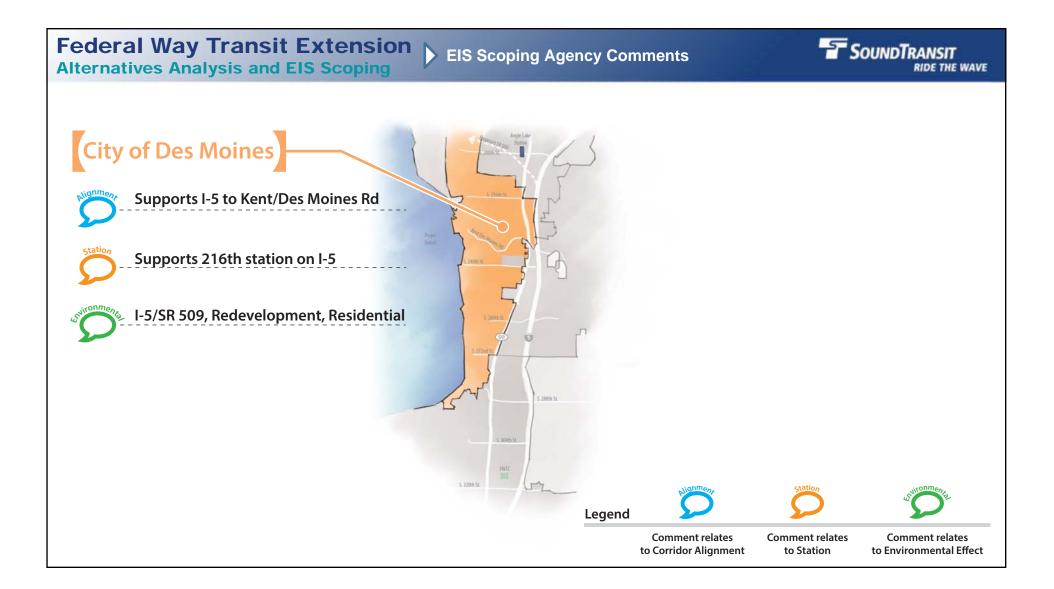


Comment letters were received from 11 agencies, jurisdictions and institutions. All scoping comments are documented in the *Federal Way Transit Extension Scoping Summary Report* (August 2013) which is available on the project website at **www.soundtransit.org/FWextension.**



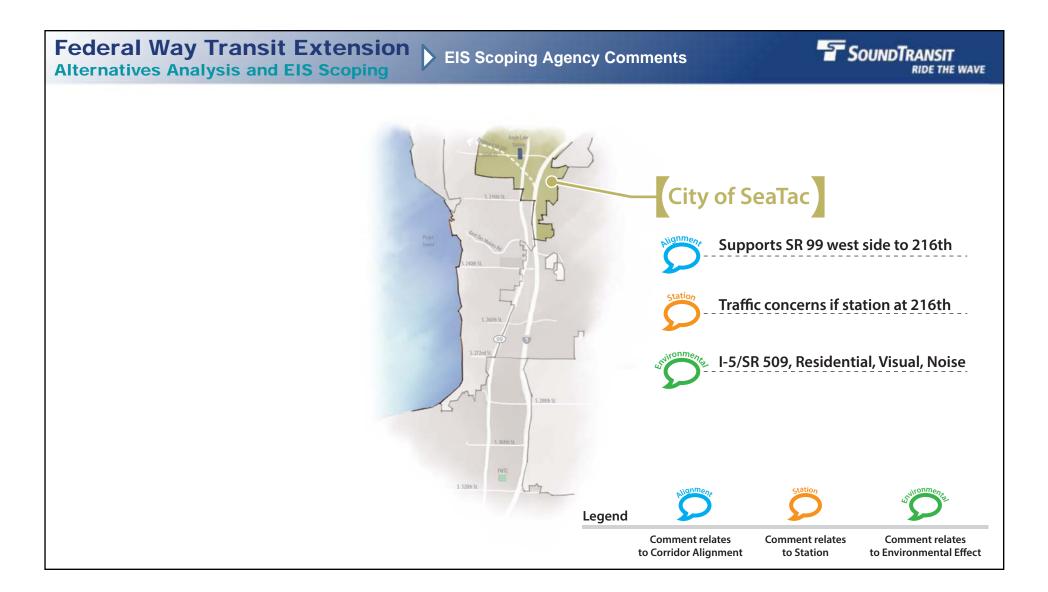


Several key stakeholders within the study area provided comments including the cities of Des Moines, Federal Way, Kent and SeaTac, as well as Highline Community College (HCC). Key comments relating to alignments, stations, and environmental effects are highlighted on the following pages.



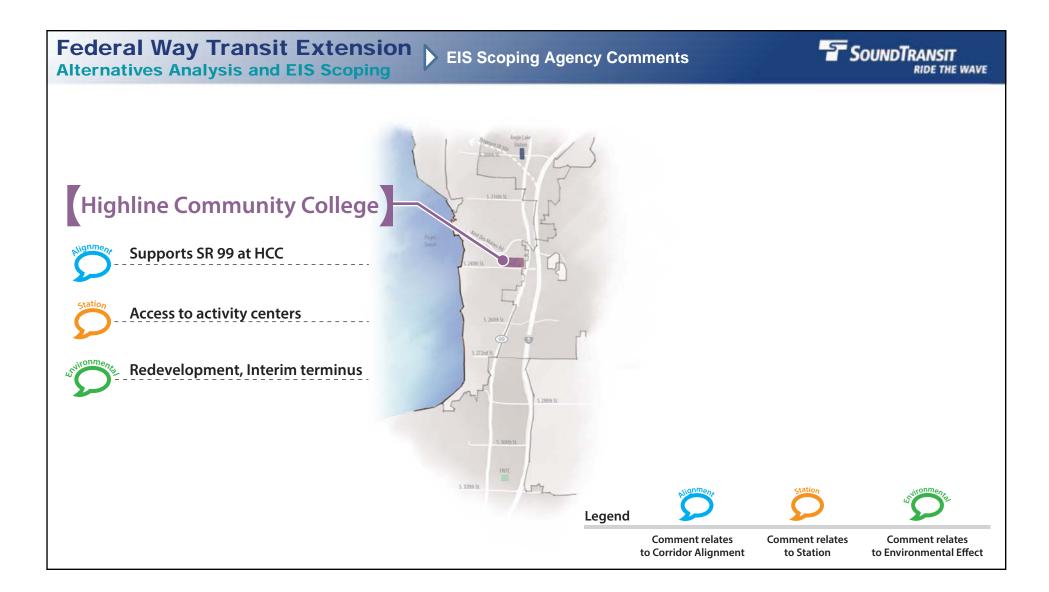


The City of Des Moines supports an I-5 alignment to Kent-Des Moines Road and an additional station at S. 216th Street on I-5. The city also supports stations near HCC on SR 99, and stations at South 260th Street and South 272nd Street on SR 99. Key concerns include potential conflict with future I-5/SR 509 expansion, and potential effects to underdeveloped commercial properties.



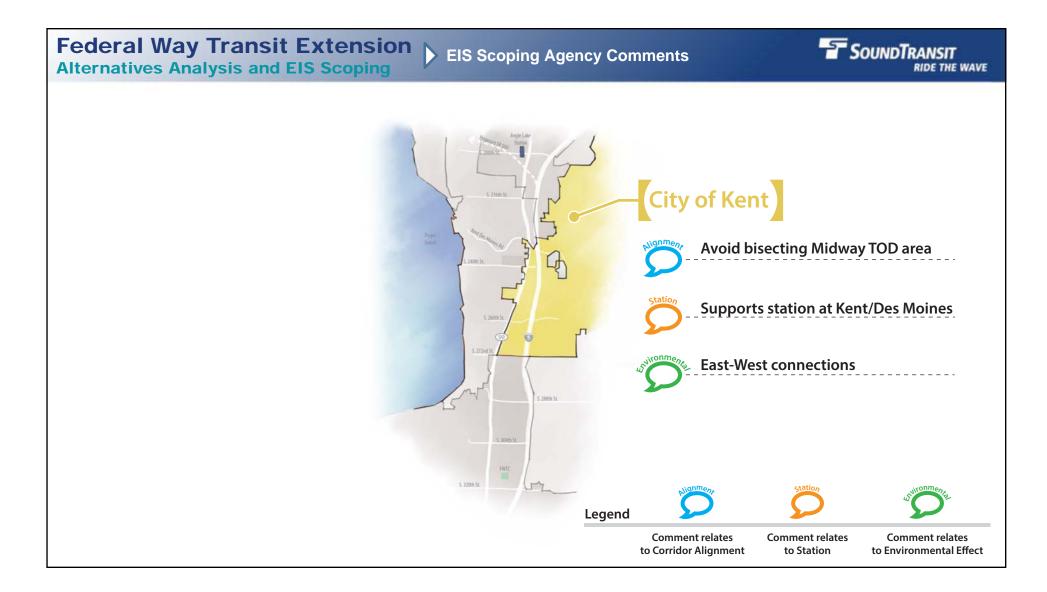


The City of SeaTac supports an alignment along the west side of SR 99 to S. 216th Street. Key concerns include potential effects to residential uses, land use effects of an additional station at 216th on I-5, and traffic effects of an additional station at 216th on SR 99 or I-5.



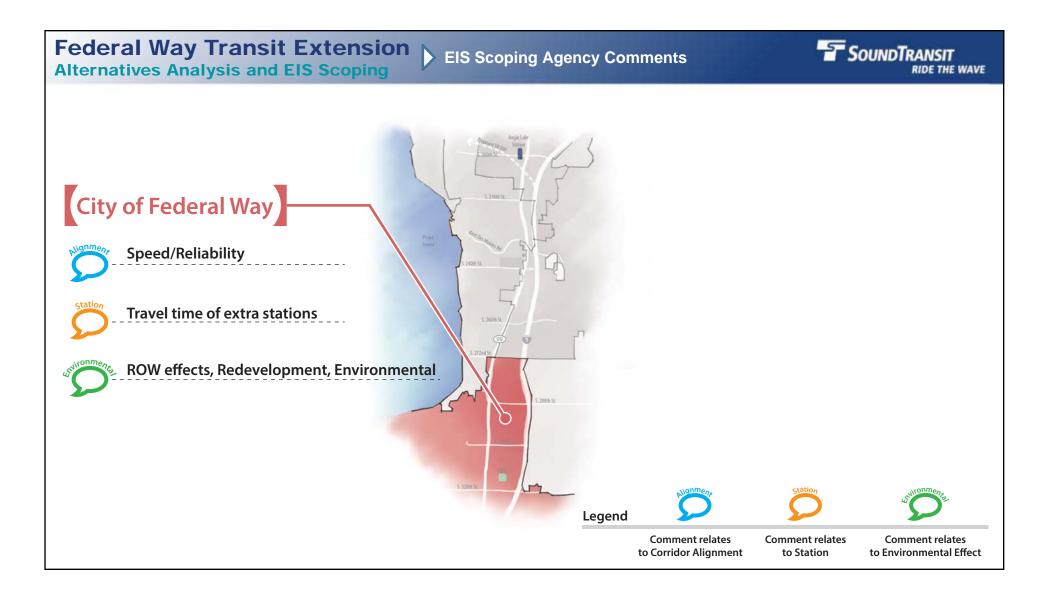


Highline Community College supports an alignment in close proximity to major activity centers along SR 99. Key concerns include economic development potential, parking, traffic congestion, pedestrian safety, and the implications of an interim terminus.





The City of Kent noted that potential alignments should not bifurcate the transit-oriented community envisioned in the Midway Subarea Plan (which extends from Kent-Des Moines Road to S. 240th Street between SR 99 and I-5). Key concerns include providing strong pedestrian connections to HCC and east/west connections from the light rail line to the Kent Valley.





The City of Federal Way noted travel speed and reliability as important considerations when considering alignments and additional stations. Key concerns include station design considerations, potential property takings, and effects to the natural environment.



Hosted 2 public meetings during Scoping period



Received 19 comment letters





from March to June in 2013

Received 113 online survey respones





Two public meetings were held during the EIS Scoping period and numerous neighborhood tabling events were held in the preceding months to increase awareness of the project. People provided comments via mail, email, comment forms, and through an online survey.

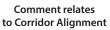


Highest-ranked additional stations are all On SR 99 alignment.

85% of survey responders said Sound Transit has identified the right station locations.









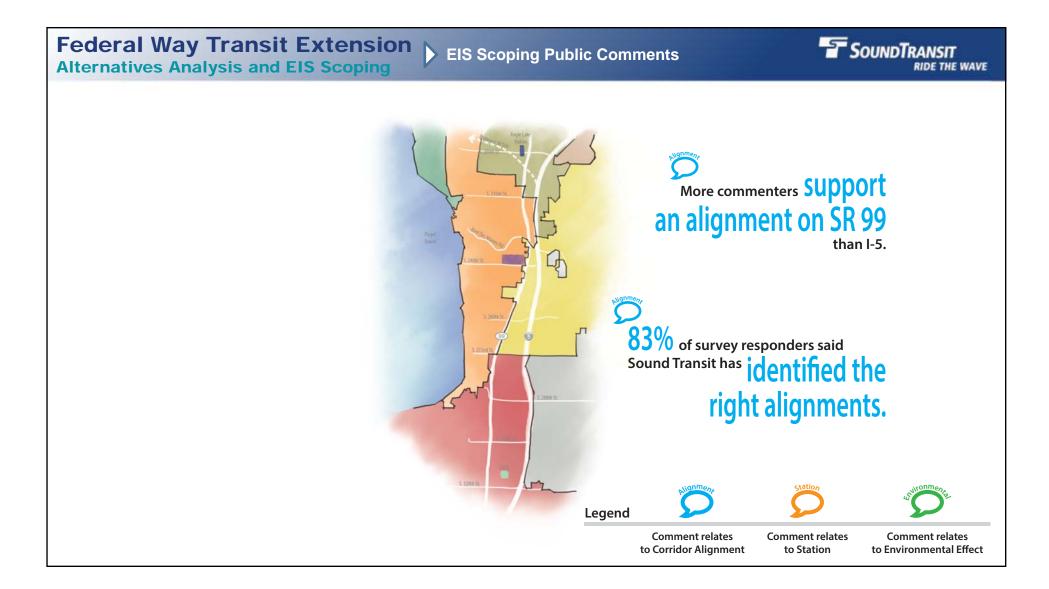
Comment relates to Station



Comment relates to Environmental Effect

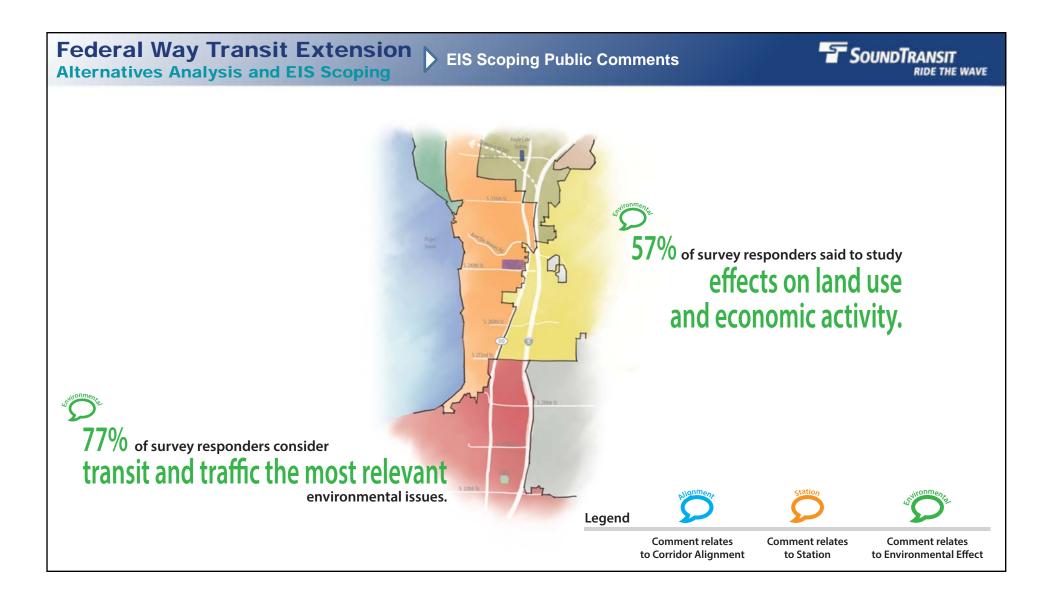


In addition to the stations at Kent/Des Moines, South 272nd and the Federal Way Transit Center, commenters were asked to prioritize which potential additional station locations they would use the most. In general, commenters expressed more support for additional stations along SR 99 than along I-5. Most commenters felt Sound Transit had identified the right station locations.



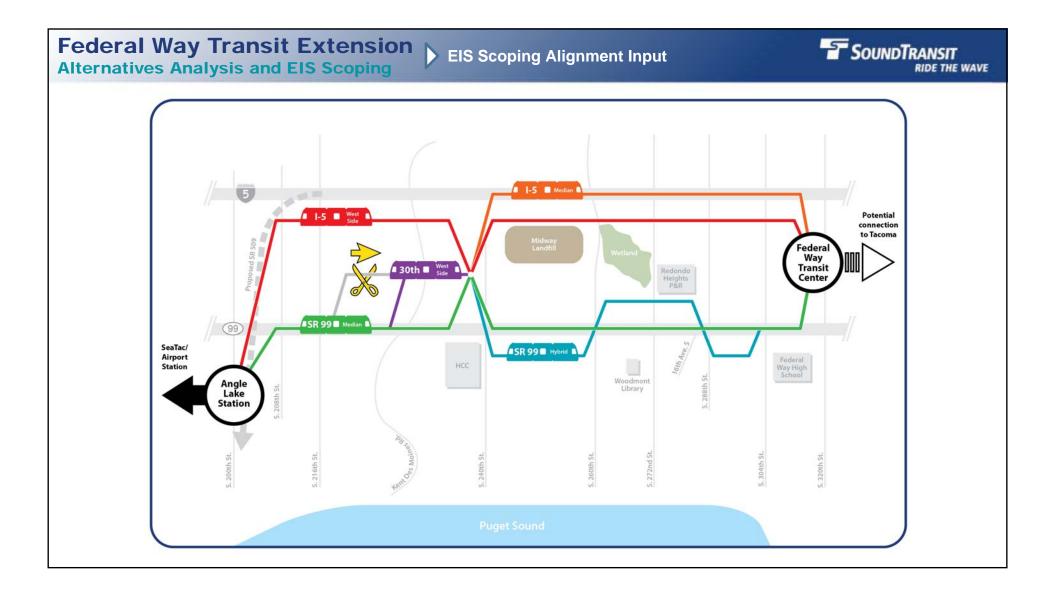


In general, commenters expressed more support for an SR 99 alignment than I-5. Most commenters felt Sound Transit had identified the right alignment alternatives.



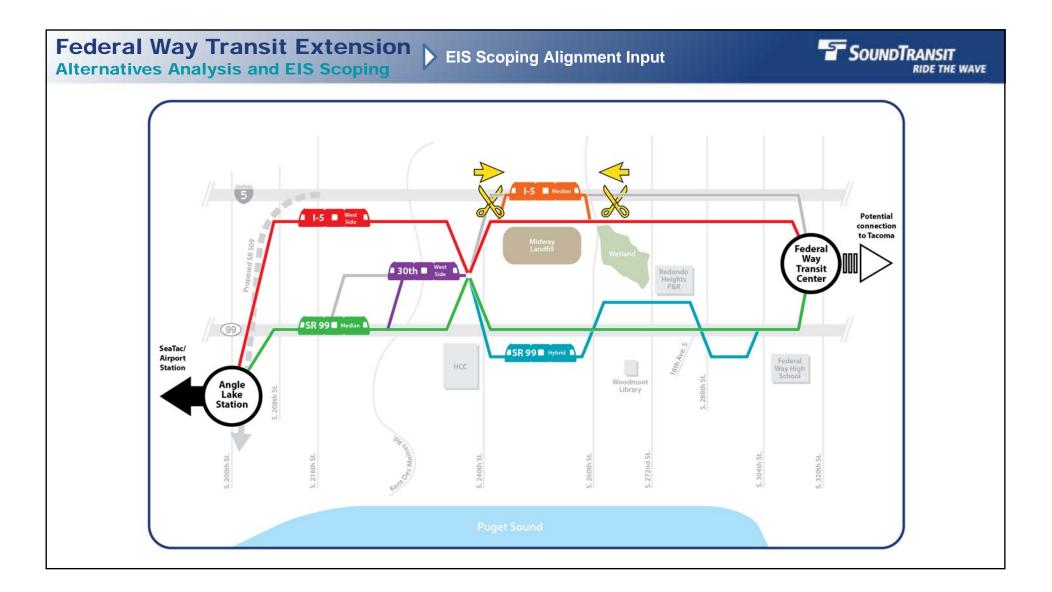


Most commenters felt that transit and traffic effects were the most important issues to examine in the EIS. Many commenters also felt that effects on land use and economic activity should be studied.



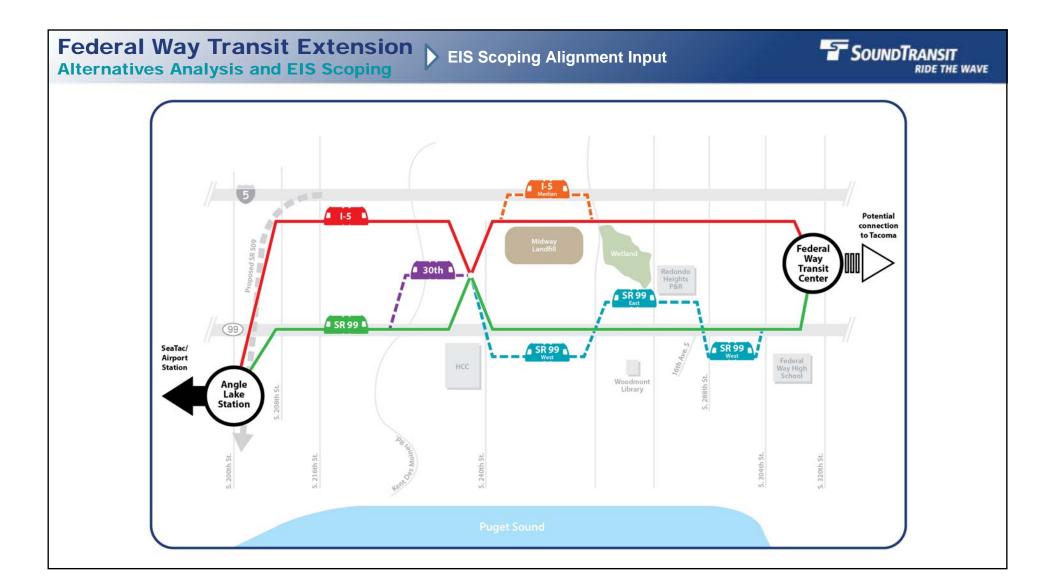


Based on the AA results, and input received during the EIS Scoping period, **the 30th Avenue alternative was shortened** to transition away from SR 99 near Kent-Des Moines Road (instead of near South 220th). This would limit potential effects to residential uses along 30th Avenue north of Kent-Des Moines Road.



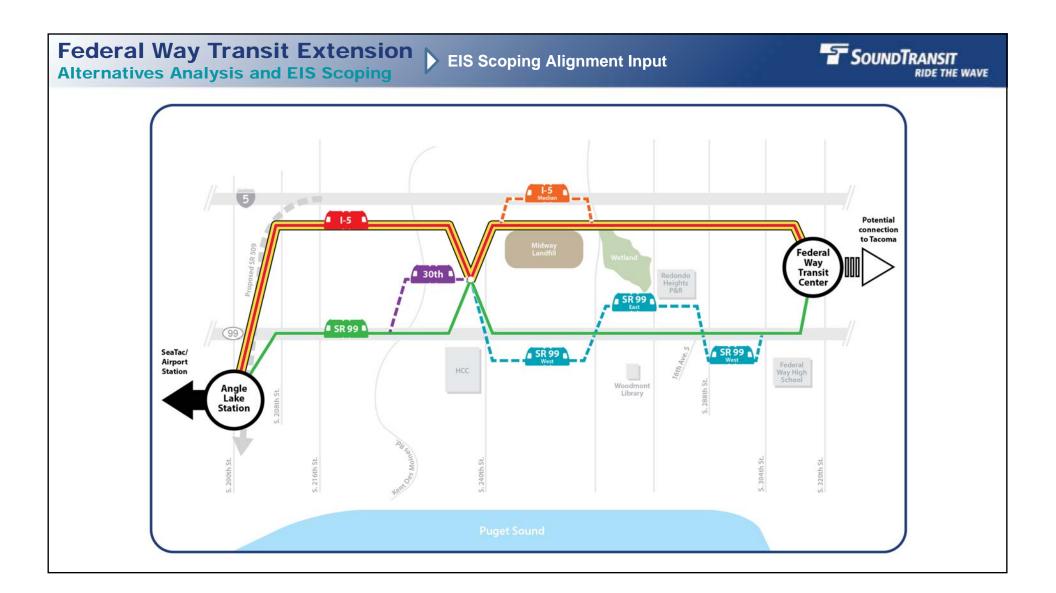


The **I-5 Median alternative was also modified** based on additional information. The alternative was shortened substantially to transition from the median of I-5 to the west side of I-5 just south of the landfill instead of near the Federal Way Transit Center. This would limit potential conflicts with future expansion of I-5 and minimize potential disruption to I-5 traffic during construction of the light rail guideway.



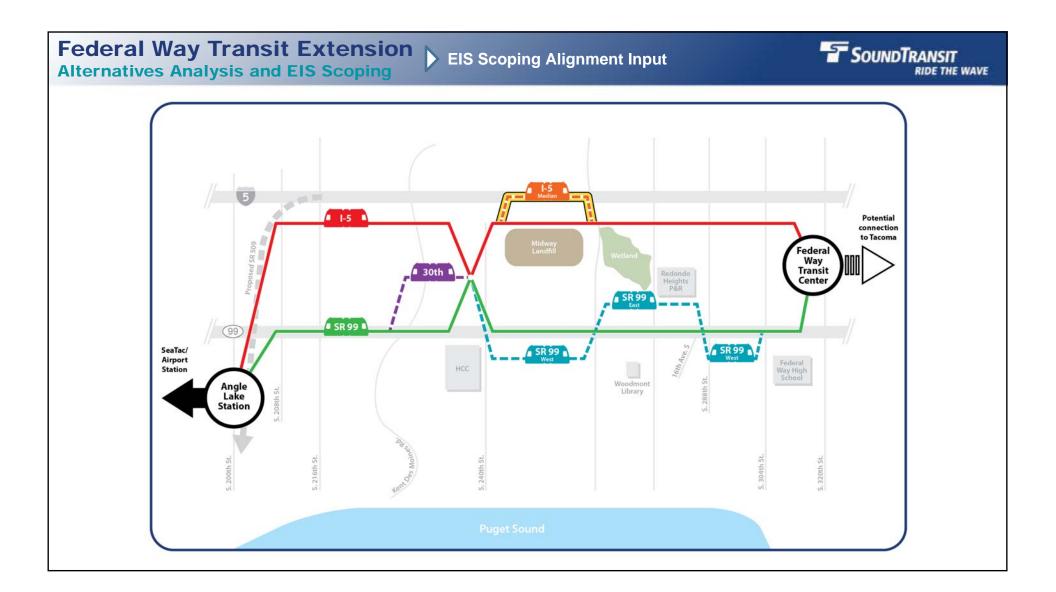


Given the AA results, and input received during the EIS Scoping period, the potential alternatives for consideration in the Draft EIS can now be defined as **four baseline alternatives** (I-5, SR 99, I-5/SR 99, and SR 99/I-5) with various design options. Each alternative is described on the following pages.



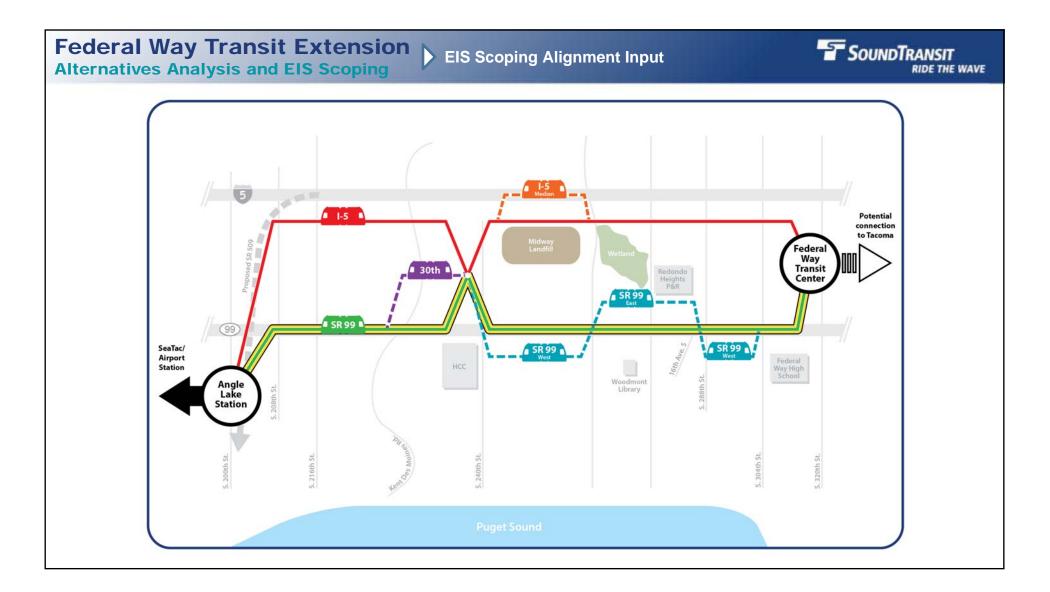


The **I-5 alternative** would extend south from Angle Lake Station along the west side of 28th Avenue, then turn east along the south side of the proposed SR 509 extension to I-5, then south along the west side of I-5, then turn west toward the Federal Way Transit Center.



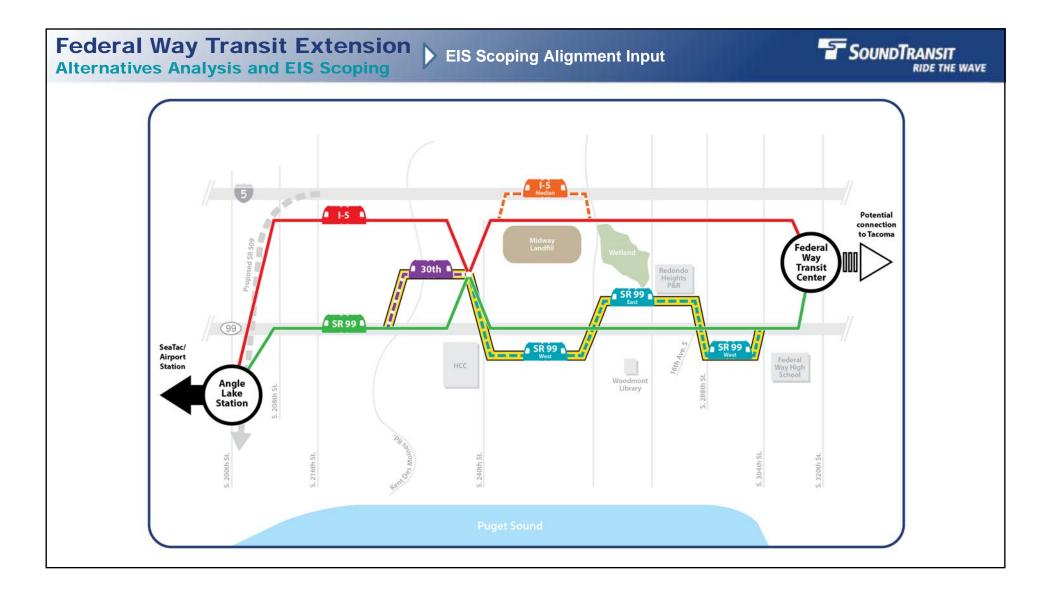


A potential **I-5 Median "design option"** would transition from the west side of the I-5 to the freeway median south of S. 240th Street to avoid the Midway Landfill. It would transition back to the west side of the I-5 south of the landfill.



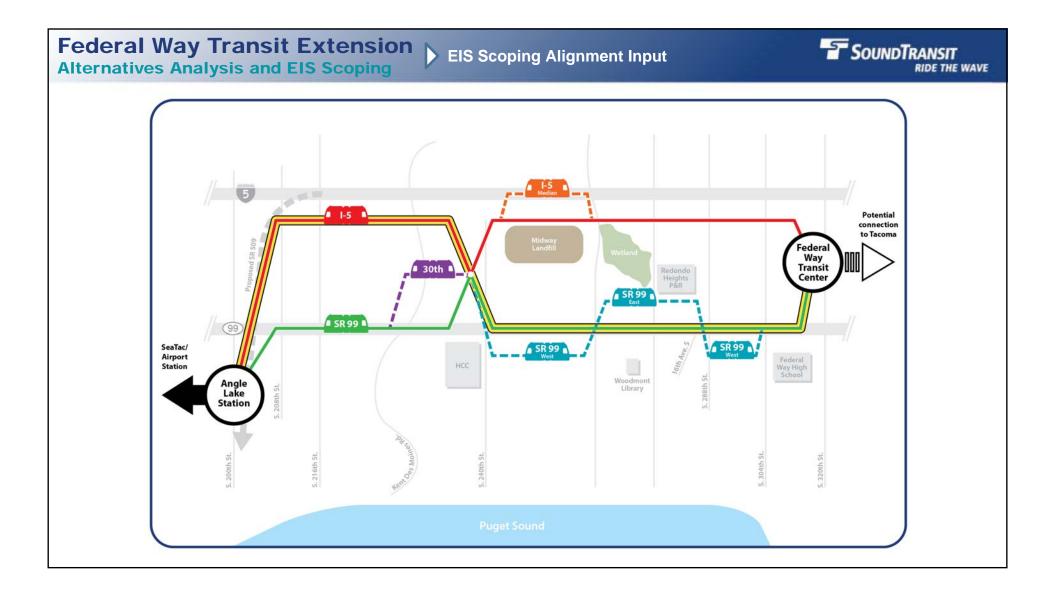


The **SR 99 alternative** would extend south from Angle Lake Station along the west side of 28th Avenue, then transition to the SR 99 median. The elevated guideway would transition to the east or west side of SR 99 at major intersections, as well as to access stations at Kent/Des Moines, S. 272nd Street, and the Federal Way Transit Center.



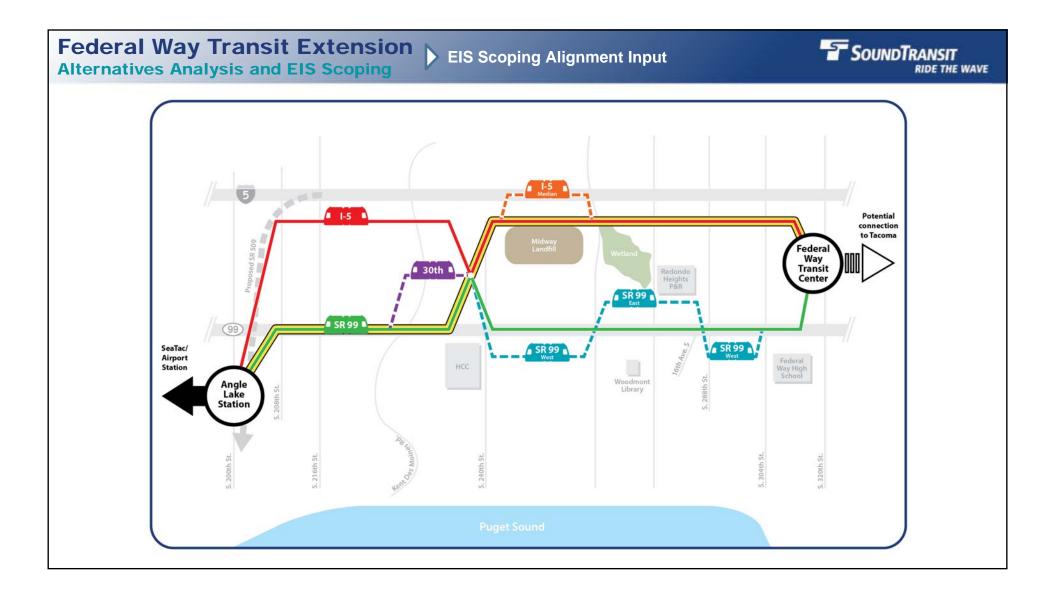


Potential **SR 99 "design options"** include a **30th Avenue** design option (from approximately Kent-Des Moines Road to S. 240th Street along 30th Avenue S.); an **SR 99 West Side** design option (from approximately S. 240th Street to S. 260th Street on the west side of SR 99); an **SR 99 East Side** design option (from approximately S. 260th Street to 16th Avenue S. on the east side of SR 99); and a **second SR 99 West Side** design option (from approximately 16th Avenue S. to S. 308th Street along the west side of SR 99).



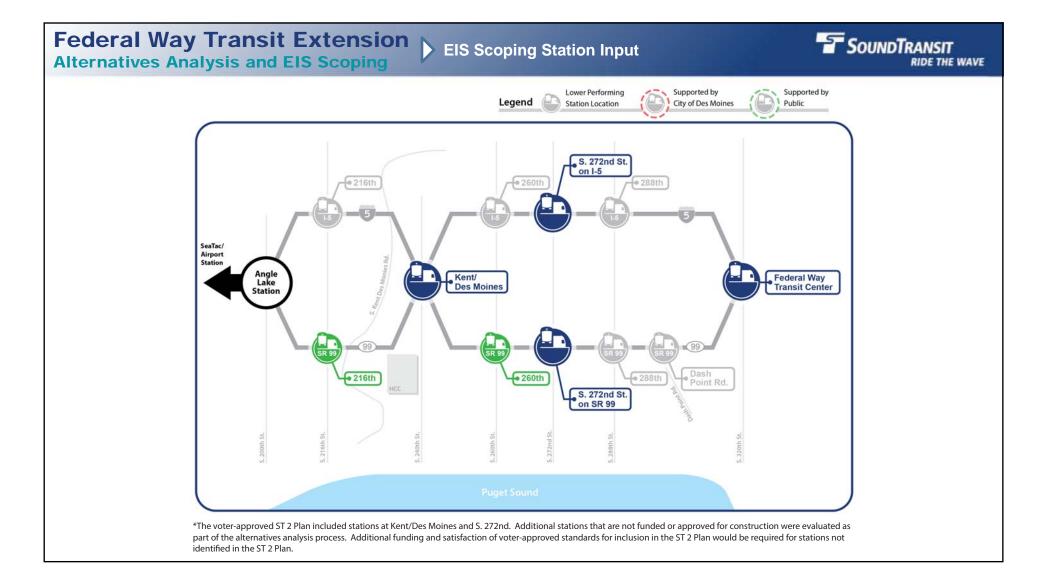


The **I-5/SR 99 alternative** would be identical to the I-5 alternative from the north end of the project area to approximately Kent-Des Moines Road, where the alignment would turn west to transition to SR 99. The alignment would then continue south along SR 99, following the same alignment as described above for the SR 99 alternative.



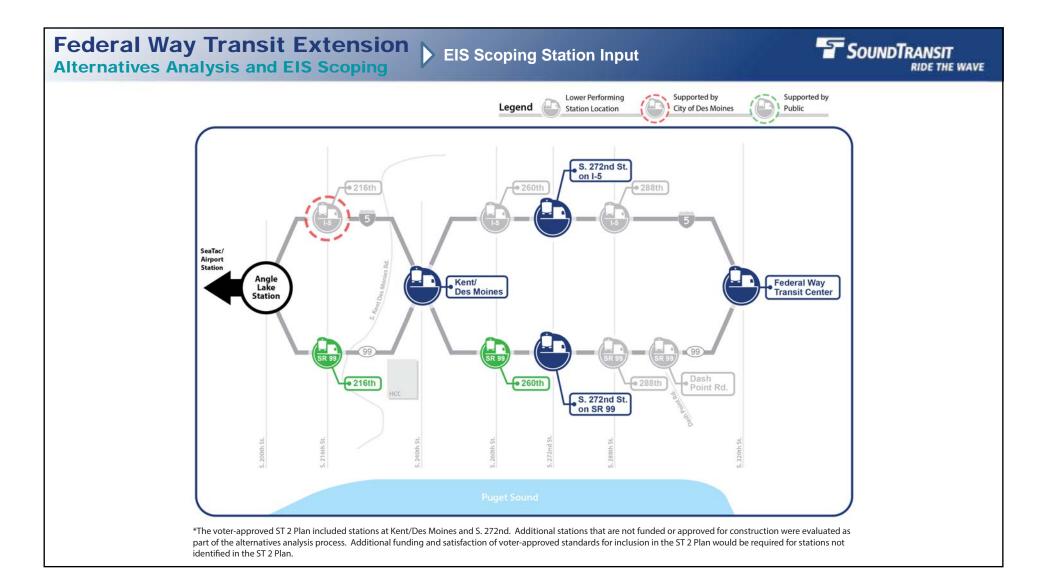


The **SR 99/I-5 alternative** would be identical to the SR 99 alternative from the north end of the project area to approximately Kent-Des Moines Road, where the alignment would turn east to transition to the west side of I-5. The alignment would then continue south along I-5, following the same alignment as described above for the I-5 alternative.



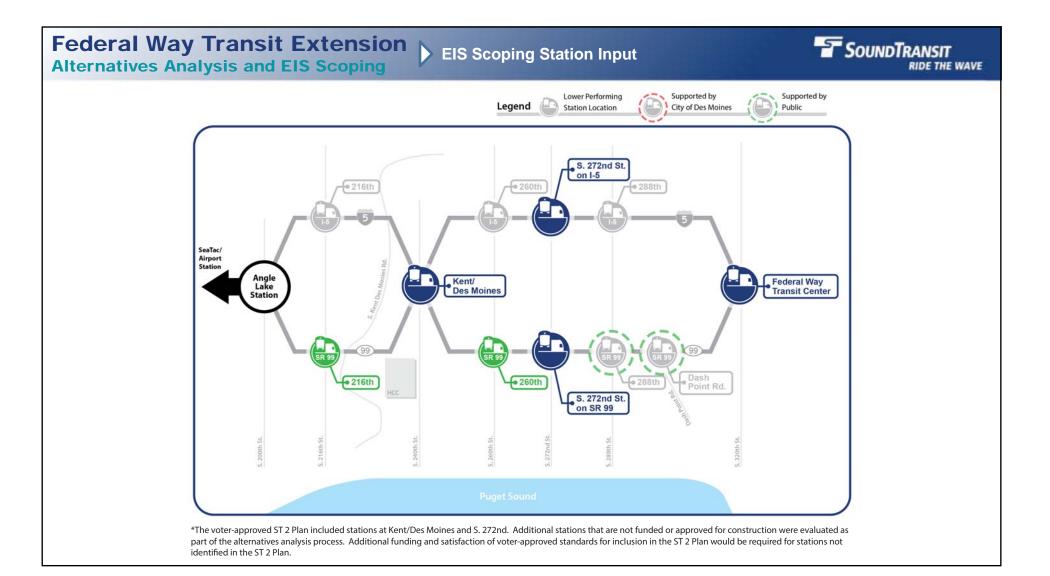


As described previously, seven potential additional station locations were evaluated during the AA (four along SR 99, and three along I-5). Two of the suggested additional stations performed well in terms of TOD potential (along SR 99 at South 216th Street and South 260th Street). The results of the station evaluation were presented during the EIS Scoping period.



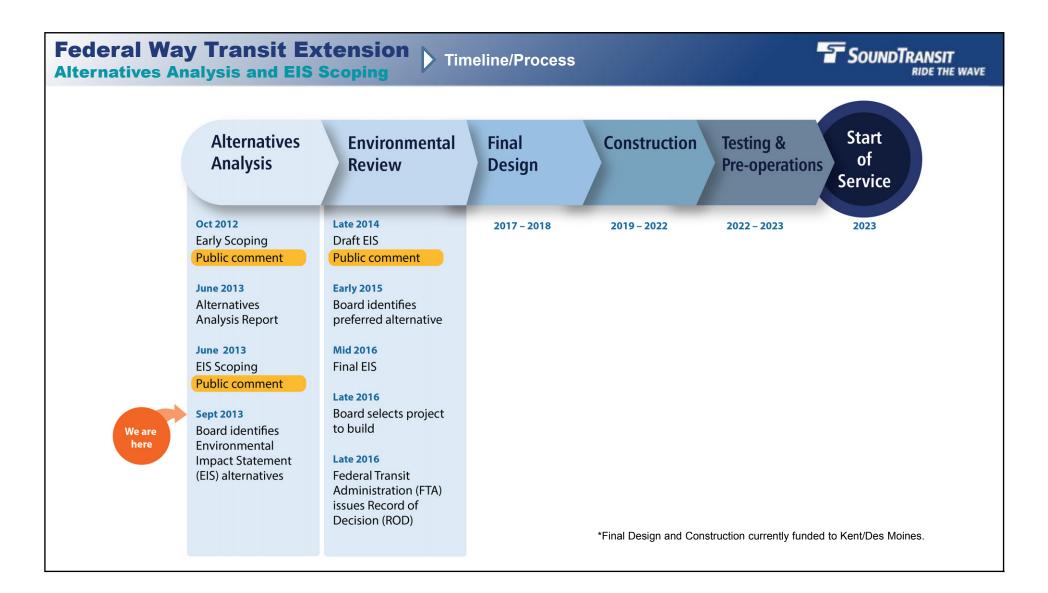


During the EIS Scoping period, the City of Des Moines expressed support for a potential additional station location at South 216th on I-5. This location had not performed well in the AA analysis.





In general, public comments expressed support for additional station locations along SR 99. Although supported by public comment, the locations at 288th and Dash Point Road did not perform well in the AA analysis.





Based on the results of the AA, and input received during the EIS Scoping period, the Sound Transit Board will identify which alternatives should be studied in more detail in the Draft EIS. The Draft EIS will be available for public comment in late 2014. A final decision on which alternative should be built will be made after publication of a Final EIS in 2016.





Additional information regarding the Federal Way Transit Extension is available on the project website at **www.soundtransit.org/FWextension**. To view the Level 1 and Level 2 Alternatives Screening reports and the EIS Scoping Summary Report, click on "Federal Way document archive" in the bottom right corner of the project home page.