4.0 Affected Environment and Environmental Consequences

This chapter discusses the affected environment and environmental consequences for the topics listed to the right. Each section begins with a summary of key findings by alternative. Each section then describes:

- The resource study area
- The affected environment
- The long-term impacts of each alternative considered in this Final EIS
- Mitigation measures for unavoidable impacts

The impacts of station or alignment options are described as an increase or decrease relative to the alternative(s) they are associated with.

Environmental Topics in Chapter 4

NEPA and SEPA regulations require that an EIS disclose direct, indirect, and cumulative impacts (i.e., effects) of a proposed action on the environment. *Direct impacts* are caused by the action and occur at the same time and place. *Indirect impacts* (sometimes called "secondary impacts") are caused by the action but are later in time or farther removed in distance. Examples include changes in land use patterns and related effects on air quality. Impacts can be either temporary (short-term), such as construction impacts, or permanent (long-term), such as property displacements or impacts due to light rail operations. This EIS divides the impacts analysis for each resource into long-term impacts (in Chapter 3 for transportation and Chapter 4 for environmental resources) and short-term construction impacts (Chapter 5).

A *cumulative impact* results from the proposed action's incremental impact when added to those of other past, present, and reasonably foreseeable future actions, regardless of what agency, business, or person undertakes such other actions. These impacts matter because the public and government agencies need to evaluate a proposed action and its alternatives in a broad perspective, including how the project might interact with impacts that persist from past actions, with present-day activities, and with other projects that are planned

but have not been built yet ("reasonably foreseeable future actions"). Cumulative impacts are discussed in Chapter 6.

This Final EIS specifies potential mitigation measures in each section. Appendix H, Mitigation Plan, compiles all the Preferred Alternative mitigation measures for all resources.

4.1 Acquisitions, Displacements, and Relocations

4.1.1 Summary

All FWLE alternatives and options would acquire property, displacing and relocating some uses. The Preferred Alternative would displace the fewest businesses and the second most residences. Table 4.1-1 shows potential property acquisitions and displacements for each alternative and a range of impacts with the station and/or alignment options. The range shows the fewest and the most potential impacts for each alternative when station or alignment options are considered.

TABLE 4.1-1
Summary of Properties Affected and Displacements by Alternative

	Number of Potential Properties Affected (Range with Options)[a]	Number of Business Displacements (Range with Options)	Number of Residential Units Displaced (Range with Options)
Preferred Alternative	**211** (151-211)	**42** (7-42)	**196** (139-258)
SR 99 Alternative	**292** (239-321)	**101** (80-146)	**36** (36-108)
SR 99 to I-5 Alternative	**119** (110-126)	**46** (21-53)	**108** (108-154)
I-5 to SR 99 Alternative	**339** (296-339)	**96** (82-114)	**203** (203-210)

[a] Includes full and partial property acquisitions.

The SR 99 Alternative would displace the most businesses. The I-5 to SR 99 Alternative would have the most property acquisitions, the most residential displacements, and the most total displacements (business and residential combined). The tables and maps in Appendix D4.1 identify each potentially affected parcel by alternative.

4.1.2 Introduction

To build the FWLE, Sound Transit would acquire public and private property for guideways, stations, parking, and other facilities. The project would displace and relocate some residential, commercial, and public uses. This section summarizes likely property acquisitions based on current conceptual designs. These impacts are representative and are not the final determination on property acquisition.

This section discusses two types of property acquisition:

- **Partial acquisition:** Sound Transit would acquire part of a parcel and generally not displace the existing use, although sometimes partial acquisitions do displace businesses or residential units.
- **Full acquisition:** Sound Transit would acquire the full parcel and displace the current use. Full acquisitions sometimes occur even when the project does not need the whole parcel because the existing use would be substantially impaired (e.g., loss of parking or access).

Study Area

The study area for the acquisitions, displacements, and relocations analysis includes the parcels in the project footprint (i.e., light rail alignments, stations, and facilities; associated road improvements; and staging areas) that would be permanently acquired for public right-of-way.

Sound Transit would acquire property for temporary staging areas used during construction. These areas are included in this section because the property acquisition and the displacements would be permanent. Following construction, many of these properties could be available for redevelopment if sold as surplus land by Sound Transit.

The FWLE would require temporary construction easements, permanent easements, and the use of public rights-of-way owned by WSDOT and the cities of SeaTac, Des Moines, Kent, and Federal Way. (This Final EIS does not attempt to calculate the likely area of temporary and all permanent easements, which is speculative at this level of design.) Approval from WSDOT and the Federal Highway Administration would be required for use of I-5 right-of-way. Other impacts associated with acquisitions and displacements are discussed in Section 4.2, Land Use; Section 4.3, Economics; and Section 4.4, Social Impacts, Community Facilities, and Neighborhoods.

Sound Transit's *Real Estate Property Acquisition and Relocation Policy, Procedures, and Guidelines* (Sound Transit, 2013) guides its compliance with federal and state property acquisition and displacement laws (see text box), so that property owners are treated uniformly and equitably.

Just Compensation and Relocation Assistance

The federal Uniform Relocation Assistance and Real Property Acquisition Policies Act and Chapter 8.26 of the Revised Code of Washington both require Sound Transit to pay property owners "just compensation" for property the agency acquires. They also specify when Sound Transit must provide relocation assistance to residential or business tenants who are displaced by the project.

4.1.3 Affected Environment

The FWLE corridor has residential, commercial, and industrial development with some public and vacant properties. Properties along I-5 are primarily residential, while properties along SR 99 are primarily commercial. Current and projected land uses in the corridor are described in Section 4.2, Land Use.

4.1.4 Environmental Impacts

Sound Transit overlaid the footprint of each alternative on parcel data from King County Department of Assessments to identify affected parcels. Appendix D4.1 provides further information on the potentially affected parcels.

Sound Transit evaluated the area needed from each parcel to assess potential full or partial acquisition. It verified the current land use, including the number of businesses or residences on affected parcels, using 2015 King County Assessor data and field verification (April 2013, February 2014, and December 2015).

The estimates in this section reflect conditions at the time of analysis and the early level of project design. Because property uses could change between the EIS and construction, as could details of the design, the number and type of displacements could also change. During final design, Sound Transit would prepare detailed assessments of acquisitions, uses, underlying ownership, and the parties involved in displacements for the alternative selected.

4.1.4.1 No Build Alternative

Under the No Build Alternative, the SR 509 Extension Project would displace approximately 100 residences in the Pacific Ridge neighborhood. The FWLE would not have any property acquisitions or displacements.

4.1.4.2 Build Alternatives

The following subsections describe for each alternative the direct and indirect impacts associated with property acquisition. Temporary property easements related to construction are discussed in Chapter 5.

Direct Impacts

Table 4.1-2 shows the number of property acquisitions by land use type and by partial or full acquisition. It also presents the number of displaced businesses and residences for each alternative. Impacts for station and alignment options are shown as an increase or decrease relative to the associated alternative.

Because most of the partial acquisitions are small “sliver” acquisitions, even alternatives with many acquisitions might not have material impacts because most would not substantially affect property use or result in displacements. The total area that would be converted to public transportation use is discussed in Section 4.2, Land Use, and is summarized in Table 4.2-1.

TABLE 4.1-2
Number of Potential Parcels Affected and Displacements by Alternative

Alternative		Number of Parcels Affected	Single-Family		Multi-Family		Commercial and Industrial		Public and Institutional		Vacant		Total		Displacements	
			Partial	Full	Partial	Full	Partial	Full	Partial	Full	Partial	Full	Partial	Full	Business	Residential
Preferred Alternative		**211**	**32**	**20**	**20**	**15**	**17**	**25**	**24**	**25**	**17**	**16**	**110**	**101**	**42**	**196**
Kent/Des Moines Station Options	Kent/Des Moines At-Grade Station	-37	-3	-1	-1	-3	-5	-14	-2	—	-5	-3	-16	-21	-16	-57
	Kent/Des Moines I-5 Station	-33	—	-1	-2	—	-8	-8	-3	—	-4	-7	-17	-16	-12	+42
Landfill Median Alignment Option		-8	-3	+1	—	—	-3	—	+1	—	-3	-1	-8	—	—	+1
S 272nd Star Lake Elevated Station Option		-3	-3	--	—	—	—	—	—	—	--	—	-3	—	—	—
S 317th Elevated Alignment Option		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Federal Way City Center Station Options	Federal Way I-5 Station	-7	-3	—	--	—	-2	-2	—	-1	+1	—	-4	-3	-4	—
	Federal Way S 320th Park-and-Ride Station	-12	-1	-1	—	—	-2	-9	+1	—	+1	-1	-1	-11	-19	+19
SR 99 Alternative		**292**	**4**	**—**	**16**	**2**	**157**	**38**	**14**	**2**	**47**	**12**	**238**	**54**	**101**	**36**
S 216th Station Options	S 216th West Station	+6	—	—	-1	—	-2	+4	—	—	+4	+1	+1	+5	+13	—
	S 216th East Station	+5	—	—	+4	+1	-2	+3	—	—	-1	—	+1	+4	+5	+26
Kent/Des Moines Station Options	Kent/Des Moines HC Campus Station	+19	—	+18	+4	+1	-5	-3	+1	+1	+2	—	+2	+17	-7	+39
	Kent/Des Moines HC from S 216th W Station	+23	—	+18	+2	+1	-15	5	-5	+2	+13	+2	-5	+28	+14	+44
	Kent/Des Moines SR 99 Median Station	+1	—	—	+1	+1	+7	-7	-1	-1	+1	—	+8	-7	+2	+14

TABLE 4.1-2
Number of Potential Parcels Affected and Displacements by Alternative

Alternative		Number of Parcels Affected	Single-Family		Multi-Family		Commercial and Industrial		Public and Institutional		Vacant		Total		Displacements	
			Partial	Full	Partial	Full	Partial	Full	Partial	Full	Partial	Full	Partial	Full	Business	Residential
	Kent/Des Moines SR 99 East Station	-9	-1	—	+1	+2	-5	-5	—	-1	—	—	-5	-4	+8	+34
S 260th Station Options	S 260th West Station	-15	—	—	—	—	-25	+12	-2	+1	-5	+4	-32	+17	+18	—
	S 260th East Station	-6	—	—	—	—	-8	+9	-3	—	-6	+2	-17	+11	+18	+3
S 272nd Redondo Trench Station Option		-22	+2	+4	+2	—	-25	+6	-5	—	-10	+4	-36	+14	-1	+4
Federal Way SR 99 Station Option		-7	—	—	—	—	-13	+4	-1	—	+3	—	-11	+4	-13	—
SR 99 to I-5 Alternative		**119**	**14**	**8**	**6**	**3**	**34**	**18**	**10**	**10**	**14**	**2**	**78**	**41**	**46**	**108**
S 216th Station Options	S 216th West Station	+6	—	—	-1	—	-2	+4	—	—	+4	+1	+1	+5	+13	—
	S 216th East Station	+5	—	—	+4	+1	-2	+3	—	—	-1	—	+1	+4	+5	+26
Landfill Median Alignment Option		-5	-1	+1	—	—	-2	—	-1	—	-2	—	-6	+1	-6	+1
Federal Way City Center Station Options	Federal Way I-5 Station	+1	—	—	-1	—	-2	+4	-1	--	-1	+2	-5	+6	-4	—
	Federal Way S 320th Park-and-Ride Station	-4	—	-1	+1	—	-2	-3	--	+1	-1	+1	-2	-2	-19	+19
I-5 to SR 99 Alternative		**339**	**15**	**11**	**23**	**17**	**133**	**34**	**25**	**17**	**47**	**17**	**243**	**96**	**96**	**203**
S 260th Station Options	S 260th West Station	-14	-1	—	—	—	-21	+7	-1	-1	—	+3	-23	+9	+11	—
	S 260th East Station	-7	-1	—	—	—	-8	+9	-3	—	-6	+2	-18	+11	+18	+3
S 272nd Redondo Trench Station Option		-22	+1	+4	+2	—	-24	+6	-5	—	-10	+4	-36	+14	-1	+4
Federal Way SR 99 Station Option		-7	—	—	—	—	-13	+4	-1	—	+3	—	-11	+4	-13	—

Preferred Alternative

The Preferred Alternative would generally be in WSDOT right-of-way south of Kent-Des Moines Road, reducing the overall number of properties affected. It has the second largest number of residential displacements (about 200) compared to other alternatives. The majority of these would occur at multi-family residences, with impacts affecting parts of two large apartment or condominium complexes and several small apartment complexes (four to eight units) north of Kent-Des Moines Road. Approximately half of these displacements would also occur with the No Build Alternative because of the SR 509 Extension. South of Kent-Des Moines Road, most displacements are in the Kent/Des Moines Station area, including two small apartment complexes and one mobile home park with 21 units.

The Preferred Alternative would displace about 40 businesses. Most of these are in the Kent/Des Moines and Federal Way Transit Center station areas. Most of the public/institutional properties affected are vacant and were acquired by WSDOT for the SR 509 Extension Project or are owned by public utilities. The exceptions are the Park of the Pines Church and Conference Center, Highline Water District property, Star Lake Park-and-Ride, Mark Twain Elementary School, and the King County Ridge West Open Space (see Section 4.17, Parkland and Open Space; Chapter 5, Construction; and Appendix E, Section 4(f) and Section 6(f) Evaluation for more information).

The two **Kent/Des Moines station options** would displace fewer businesses than the Preferred Alternative because the stations and alignments remain adjacent to I-5. The **Kent/Des Moines At-Grade Station Option** would also reduce residential displacements because it would be on mostly vacant land south of S 240th Street. The **Kent/Des Moines I-5 Station Option** would increase residential displacements due to displacing two mobile home parks with a total of 56 units, and a 40-unit apartment building.

The **I-5 Landfill Median Alignment Option** would change one partial residential acquisition to full, for emergency access, displacing one more residential unit. The **S 272nd Star Lake Elevated Station Option** would affect fewer properties but not change displacements. The **S 317th Elevated Alignment Option** would not have any change in properties affected or displacements.

The **Federal Way I-5 Station Option** would impact four fewer businesses but not change residential displacements. The **Federal Way S 320th Park-and-Ride Station Option** would reduce business displacements but displace 19 more mobile homes.

SR 99 Alternative

For the SR 99 Alternative, property acquisitions would occur on both sides of SR 99, generally for widening intersections and for stations and associated parking. This alternative would have the most business displacements but the fewest residential displacements.

"Public/institutional" properties affected include full acquisitions of the Highline College Outreach Center and the Redondo Heights Park-and-Ride, both of which would be acquired for stations. Road widening would require partial acquisitions at three churches, a childcare center, the Woodmont Public Library, and Federal Way High School. No buildings would be affected at these locations. Section 4.4, Social Impacts, Community Facilities, and Neighborhoods, and Section 4.14, Public Services, discuss impacts on these resources.

The **S 216th West Station Option** would have additional business displacements but no additional residential displacements. The **S 216th East Station Option** would displace additional businesses and 26 units from a mobile home park.

The **Kent/Des Moines HC Campus Station Option** would displace fewer businesses but would displace 18 additional single-family residences and one additional mobile home park with 21 units. If this station option were selected in combination with the S 216th West Station Option, there would be four additional mobile homes and one additional single-family home displaced. The **Kent/Des Moines SR 99 Median Station Option** would increase business displacements and displace one additional apartment building with 14 units. The **Kent/Des Moines SR 99 East Station Option** would increase business displacements and would displace two additional mobile home parks with 34 units.

The **S 260th Street West Station Option** would increase business displacements but not change residential displacements. The **S 260th East Station Option** would increase business displacements and single-family residential displacements.

The **S 272nd Redondo Trench Station Option** would reduce business displacements and increase single-family residential displacements.

The **Federal Way SR 99 Station Option** would reduce business displacements and not change residential displacements.

SR 99 to I-5 Alternative

The SR 99 to I-5 Alternative would affect the fewest parcels because it would be mostly along I-5 within WSDOT right-of-way.

Residential displacements would mostly occur at multi-family residences, including two mobile parks with a total of 56 units. Businesses would be displaced from single-use properties and business complexes.

The impacts from the station and alignment options for the SR 99 to I-5 Alternative are the same as the SR 99 Alternative (S 216th station options) north of Kent-Des Moines Road and similar to the Preferred Alternative (Landfill Median Alignment Option and Federal Way City Center station options) south of Kent-Des Moines Road.

I-5 to SR 99 Alternative

The I-5 to SR 99 Alternative would have the most property acquisitions and total displacements (business and residential combined). Approximately two-thirds of the residential displacements are multi-family, including two mobile home parks with a total of 46 units. Station options for the I-5 to SR 99 Alternative have impacts similar to the SR 99 Alternative station options.

Indirect Impacts

The FWLE would likely have indirect impacts associated with land use change. Property initially acquired for a project use, such as construction staging or surface parking lots, could convert to different uses in the future. Some acquired property could redevelop as transit-oriented development (TOD) or other uses, consistent with Sound Transit policy and local land use regulations. However, such TOD and land use changes would not cause additional property acquisition or displacements by Sound Transit (refer to Section 4.2, Land Use).

4.1.5 Relocation Opportunities

Sound Transit helps relocate people and businesses when its projects displace them. To evaluate relocation opportunities for businesses and residents displaced by the FWLE, Sound Transit researched available residential and commercial real estate in the FWLE vicinity (generally including SeaTac, Des Moines, Kent, and Federal Way, with additional areas in south

Relocation Assistance

Sound Transit policy and federal and state laws require that it help displaced residents find "comparable replacement dwellings."

King County, such as Tukwila and Renton). Although property availability will change over time, there are numerous opportunities for residents and businesses to relocate within the FWLE vicinity. Some affected properties with unique characteristics (such as a church) could prove more challenging to relocate.

Sound Transit would offer relocation assistance that includes compensation and supporting services that consider the needs of those being relocated, to help reduce inconveniences or hardships. Sound Transit would also satisfy federal and state requirements for residential relocation, which define a "comparable replacement dwelling" as:

- decent, safe, and sanitary;
- adequate in size to accommodate the occupants;
- within the financial means of the displaced person;
- functionally equivalent;
- in an area not subject to unreasonable adverse environmental conditions; and
- in a location generally not less desirable than the location of the displaced person's dwelling with respect to public utilities, facilities, services, and the displaced person's place of employment.

To meet these requirements, Sound Transit may identify relocation properties that are in better condition and of higher value than the properties being acquired. If so, tenants may be eligible for a rent supplement as described in Section 4.1.6.

4.1.5.1 Office

Enough office buildings are available for sale to replace those that the project will acquire. A substantial amount of space is also available for lease to meet the needs of displaced office tenants. Vacant land and underutilized properties available for the construction of new office buildings could provide additional capacity. Table 4.1-3 summarizes the vacancy rates of different types of commercial property in the FWLE vicinity.

4.1.5.2 Retail

There is enough retail space for sale and for lease to meet the relocation needs of displaced retailers. Sound Transit would perform a case-by-case assessment of the available inventory and the

displaced retailer's specific needs. There are approximately 1.5 million square feet of retail space available in the south Puget Sound area (NAI Puget Sound Properties, 2015). That reflects an area larger than the project's immediate vicinity; still, field surveys confirm that there is also an adequate amount of vacant retail space in the FWLE vicinity.

TABLE 4.1-3
Commercial Property Vacancy in the FWLE Vicinity

Commercial Property Type	Vacancy Rate[a]
Office	10.2%
Retail	4.9%
Industrial	3.9%

Source: NAI Puget Sound Properties, 2015.

[a] Vacancy rates listed here are for the south end of Puget Sound, which includes the cities of Des Moines, Federal Way, SeaTac, and Kent. The south end also includes additional nearby cities such as Renton and Tukwila.

4.1.5.3 Hotels

Displaced hotel operators would require a property for sale or a substitute site for new hotel construction. The study area has approximately 21 hotels, generally along the SR 99 corridor. The Preferred Alternative would displace one, while the SR 99, SR 99 to I-5, and I-5 to SR 99 alternatives would displace three. Although hotel properties do come up for sale, location requirements and physical characteristics of the displaced property are usually unique and it can be difficult to find an available property that meets all of the desired features. New development sites exist and may provide the best opportunity for replacement.

4.1.5.4 Industrial

Adequate industrial space is available in the market to meet the needs of the few light-industrial businesses that the FWLE might displace.

4.1.5.5 Owner-Occupied Residences

Relocation sites for owner-occupied residences (single-family and multi-family) are expected to be available in the same general area, but not necessarily in the same neighborhood. According to the Northwest Multiple Listing Service, over 400 residences (including approximately 100 condominiums and 20 mobile homes) were for sale in SeaTac, Des Moines, Kent, and Federal Way in December 2015 (TheMLSonline.com, 2015).

The number of owner-occupied residences to be acquired in each area is relatively small in proportion to the entire housing stock. A sufficient supply of relocation housing similar in size and quality is expected to be available within the study area; however, depending on market conditions and individual circumstances, the replacement property may cost more. Section 4.1.6 describes how Sound Transit would accommodate this difference.

4.1.5.6 Renter-Occupied Residences

There is a sufficient supply of relocation housing similar in size and quality for renters within the study area; however, depending on market conditions and individual circumstances, the replacement property may cost more. Section 4.1.6 describes how Sound Transit would accommodate this difference. Table 4.1-4 summarizes the total number of housing units and estimates the available rental units in the FWLE vicinity.

TABLE 4.1-4
Estimated Available Rental Units in the FWLE Vicinity

Area	Rental Vacancy Rate	Total Renter-Occupied Housing Units	Approximate Number of Available Units
Kent	7.0%	19,632	1,500
SeaTac	3.4%	4,817	200
Des Moines	3.6%	4,727	200
Federal Way	6.2%	15,338	1,000
Total units in FWLE vicinity		44,514	2,900

Source: American Community Survey, 2015.

4.1.6 Sound Transit Acquisition and Relocation Policy Summary

Sound Transit has notified property owners whose property may be directly affected by any of the alternatives. It would not begin property acquisition until it completes the environmental process and the Sound Transit Board selects the project to build. The tables and maps in Appendix D4.1 identify each potentially affected parcel. As described in Section 2.7, Next Steps and Schedule, property acquisition activities will begin during final design. Sound Transit will continue to communicate with property owners during the Sound Transit board decision process on the project to build and during final design. As described in Chapter 2, the project may be constructed in phases. Phased construction could delay acquisition of properties south of the Kent/Des Moines Station from the schedule shown in Exhibit 2-27.

Sound Transit relocation staff are available to answer questions and provide additional information about relocation assistance services, payments, reimbursement eligibility, and the timing of the process. Relocation agents from Sound Transit would determine the needs and preferences of each household, business, and organization to be displaced. They would work closely and proactively with residents and businesses to help them plan for relocation, and would help in finding new homes or sites and in solving problems that might occur. While the ultimate choice of relocation site is up to the affected resident or business, the agency would help identify possible locations, including nearby properties. Sound Transit uses interpreters to help those with limited English proficiency understand their choices and options.

Owners would not have to relocate until (a) they were paid the agreed purchase price, or (b) an amount equal to Sound Transit's estimate of just compensation was deposited with the court. Residents, businesses, and tenants would not have to relocate without receiving at least 90 days' written notice. Property owners would be offered just compensation for their land and improvements as described below.

A public agency must pay "just compensation" to property owners for land and improvements acquired for public purposes. "Just compensation" must not be less than the fair market value of the property acquired. It includes any measurable loss in value to the remaining property as a result of a partial acquisition. For instance, Sound Transit would mitigate for the permanent loss of parking spaces resulting from partial property acquisition by compensating the property owner or by providing replacement parking.

Sound Transit would pay for normal expenses of sale, including escrow fees, title insurance, prepayment penalties, mortgage release fees, recording fees, and typical costs incurred as part of conveying title.

Relocation benefits depend on individual circumstances. Factors that can affect relocation benefits include the condition of the replacement property, time of occupancy at the displaced property, and age or condition of a mobile home. Sound Transit might pay for residential moving expenses and replacement housing payments, nonresidential moving expenses, business reestablishment expenses, and other eligible expenses. Zoning

Sound Transit Acquisition and Relocation Procedures

Sound Transit's residential and non-residential acquisition and relocation handbooks (Sound Transit, 2014a and b) detail the compensation and acquisition procedures. These are available at http://www.soundtransit.org/sites/default/files/Residential%20handbook_2014.pdf and http://www.soundtransit.org/sites/default/files/Non-Residential_handbook_2014w.pdf, respectively.

restrictions may make it difficult for some businesses to relocate in the same area.

Owners may be eligible for a price differential payment and mortgage interest differential payment if the cost of comparable housing is greater than the value of their existing property. Tenants may be eligible for rent supplements if comparable decent, safe, and sanitary replacement housing is more than their current rental cost. In these cases, Sound Transit would pay the difference, or a portion of the difference, between the tenant's current and new rental rates for a 42-month period.

Sound Transit follows the federal Uniform Relocation Act for relocating mobile home owners and tenants. Assistance would depend on individual circumstances. Mobile home residents are eligible for the same acquisition and relocation benefits that apply for other residential properties. Some residents own their mobile home, but rent or lease space in a mobile home park. In these cases, they would receive rental relocation assistance and their mobile home would be relocated. If the mobile home could not be relocated because of its age or condition, Sound Transit would provide rental relocation assistance to the owners, and would compensate them for their mobile home. The owners could then choose to use this payment to purchase another mobile home or other real estate (for example, make a down payment for a single-family home or condominium). Other mobile home residents rent both the space in a mobile home park and the mobile home unit. Sound Transit would provide rental relocation assistance to these residents similar to someone renting an apartment or house. Others may own land with a mobile home. Sound Transit would pay them for the land and for the mobile home, similar to other residential land acquisition.

4.1.7 Potential Mitigation Measures

As part of the FWLE and as noted above, Sound Transit would compensate affected property owners according to the provisions specified in Sound Transit's adopted Real Estate Property Acquisition and Relocation Policy, Procedures, and Guidelines. These policies and procedures comply with the federal Uniform Relocation Act and the State of Washington's relocation and property acquisition requirements, and in some cases provide advisory services above the minimum requirements of federal and state law. Benefits would depend on the level of impact, available relocation options, and other factors. No additional mitigation would be necessary.

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4.2 Land Use

4.2.1 Summary

Direct land-use impacts would occur from conversion of public and private property to transportation uses. The SR 99 to I-5 Alternative would convert the least area of land and the I-5 to SR 99 Alternative would convert the most. Table 4.2-1 shows predominant land uses that would be converted to transportation use for each FWLE build alternative and the total acres of land that would be converted. All build alternatives would generally run adjacent to or within existing transportation rights-of-way.

Redevelopment of land around stations could occur as an indirect effect of the FWLE. Often referred to as transit-oriented development (TOD), these potential changes in land use and the timing for such redevelopment depends on land availability, zoning regulations, market conditions, and other factors. TOD could occur on surplus property originally acquired for construction of the project but no longer needed (such as the staging areas outside of highway right-of-way). TOD could also occur on land near transit stations that is not owned by Sound Transit.

Transit-Oriented Development

TOD is a pattern of dense, mixed-use, pedestrian-friendly land uses near transit nodes such as light rail stations. TOD could occur in station locations where jurisdictions have provided for greater density and mixture of uses in their comprehensive plans and zoning regulations.

A separate study of TOD potential at station locations as completed for the FWLE Draft EIS (Sound Transit, 2015) and an addendum was prepared for the Final EIS (Sound Transit, 2016a). Both are available at: http://www.soundtransit.org/Projects-and-Plans/Federal-Way-Link-Extension/Federal-Way-document-archive. Results of this assessment are summarized in this section.

TABLE 4.2-1
Predominant Existing Land Uses Converted to Transportation Use

Alternative	Predominant Existing Land Uses	Acres Converted to Transportation Use (Range with Options)
Preferred Alternative	Commercial, Vacant, Multi-Family	**47.7** (36.2-56.2)
SR 99 Alternative	Commercial, Vacant, Multi-Family	**40.6** (38.5-79.0)
SR 99 to I-5 Alternative	Commercial, Multi-Family, Vacant	**35.2** (26.2-49.6)
I-5 to SR 99 Alternative	Commercial, Vacant, Multi-Family	**44.1** (44.1-60.6)

4.2.2 Introduction

This section provides information on the existing land uses and current zoning (i.e., allowed uses), describes changes in land use that would occur from the FWLE, and evaluates the consistency of the project with local and regional planning policies.

High-capacity transit (HCT) is addressed in local comprehensive plans and other planning documents, and in some locations the potential for HCT is reflected in comprehensive plan land-use designations. The following local and regional plans identify HCT in the FWLE corridor:

- Des Moines' *Comprehensive Transportation Plan* (City of Des Moines, 2012)
- Kent's *Midway Subarea Plan* (City of Kent, 2011),
- *Federal Way Comprehensive Plan* (City of Federal Way, 2015)
- Puget Sound Regional Council's (PSRC) *Vision 2040* (PSRC, 2009)
- King County Metro Transit Strategic Plan for Public Transportation 2011 to 2021 (King County Metro, 2013)
- Sound Transit's Regional Transit Long-Range Plan (Sound Transit, 2014)
- Sound Transit 2: A Mass Transit Guide (ST2; Sound Transit, 2008)
- Sound Transit 3 (ST3; Sound Transit, 2016b)

These local and regional plans identify the need to connect urban centers with HCT to allow for more efficient use of land and as a sustainable alternative to increasing traffic congestion.

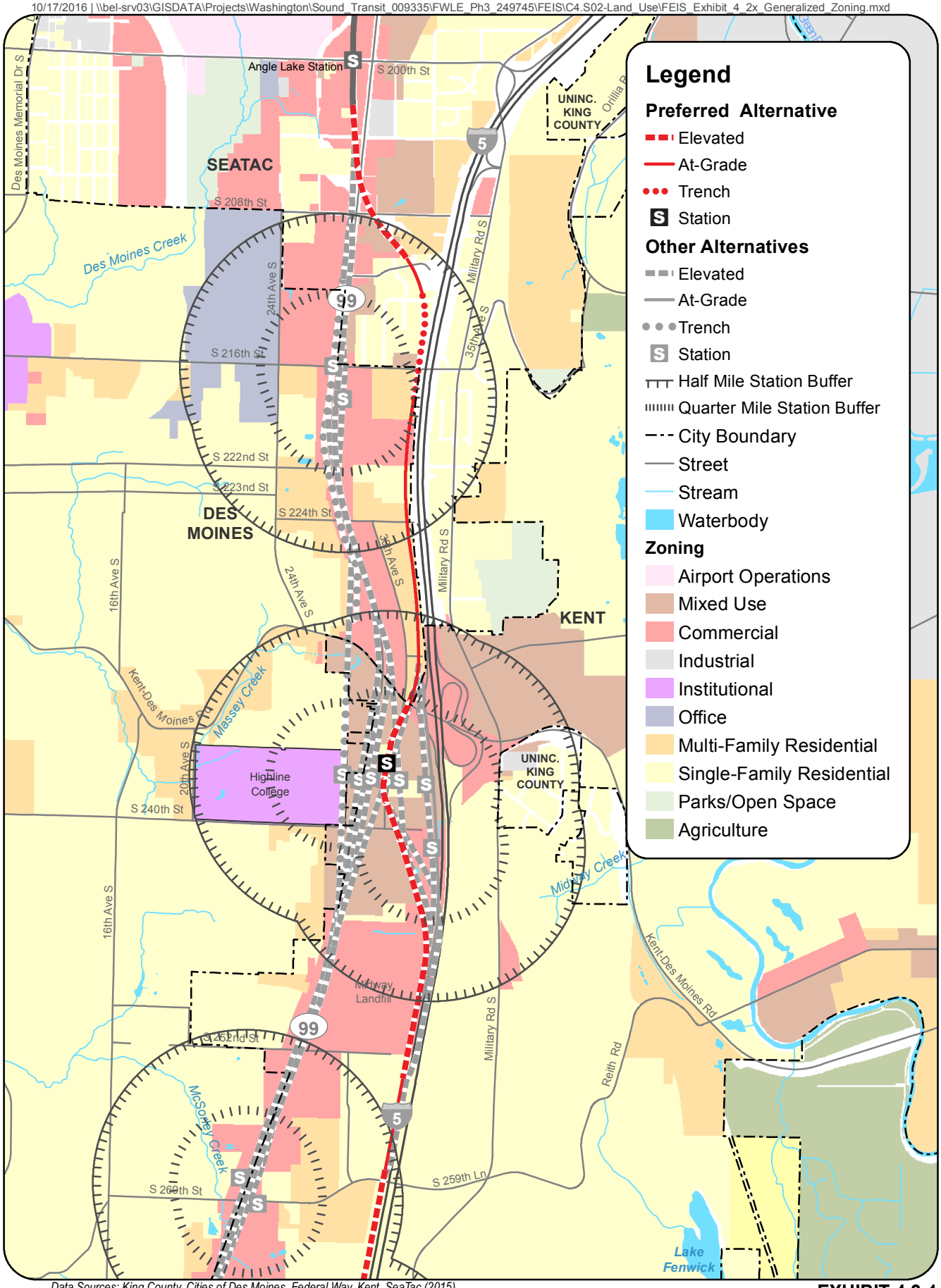
Sound Transit evaluated the compatibility and conformance of the FWLE with the existing land-use policies and plans listed above, and other plans pertinent to the corridor. Appendix D4.2, Land Use, describes this evaluation.

Study Area

The land-use study area for FWLE consists of the areas immediately adjacent to the project alignments and the land uses within a 1/2-mile radius around the potential stations. Land uses in the areas within 1/2 mile of the potential stations have the greatest probability of being affected, both directly and indirectly. The FWLE would be within the urban growth boundary of southwest King County, and the FWLE alternatives would travel through and within the urbanized cities of SeaTac, Des Moines, Kent, and Federal Way. The I-5 and SR 99 corridors generally travel parallel to each other and are less than one mile apart. Since these corridors are close to each other the potentially affected area east of SR 99 and west of I-5 overlap. Likewise, the 1/2-mile study area around some of the station areas overlaps.

4.2.3 Affected Environment

This section describes existing and potential future land uses in each city and summarizes the overarching land-use policies in the I-5 and SR 99 corridors as they relate to the FWLE. Existing land uses have been generalized into dominant land-use categories (single-family residential, multi-family residential, commercial, institutional, mixed-use, parks/open space, industrial, office, and vacant). Potential future land uses were defined by generalizing each city's zoning and reviewing city ordinances. Generalized zoning shown on Exhibits 4.2-1 and 4.2-2 is based on current comprehensive plans.

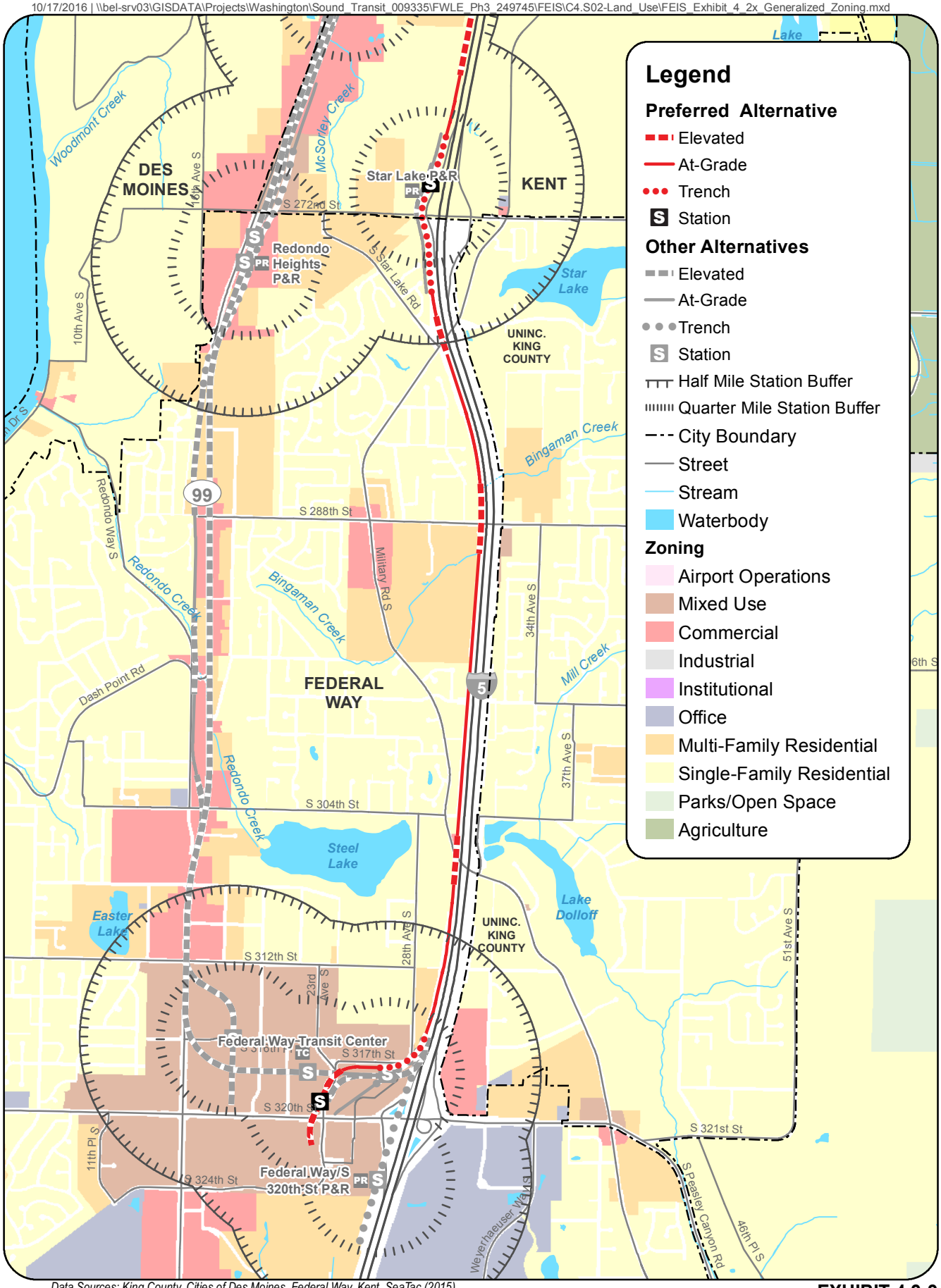


Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac (2015).

N

0 0.25 0.5 1 Miles

EXHIBIT 4.2-1
Generalized Zoning
(North)
Federal Way Link Extension



Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac (2015).

N

0 0.25 0.5 1 Miles

EXHIBIT 4.2-2
Generalized Zoning
(South)
Federal Way Link Extension

Exhibit 4.2-3 compares the existing land uses with the future allowable land uses (generalized zoning) at each potential station area (including all station options) and indicates where zoning differs from existing uses. The percentages of land use shown in Exhibit 4.2-3 are estimates of the amount of land within 1/2 mile and 1/4 mile of stations.

4.2.3.1 FWLE Corridor

The I-5 corridor is mostly surrounded by residential land uses. South of S 272nd Street, its eastern portion is in unincorporated King County and is primarily suburban single-family residential uses; much of the area is zoned for single-family residential with some areas of commercial and multi-family residential (see Exhibit 4.2-3). Single- and multi-family residential uses predominate on the west side of I-5, with commercial land uses farther west near SR 99.

The SR 99 corridor has similar land uses from north to south, and land use does not vary greatly by city boundaries. Land uses adjacent to SR 99 are predominantly commercial, including hotel/motels, automotive services, small-scale strip malls, office uses, retail commercial, larger big-box retail commercial, medical facilities, and restaurants. These transition to single-family and multi-family residential west and east of the commercial corridor. Some public and quasi-public uses (e.g., churches and a park) are between I-5 and SR 99, and Highline College is west of SR 99. Some industrial land uses and pockets of vacant land are adjacent to the corridor.

4.2.3.2 Land Use by City

City of SeaTac

Seattle-Tacoma International Airport (Sea-Tac) is just north of the FWLE corridor and has played an important role in land-use development along the SR 99 corridor. In SeaTac, this corridor has a number of commercial uses that cater to the airport such as motels/hotels, restaurants, and gas stations. In the north, the area between SR 99 and I-5 is dominated by commercial uses and several former residential and commercial properties acquired by Washington State Department of Transportation (WSDOT) for the SR 509 Extension Project that are now vacant. Land use south of this area is predominantly single-family residential.

Note: Station information is generalized for multiple station options in the same area and represents all alternatives.

EXHIBIT 4.2-3
Existing Land Uses and Allowable Future Land Uses around Station Areas

The *City of SeaTac Comprehensive Plan* (City of SeaTac, 2015) identifies future light rail extension south of the Angle Lake Station. Although no stations for the FWLE are proposed in SeaTac, the potential additional station at S 216th Street with the SR 99 Alternative or SR 99 to I-5 Alternative would be near the boundary between Des Moines and SeaTac, and development of this station could affect land use in SeaTac. This area is commercial and single-family residential but planned for mixed use in the future as shown in Exhibit 4.2-1.

City of Des Moines

The area west of SR 99 in Des Moines is single-family and multi-family residential with some commercial development as well as Highline College. The area between SR 99 and I-5 is known as Pacific Ridge and is currently single- and multi-family residential and commercial. The Pacific Ridge Element of the City of Des Moines comprehensive plan (City of Des Moines, 2015) calls for higher-density development to take advantage of regional transportation links. It also calls for increased building heights to enhance land value, promote redevelopment and job growth, expand views toward Puget Sound, and accommodate household growth targets.

Potential future land uses adjacent to SR 99 include commercial and mixed use, with single- and multi-family residential uses farther east and west. This is similar to existing land uses, although zoning allows for higher-density development and more mixed use than currently exists.

The Kent/Des Moines station options are close to the border between the cities of Des Moines and Kent; the 1/2-mile radius around them includes areas in both cities.

City of Kent

Most of the study area in Kent is within the Midway Subarea, located between SR 99 and I-5 south of Kent-Des Moines Road. The Midway Subarea is currently low-density commercial and residential. Commercial uses include retail stores generally larger than those found elsewhere in the corridor, such as Lowe's and Fred Meyer. The study area includes the decommissioned 60-acre Midway Landfill. Most of the area between S 260th Street and S 272nd Street is the McSorley Creek Wetland, much of which has been acquired by the City for preservation.

The City adopted the *Midway Subarea Plan* in December 2011. It encourages transitioning to denser mixed-use development in the FWLE corridor in anticipation of light rail. Its potential future land uses include mixed-use, multi-family residential, and commercial.

Star Lake Park-and-Ride, north of S 272nd Street, is surrounded by single- and multi-family residential land uses. Potential future land uses within 1/2 mile of the S 272nd Star Lake Station include some commercial land along SR 99, but otherwise are not planned to change.

Beyond the station areas, potential future land uses include single-family land use on the east side of I-5 and a mix of commercial, single-family, and mixed-use on the west side of I-5. With the exception of this mixed-use area, future land-use designations are generally consistent with existing land uses.

City of Federal Way

The FWLE would enter the city of Federal Way at S 272nd Street. Existing land uses are predominantly single-family residential, but also have commercial and multi-family uses along the SR 99 corridor and the Redondo Heights Park-and-Ride. The Federal Way Transit Center is between SR 99 and I-5 in the Federal Way City Center, an area dominated by larger commercial retail uses including The Commons mall and big box retail. Some of these commercial properties are currently vacant. The area also includes a new Town Square Park and the Federal Way S 320th Street Park-and-Ride.

The City Center element of the *City of Federal Way Comprehensive Plan* (City of Federal Way, 2015) supports regional HCT to reduce dependency on automobiles. This plan envisions a HCT stop in the City Center surrounded by mixed uses.

Potential future land uses along SR 99 include more mixed use and multi-family residential. Potential future land uses along I-5 are generally single-family residential with some multi-family residential. Potential future land uses within 1/2 mile of the S 272nd Redondo Station include multi-family residential and mixed-use along SR 99. Within the Federal Way City Center, which is between S 312th and S 324th streets and includes much of the area within 1/2 mile of the Federal Way Transit Center stations, the potential future land use is mixed-use.

4.2.4 Environmental Impacts

This section discusses the consistency of the alternatives with regional, state, and local land-use policies and the direct and indirect operational impacts on existing and planned future land uses.

4.2.4.1 No Build Alternative

The No Build Alternative includes the existing transportation system and future population and employment growth assumed in adopted plans, but without the Federal Way Link Extension. This alternative would be inconsistent with many regional land-use and transportation policies because it would not develop a HCT system connecting the FWLE corridor to the region's highest-growth centers. It would also not be consistent with the local plans that encourage increased density and/or TOD in anticipation of HCT service. PSRC policies related to focused and compact growth, frequent transit service, connecting urban centers, and transportation alternatives to the single-occupant vehicle would be only partially implemented. The No Build Alternative would limit transportation options, increasing traffic congestion where higher density land uses are planned, and could slow the rate of denser development in growth centers.

4.2.4.2 Build Alternatives

The following subsections describe the direct and indirect impacts of operating the build alternatives. Construction impacts related to land use are discussed in Chapter 5, Construction Impacts.

Direct Impacts

Impacts Common to All Alternatives

Consistency with Land-use Plans and Policies

Regional, state, and local land-use plans in the study area share the goals of improving transit accessibility and encouraging transit use by concentrating mixed land uses in the areas each city has identified. The FWLE would connect employment centers and create uninterrupted access among the four cities in the corridor.

The FWLE alternatives all advance regional policies in the study area. The FWLE would comply with goals and policies identified in PSRC's *VISION 2040* by providing a regional transit system that serves and connects designated urban centers. In addition, it would contribute to meeting the goals of PSRC's *Growing Transit Communities Strategy* (PSRC, 2013).

Local planning documents focus on the types of uses and scale of development permitted in different land use zones. The FWLE would

improve transit level of service and enhance linkages with other jurisdictions and regional destinations. Stations in lower-density residential areas are not expected to encourage incompatible commercial or office use development because the applicable plans and codes preclude such uses. Most of the stations are surrounded by areas of planned commercial and mixed-use development. The FWLE would be consistent with the goals and policies for these areas.

The Washington State Growth Management Act (GMA) requires that zoning be consistent with comprehensive plans. It also prohibits local governments from precluding the siting of essential public facilities through their comprehensive plans or zoning. The FWLE is a "regional transit authority facility" and is, therefore, explicitly recognized as an essential public facility in the GMA (RCW 36.70A.200). Once a FWLE alternative is selected, jurisdictions have a "duty to accommodate" the project in their land-use plans and development regulations.

Conversion of Land Uses to Transportation Uses

Direct land-use impacts would occur where Sound Transit would acquire property for the project. Most of the property acquired would be permanently converted to a transportation-related use for the light rail tracks, stations, or ancillary facilities. Property that is already public right-of-way for transportation uses, such as park-and-rides, the SR 99 median, and the I-5 right-of-way, is not included in this analysis because it is already dedicated to transportation uses. The FWLE alternatives generally follow existing transportation corridors, minimizing the amount of additional required right-of-way.

Reflecting the relatively early level of design, Table 4.2-2 shows the approximate amount of land that would be converted to a transportation-related use for the alternatives. The range shows the minimum and maximum area that would be converted with station and alignment options. Table D4.2-1 in Appendix D4.2 provides impacts by option.

The land acquired for the FWLE would constitute less than 0.2 percent of the total land in the study area. It would not materially change regional or local land use or development patterns and would minimize changes in land use because all build alternatives are along an existing transportation corridor (either I-5 or SR 99). There would be indirect TOD opportunities near some stations as described below in "Indirect Impacts."

TABLE 4.2-2

Potential Conversion of Existing Land Use to Transportation-Related Land Use (acres)

Alternative	Acres by Zoning Category (Range with Options)							Total Acreage Affected[a]
	Single-Family	Multi-Family	Commercial (includes Office)	Industrial	Institutional	Parks/ Open Space	Vacant	
Preferred Alternative	**6.0** (3.3 to 8.1)	**6.2** (5.0 to 11.4)	**16.9** (0.9 to 24.6)	**<0.1** (<0.1)	**4.0** (2.5 to 6.0)	**0.2** (**0.2**)	**14.3** (10.3 to 25.6)	**47.7** (36.2 to 56.6)
SR 99 Alternative	**0.2** (0.2 to 2.8)	**2.1** (2.1 to 8.7)	**30.4** (27.0 to 50.4)	**0** (0 to 0.1)	**0.4** (0.1 to 4.4)	**0** (0)	**7.6** (7.1 to 18.4)	**40.6** (38.5 to 79.0)
SR 99 to I-5 Alternative	**5.5** (5.4 to 5.6)	**5.9** (5.9 to 10.8)	**17.2** (7.5 to 30.0)	**0** (0)	**0.8** (0.8 to 0.9)	**0** (0)	**5.8** (5.4 to 7.3)	**35.2** (26.2 to 49.6)
I-5 to SR 99 Alternative	**1.3** (1.3 to 2.4)	**6.4** (6.4 to 6.6)	**25.9** (25.9 to 32.6)	**<0.1** (<0.1 to 0.1)	**1.3** (0.9 to 1.4)	**0** (0)	**9.2** (9.2 to 17.1)	**44.1** (44.1to 60.6)

Note: Existing land-use types were developed using King County Assessor data. Acreage excludes planned staging areas and portions of parcels that are anticipated to be sold after construction is complete.

[a] Total acreage may be more or less than the sum of individual zoning categories due to rounding.

Impacts by Alternative

The following discussion focuses on the differences in direct impacts from converting existing uses to a transportation use for each alternative, station, and station option.

Preferred Alternative

The Preferred Alternative would convert the most land to transportation use. Much of the land that would be directly affected is either vacant or commercial. Some of the vacant land is owned by WSDOT and is intended for future SR 509 improvements, which is a transportation use. Of all the alternatives, the Preferred Alternative would convert the most vacant land.

The **Kent/Des Moines At-Grade Station Option** would convert more vacant land than the Preferred Alternative and would convert the most acreage of the Kent/Des Moines station options. The **Kent/Des Moines I-5 Station Option** would also increase the conversion of land compared to the Preferred Alternative and would affect more single-family, multi-family, and institutional property than the Preferred Alternative.

The **I-5 Landfill Median Alignment Option** would convert less land than the Preferred Alternative. The **S 272nd Star Lake Elevated Station Option** and **S 317th Elevated Alignment Option** would slightly increase the land converted.

The **Federal Way I-5 Station Option** would convert more land than the Preferred Alternative, and would mostly convert commercial property. The **Federal Way S 320th Park-and-Ride Station Option** would convert less total land and less commercial property in the City Center than the Preferred Alternative.

SR 99 Alternative

The SR 99 Alternative would convert mostly commercial land along SR 99. It would convert more commercial land than the other FWLE alternatives.

The S 216th Street station options would have more land conversion than the SR 99 Alternative. Of these, the **S 216th West Station Option** would have the most land conversion.

The **Kent/Des Moines HC Campus Station Option** would convert more land to a transportation use than the SR 99 Alternative, while the **Kent/Des Moines SR 99 East** and **SR 99 Median** station options

would convert less. The **Kent/Des Moines HC Campus Station Option** would convert more institutional (college) land, as well as single-family and multi-family property adjacent to the college.

The **S 260th Street** station options would have more land conversion than the SR 99 Alternative. Of these, the **S 260th West Station Option** would convert the greatest amount of land to transportation use. Most of the land that would be converted would be commercial or vacant. The **S 272nd Redondo Trench Station Option** and **Federal Way SR 99 Station Option** would increase the land area converted and most of the land would be either commercial or vacant.

SR 99 to I-5 Alternative

The SR 99 to I-5 Alternative would convert the least amount of land to transportation use. This is because the north end is in the median of SR 99, and south of Kent-Des Moines Road it is mostly within I-5 right of way. Much of the land that would be converted is commercial, with smaller amounts of multi-family, single-family, institutional, and vacant. Station or alignment options described for the SR 99 and Preferred alternatives could be included in the associated portions of the SR 99 to I-5 Alternative.

I-5 to SR 99 Alternative

The I-5 to SR 99 Alternative would convert the second most land to a transportation use. The affected land is mostly commercial or vacant. Station options would increase the area converted.

Indirect Impacts

Transit-Oriented Development Potential

Improvements in transportation systems can influence changes to nearby land uses. The FWLE would directly affect land use through property acquisition. However, the project would not directly change surrounding land use. Property owners make decisions about developing or redeveloping their property, and cities and counties control land-use regulations, including zoning. The FWLE could indirectly affect land use by catalyzing others to develop or redevelop land near the project's facilities. Some of the possible indirect development might be TOD where local jurisdictions have planned for a higher density of land use and/or a mixture of uses. The discussion of TOD in this section describes the potential indirect impacts on land uses from the FWLE.

TOD Conditions

TOD generally takes place under three conditions:

- When stations are in prime regional and community centers attractive to typical market forces.
- When regional and local real estate markets are active, including willing property owners and investors.
- When public policies and regulations permit or encourage intensive development in station areas.

Experience in the United States indicates that new transit facility investments can have a major influence on land use. Supportive policies, plans, land use regulations, and incentives can be effective in facilitating TOD near transit stations.

Increased development around the stations could provide additional public benefits such as increased transit ridership, traffic congestion relief, improved air quality, infill development and job opportunities, natural resource preservation, more housing choices, less energy consumption, and better use of public infrastructure. Revitalized station areas could attract residents and employees who would ride the light rail as well as those who would not.

The Sound Transit Board adopted a Transit-Oriented Development policy in 2012 (Resolution R2012-24). It defines TOD goals and provides guidance for Sound Transit to use in the evaluation, facilitation, and implementation of TOD as it builds the regional transit system. The policy supports land-use change and economic development that would improve quality of life, support achievement of comprehensive and regional plans, and maximize ridership. It contains goals to support and encourage economic development, TOD, non-motorized access, housing options, and sustainability, and directs Sound Transit to consider TOD potential in the development of its transit projects. This includes identifying TOD opportunities and strategies during early project planning. Opportunities for partnerships with public and private interests should also be considered in decisions about acquisition, use, and disposition of land.

The potential for TOD in the FWLE corridor has been assessed as indirect impacts because TOD would not be a project element. Sound Transit's TOD program would evaluate development opportunities at specific locations as part of the station area planning efforts during final design. Sound Transit has evaluated the relative degree to which the FWLE station locations have the potential for TOD. The analysis is documented in the *Federal Way Link Extension Transit Oriented Development Study Addendum* (Sound Transit, 2016a).

To assess which station locations would have the most TOD potential, Sound Transit evaluated each station location using four measures:

- **Access** to each station location - How accessible is the station for pedestrians, bicycles, other forms of transit, and automobiles?

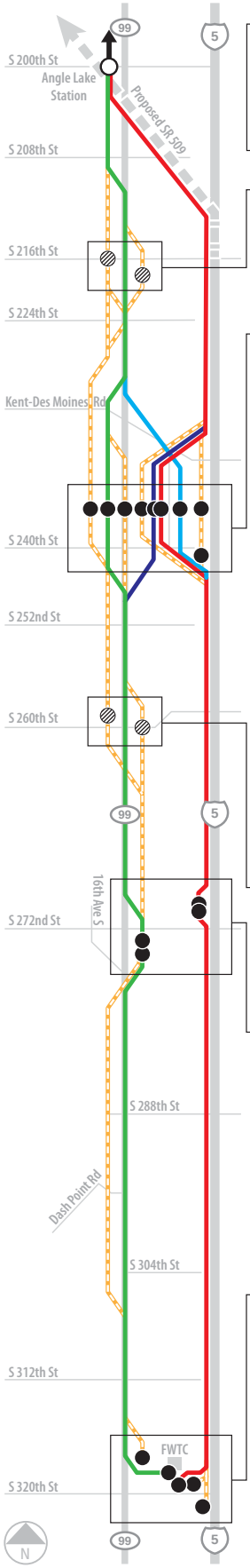
- **Land use** plans and policies, and utilities around each station location - How do existing land use policies, plans, regulations, and infrastructure support new development?
- **Market support** at each station location - Is the location competitive for multi-family housing, retail, office, and/or lodging?
- **Development potential** - How much net new development can be accommodated within 1/4 mile of each station after light rail is constructed, as measured by residential and commercial square footage?

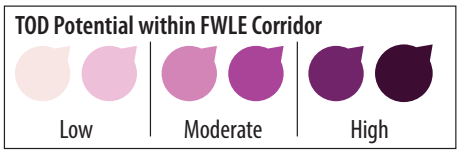
The four measures were considered together to provide an overall assessment of each station option's TOD potential.

Each station area was rated using a combination of quantitative and qualitative assessments based on the information available at the time of the analysis. The assessment was designed to help identify the station location in each of the five station areas with the greatest TOD potential. Station locations that have greater TOD potential would also be more likely to experience changes in land use and development patterns when the project is built.

The Draft EIS included results from the *Federal Way Link Extension Transit Oriented Development Study* (Sound Transit, 2015). The Draft EIS included a land availability measure that has been refined and replaced with a **development potential** measure, described above. While the land availability measure determined the number of acres with future TOD potential, development potential is a more informative measure—it takes into account zoning and building densities, and quantifies results in terms of residential and commercial square footage capacity.

The TOD study shows overall results as six relative rankings to represent whether a station area is more or less supportive of TOD (i.e., has more or less TOD potential). As shown in Exhibits 4.2-4 and 4.2-5, these rankings can be characterized as low, moderate, or high TOD potential. The analysis is described below by station area.

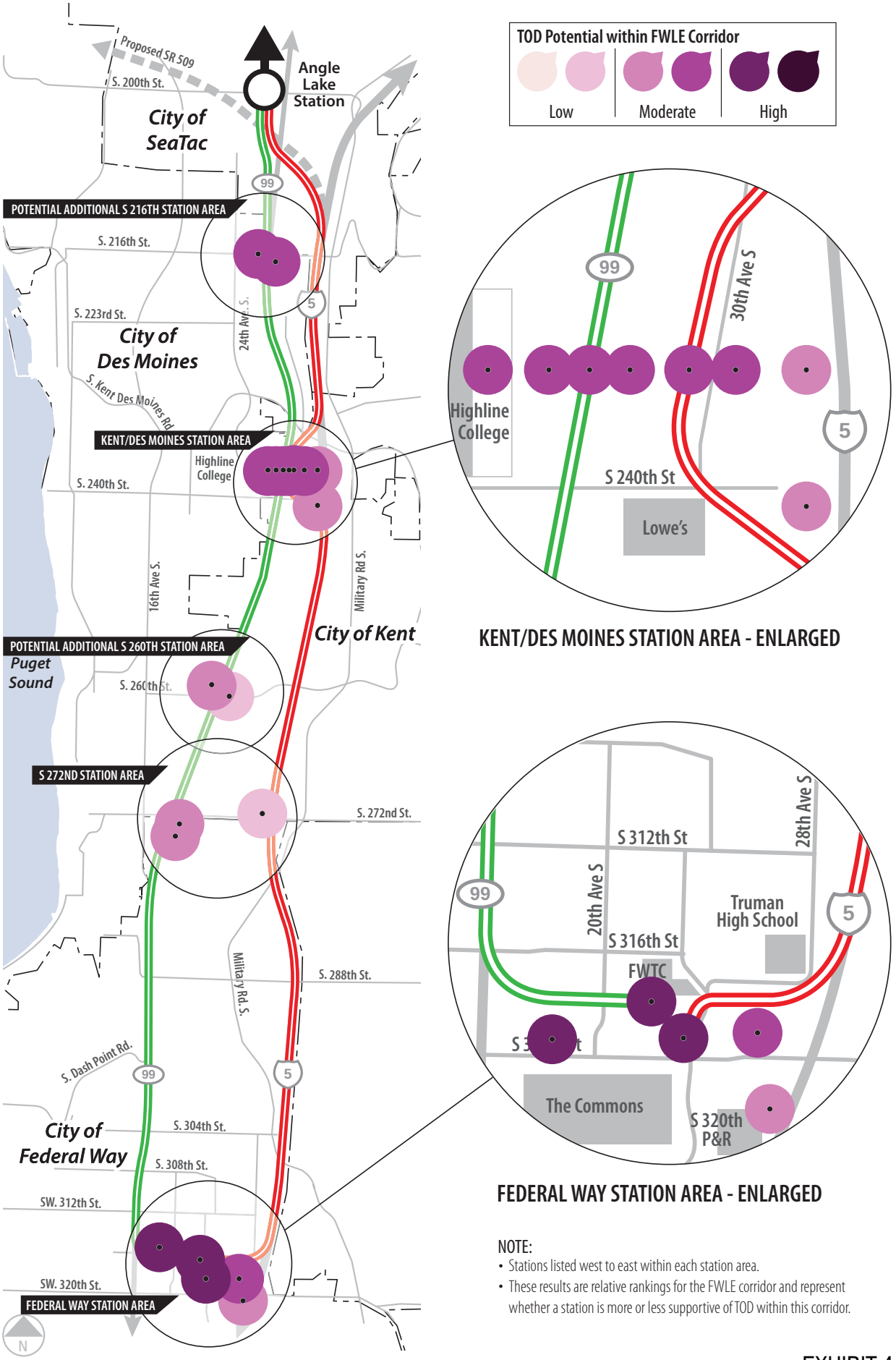




	OVERALL	ACCESS	LAND USE PLANS & POLICIES	MARKET SUPPORT	DEVELOPMENT POTENTIAL
POTENTIAL ADDITIONAL S 216TH STATION AREA					
S 216th West Station Option					
S 216th East Station Option					
KENT/DES MOINES STATION AREA					
Kent/Des Moines HC Campus Station Option					
Kent/Des Moines SR 99 West Station					
Kent/Des Moines SR 99 Median Station Option					
Kent/Des Moines SR 99 East Station Option					
Kent/Des Moines 30th Avenue West Station					
Preferred Kent/Des Moines Station					
Kent/Des Moines 30th Avenue East Station					
Kent/Des Moines I-5 Station Option					
Kent/Des Moines At-Grade Station Option					
POTENTIAL ADDITIONAL S 260TH STATION AREA					
S 260th West Station Option					
S 260th East Station Option					
S 272ND STATION AREA					
S 272nd Redondo Station					
S 272nd Redondo Trench Station Option					
Preferred S 272nd Star Lake Station					
S 272nd Star Lake Elevated Station Option					
FEDERAL WAY STATION AREA					
Federal Way SR 99 Station Option					
Federal Way Transit Center Station (SR 99)					
Preferred Federal Way Transit Center Station					
Federal Way I-5 Station Option					
Federal Way S 320th Park and Ride Station Option					

NOTE:
- Stations listed west to east within each station area.
- These results are relative rankings for the FWLE corridor and represent whether a station is more or less supportive of TOD within this corridor.

EXHIBIT 4.2-4
Summary of TOD Potential within FWLE Corridor by Station Option
Federal Way Link Extension



NOTE:

- Stations listed west to east within each station area.
- These results are relative rankings for the FWLE corridor and represent whether a station is more or less supportive of TOD within this corridor.

EXHIBIT 4.2-5

Summary of TOD Potential within FWLE Corridor by Geographic Location

Federal Way Link Extension

The net new development potential in each station area is summarized in Table 4.2-3. More detailed information on development potential is provided in Appendix D4.2.

TABLE 4.2-3
Development Potential

Station Area	Development Potential (square feet)
S 216th Station Area	2,700,000 – 3,700,000
Kent/Des Moines Station Area	2,100,000 – 5,200,000
S 260th Station Area	700,000 – 900,000
S 272nd Station Area	100,000 – 1,700,000
Federal Way City Center Station Area	2,200,000 – 6,400,000

Note: Development potential is the net new residential and commercial development within 1/4 mile of station locations.

Alignments along I-5 and SR 99 have similar TOD potential when all four station area categories are considered together, but specific station locations have a substantial influence on the overall TOD potential results. In general, all stations and station options within a station area have similar **market support** scores. **Land use** scores for stations associated with SR 99 alignments are generally higher than stations associated with I-5 alignments. **Access** scores begin to differentiate station options, and **development potential** scores vary the most within general station areas.

The Preferred Alternative includes the station with the highest overall TOD potential, the Preferred Federal Way Transit Center Station, as well as the station with the lowest overall TOD potential, the S 272nd Star Lake Station. The Preferred Kent/Des Moines Station scores in the middle of all stations at that station area.

How stations are combined to develop an alternative affects the overall TOD potential results. For example, any I-5 alignment must connect to the S 272nd Star Lake Station, which is the lowest-performing station overall. This station lowers the TOD potential for the entire alignment, regardless of which station it connects to at Kent/Des Moines and Federal Way.

Overall, the Preferred Federal Way Transit Center Station and Federal Way SR 99 Station Option to the SR 99 and the I-5 to SR 99 alternatives would have the greatest development potential, followed by the Federal Way Transit Center I-5 and Kent/Des Moines At-Grade I-5.

S 216th Station Area (Potential Additional Station)

Within the S 216th station area, the two potential station options (west and east) for the SR 99 Alternative and SR 99 to I-5 Alternative are similar and have moderate TOD potential. The S 216th East Station Option would have a very slight advantage in bus access and existing land use. The two options would be identical in terms of market support. The S 216th West Station Option would have slightly more net new development potential.

Kent/Des Moines Station Area

Within the Kent/Des Moines station area, all station locations have similar degrees of moderate TOD potential.

For the Kent/Des Moines station area, the options on SR 99 all received higher combined access ratings than those on I-5. The SR 99 east and west locations performed the best in terms of access, driven by station designs and locations that favor strong bus access. Station access was optimized for the Preferred Kent/Des Moines Station.

Land use plans and policies ratings for the options at Kent/Des Moines correlated with proximity to Highline College. The Kent/Des Moines HC Campus Station Option to the SR 99 Alternative performed the best, and the two I-5 Kent/Des Moines station options the worst. Market support ratings indicated little differentiation between station options, with the two I-5 station options performing only slightly worse than the others.

The Kent/Des Moines At-Grade Station Option to the Preferred Alternative has the most net new development potential, while the Kent/Des Moines HC Campus Station Option and Kent/Des Moines SR 99 Median Station Option (both to the SR 99 Alternative) would have the least net new development potential in this station area.

S 260th Station Area (Potential Additional Station)

Within the S 260th station area, both potential additional station options (west and east) for the SR 99 Alternative and I-5 to SR 99 Alternative are relatively similar with respect to their TOD potential. One minor difference is that the 260th West Station Option would have slightly more net new development potential. Ratings for access, land use plans and policies, and market support are basically the same for the two stations.

The overall TOD potential of these stations is relatively low compared to most of the other station areas along the corridor, in large part due to the relatively low ratings in the land use and net new development potential categories.

S 272nd Station Area

Within the S 272nd station area, the S 272nd Redondo Station and the S 272nd Redondo Trench Station Option to the SR 99 Alternative and I-5 to SR 99 Alternative have similar TOD potential. The only notable difference is that the S 272nd Redondo Station has more net new development potential than the Redondo Trench Station Option.

The Preferred S 272nd Star Lake Station has less TOD potential than the Redondo Station and Redondo Trench Station Option in all four categories. Although the Preferred S 272nd Star Lake Station is closer to I-5 and therefore has better auto access, the other three modal access criteria favor the Redondo options by a substantial margin. Star Lake also has much less transit-supportive land use and utilities. In terms of market support, the three options received similar overall scores, with the Redondo options rated as very slightly better. The Preferred S 272nd Star Lake Station has very limited net new development potential compared to the Redondo station options. This is primarily because I-5 bisects the Star Lake station area and a large portion of the area is wetlands.

Federal Way City Center Station Area

The Federal Way Transit Center stations (all alternatives) and the Federal Way SR 99 station options have similar TOD potential, all with comparatively high net new development potential. The Preferred Federal Way Transit Center Station ranks first in this category among all stations considered in the project corridor.

The close proximity to the existing transit center provides excellent bus access for both Federal Way Transit Center stations. Comparatively, the Federal Way I-5 Station Option to the Preferred Alternative and the SR 99 to I-5 Alternative, while it has the highest possible bus access rating, has much less net new development potential.

The Federal Way S 320th Park-and-Ride Station Option to the Preferred and the SR 99 to I-5 alternatives has the least TOD potential in the Federal Way station area, with the lowest individual ratings for

access, land use, market support, and net new development potential categories.

4.2.5 Potential Mitigation Measures

No land use mitigation would be required during operation of the FWLE. In general, the FWLE would not result in inconsistencies with adopted land-use plans. Refer to Section 4.1, Acquisitions, for information on how Sound Transit would minimize the impacts associated with required acquisitions, displacements, and relocations. Refer to Chapter 5, Construction, for information about potential construction-period impacts on land use.

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4.3 Economics

4.3.1 Summary

This section evaluates the potential local and regional economic effects of the FWLE. Impacts include land acquisition, displacement of local businesses and employees, and loss of property tax revenue from land converted to transportation facilities. The Preferred Alternative would have the second fewest business displacements, the fewest employee displacements, and the second lowest impact on property tax revenue for local jurisdictions. The SR 99 to I-5 Alternative would have the fewest business displacements and the least impact on property taxes, the SR 99 Alternative would have the most business and employee displacements, and the I-5 to SR 99 Alternative would have the greatest property tax impacts. Table 4.3-1 summarizes the potential displacements and property tax impacts by alternative, and the range of impacts with station and alignment options.

TABLE 4.3-1
Range of Business and Employee Displacements and Property Tax Impacts by Alternative

Alternative	Business Displacements (Range)	Employee Displacements (Range)	Annual Initial Property Tax Impact (Range)
Preferred Alternative	**42** (7-42)	**370** (10-370)	**- $77,394** (- $31713-77,394)
SR 99 Alternative	**101** (80-146)	**580** (480-1,040)	**- $91,380** (- $77,856-$141,544)
SR 99 to I-5 Alternative	**46** (20-53)	**420** (210-490)	**- $59,716** (- $35,720-$74,610)
I-5 to SR 99 Alternative	**96** (82-114)	**500** (480-640)	**- $95,228** (- $92,733-$116,579)

Construction of the FWLE, in combination with other factors, would likely encourage private transit-oriented development (TOD) investment, leading to increased property tax and sales tax revenues for local jurisdictions. Alternatives in the SR 99 corridor generally have greater TOD potential because of more supportive zoning, fewer physical major impediments to pedestrian movement (such as limited crossings of I-5), and a larger area of redevelopable land. Appendix D4.3 presents supporting information for property tax impacts and commercial property impacts.

4.3.2 Introduction

Regional transit projects can change patterns of regional and local mobility and access, in turn affecting regional and local development

patterns, employment opportunities, business accessibility, and retail sales. The FWLE would also have localized economic impacts on businesses and properties in the cities it would pass through.

The economic analysis identifies potential impacts of the FWLE on the local and regional economies and compares the anticipated direct and indirect impacts from business displacements and changes in tax revenue for the alternatives.

4.3.3 Affected Environment

4.3.3.1 Regional Demographic and Economic Trends

This section provides demographic and economic regional forecasts for the four-county Central Puget Sound Region.

Study Area

Sound Transit evaluated economic impacts at three different scales:

Regional: Economic impacts on the regional economy (such as effects on employment, traffic mobility, and congestion) were analyzed for a study area consisting of the four counties in the Central Puget Sound Region: Snohomish, King, Kitsap, and Pierce.

City: Economic impacts on local property tax revenues were assessed for cities that would be affected by property acquisitions (SeaTac, Des Moines, Kent, and Federal Way).

Site-specific: Site-specific impacts were evaluated for a study area of 1/2 mile around the light rail alignments and stations. As described in Section 4.3.3.2, the transportation analysis zones (TAZs) used for data collection include some geographic areas more than 1/2 mile from project alternatives.

Population, Households, and Employment

The Puget Sound Regional Council (PSRC) periodically prepares regional economic and demographic forecasts. Table 4.3-2 shows 2010 population, household, and employment data and 2035 projections for the four counties. King County is projected to account for 40 percent of total regional population growth and 52 percent of household growth.

The employment growth rate in King County is expected to average 1.6 percent per year, similar to the regional level. Most of these new jobs are anticipated to be created in the service sector—in food and beverage services, professional and business services, and health care.

Income

Median household income in the region is higher than the state average. As of 2014, median income was $60,294 for Washington State, and in King County was highest at $75,834, followed by Snohomish County at $71,984, Kitsap County at $61,794, and Pierce County at $60,496 (U.S. Census Bureau, 2015).

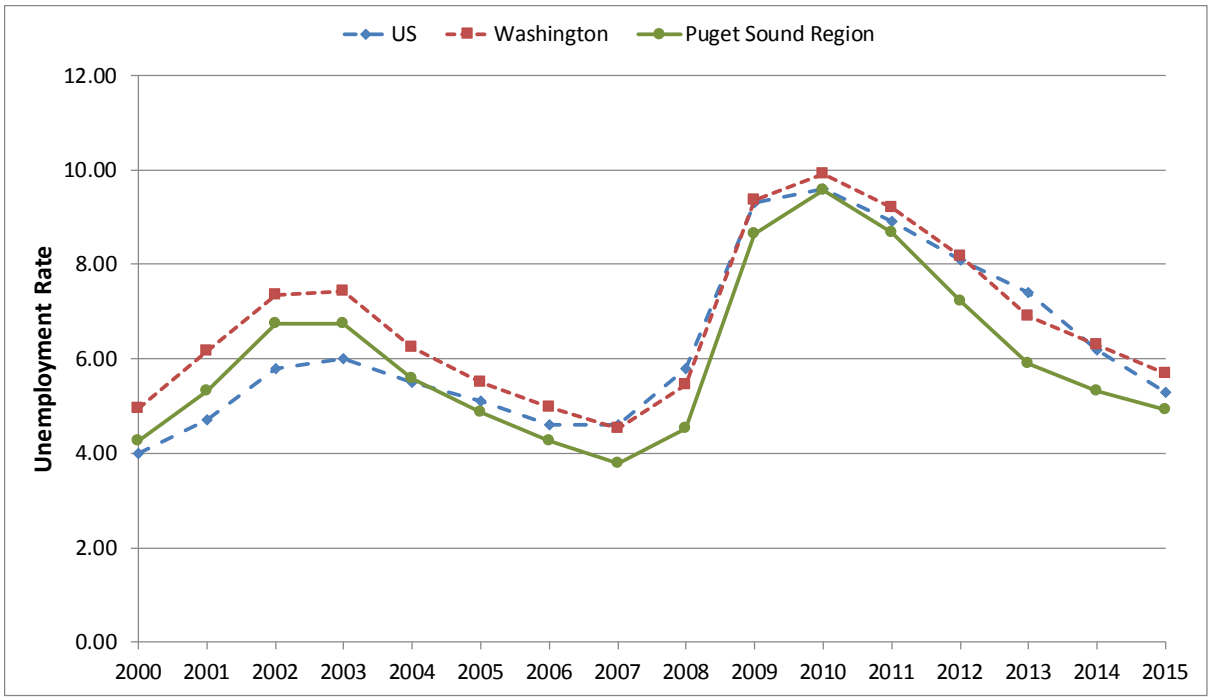
TABLE 4.3-2
Regional Population, Household, and Employment Forecasts, 2010–2035

County	2010	2035	Average Annual Growth Rate
Population			
King	1,931,249	2,394,179	0.9%
Kitsap	251,133	373,567	1.6%
Pierce	795,225	1,038,757	1.1%
Snohomish	713,335	941,987	1.1%
Total	3,690,942	4,748,490	1.2%
Households			
King	789,232	1,017,084	1.0%
Kitsap	97,220	147,376	1.7%
Pierce	299,918	402,387	1.2%
Snohomish	268,325	371,358	1.3%
Total	1,454,695	1,938,205	1.2%
Employment			
King	1,181,537	1,750,151	1.6%
Kitsap	97,417	131,063	1.2%
Pierce	317,874	465,692	1.5%
Snohomish	268,586	402,847	1.6%
Total	1,865,414	2,749,753	1.6%

Source: PSRC, 2013a.

Unemployment

Exhibit 4.3-1 shows unemployment trends for the region, state, and country between 2000 and 2014. From approximately 2006 through 2014, the region's unemployment rate has remained below those of both the state and the nation.



Note: Regional unemployment was calculated using an employee-weighted average of the unemployment rates for the Seattle-Tacoma-Bellevue, Washington, Metropolitan Statistical Area (which includes King, Snohomish, and Pierce Counties) and the Bremerton-Silverdale, Washington, metropolitan statistical area (which includes Kitsap County).

Source: U.S. Bureau of Labor Statistics, 2016.

EXHIBIT 4.3-1
Unemployment Rates, 2000–2015

4.3.3.2 Demographic and Economic Trends in the Study Area

Table 4.3-3 summarizes population, household, and employment forecasts for PSRC transportation analysis zones (TAZs) within 1/2 mile of the alternative alignments. Because of the alternatives' proximity, many TAZs fall within the study areas for all alternatives. Population, household, and employment figures for individual jurisdictions are based on TAZs that intersect with city boundaries. TAZs that cross jurisdictions are assigned to the jurisdiction with the largest geographic area within the TAZ.

Because the TAZs analyzed extend outside the study area, the population and employment figures overstate both the existing and projected population and employment within 1/2 mile of the alignments. Most notably, TAZs east of I-5 are large and include much of the Kent Valley (see Exhibit D4.3-1 in Appendix D4.3). They include some population and employment that would be less likely to use and benefit from the FWLE.

TABLE 4.3-3
Study Area Population, Household, and Employment Forecasts, 2010–2035, by Jurisdiction

Jurisdiction	I-5 Corridor			SR 99 Corridor		
	2010[a]	2035[b]	Average Annual Growth Rate	2010[a]	2035[b]	Average Annual Growth Rate
SeaTac						
Population	9,223	14,273	1.8%	9,223	14,273	1.8%
Households	2,978	5,664	2.6%	2,978	5,664	2.6%
Employment[c]	3,727	12,612	5.0%	3,727	12,612	5.0%
Tukwila[d]						
Population	1,017	4,561	6.2%	1,017	4,561	6.2%
Households	471	2,040	6.0%	471	2,040	6.0%
Employment	5,005	8,253	2.0%	5,005	8,253	2.0%
Des Moines						
Population	13,722	15,711	0.5%	21,969	26,234	0.7%
Households	5,003	6,301	0.9%	8,536	11,186	1.1%
Employment	3,237	6,284	2.7%	5,619	11,031	2.7%
Kent						
Population	18,174	21,182	0.6%	9,923	12,098	0.8%
Households	6,695	8,330	0.9%	3,535	4,703	1.2%
Employment	3,433	5,372	1.8%	1,645	2,896	2.3%
Federal Way						
Population	20,306	25,150	0.9%	31,128	36,853	0.7%
Households	7,796	10,434	1.2%	11,619	14,854	1.0%
Employment	6,196	9,849	1.9%	6,805	11,437	2.1%
Unincorporated King County[e]						
Population	22,098	28,098	1.0%	-	-	-
Households	7,412	10,286	1.3%	-	-	-
Employment	5,439	11,315	3.0%	-	-	-
Total						
Population	**84,540**	**108,975**	**1.0%**	**73,260**	**94,019**	**1.0%**
Households	**30,355**	**43,055**	**1.4%**	**27,139**	**38,447**	**1.4%**
Employment	**27,037**	**53,686**	**2.8%**	**22,801**	**46,229**	**2.9%**

Source: PSRC, 2013b.
[a] 2010 numbers are based on TAZ-level estimates of actual population, households, and employment.
[b] 2035 numbers are based on TAZ-level forecasts derived from PSRC's Land Use Target forecast dataset.
[c] Jurisdiction includes TAZs for which some employment data have not been released to the public. Actual employment is likely to be slightly higher than indicated here.
[d] All areas of Tukwila within the study area are east of I-5.
[e] All unincorporated TAZs are east of I-5. The SR 99 corridor does not contain any unincorporated areas.

For the I-5 corridor, 12,788 jobs and 38,384 residents are in TAZs east of I-5. By 2035, these areas are forecast to contain 22,917 jobs and 49,935 residents. For the SR 99 corridor, 7,349 jobs and 16,286 residents are in TAZs east of I-5. By 2035, these areas are forecast to contain 11,602 jobs and 21,837 residents.

Major Employers in the Project Vicinity

The I-5 corridor has more people, households, and jobs within 1/2 mile than the SR 99 corridor. Employment in the study area varies, with notable concentrations in the transportation, education, and retail industries. The Port of Seattle's Seattle-Tacoma International Airport is at the northern edge of the study area. Highline College is in Des Moines on SR 99 at S 240th Street. The Commons at Federal Way, a major shopping and entertainment center, and surrounding retail activities are at the southern end of the study area between SR 99 and I-5 around S 320th Street. The area east of I-5 and west of SR 167 contains several large industrial and business parks containing distribution and manufacturing employers including Boeing's Kent Space Center, Sysco, Hexcel Corporation, and FedEx.

4.3.3.3 Regional Transportation of Goods and Services

Regional and interstate commerce depend heavily on moving goods and people through the I-5 and SR 99 corridors. Both corridors currently experience heavy congestion during peak hours, which limits the ability of businesses to efficiently deliver goods and restricts their labor force by extending commute times. This has increased off-peak transport company deliveries to customers. Some smaller businesses may find this unsustainable and may wish to relocate to less-congested areas of the region. Chapter 3, Transportation Environment and Consequences, details current and future travel conditions in the I-5 and SR 99 corridors, including freight mobility.

4.3.4 Environmental Impacts

4.3.4.1 No Build Alternative

The No Build Alternative would have fewer transportation options and longer travel times for transit riders (Chapter 3, Transportation Environment and Consequences, provides additional information on delays). This will lead to increased road congestion and possibly less transit use because there are fewer alternatives to driving, and buses are affected by congestion. This might deter residents and businesses and reduce development and investment in the study area.

Development could be more dispersed and of lower density than with the FWLE. Under the No Build Alternative, planned land use changes in Midway and the Federal Way City Center could occur more slowly or might not reach the full density permitted under the current zoning. This might limit or delay economic development opportunities.

4.3.4.2 Build Alternatives

The FWLE would have economic impacts on the local business environment, adjacent communities, and region. Direct impacts would include business and employee displacements, and tax revenue impacts. Indirect impacts would likely include changes to development amounts, locations, and intensity. Indirect impacts on local economic conditions would include changes in parking, noise, visual conditions, or access. FWLE construction-related impacts, including job creation, are described in Chapter 5, Construction.

Direct Impacts

This section discusses the direct economic and fiscal long-term impacts of transit operations, business displacement, and property acquisitions in the study area. Direct impacts include commercial properties acquired, businesses and employees displaced, and impacts on the local tax base from those acquisitions and displacements.

Commercial Properties Acquired

All alternatives would acquire commercial properties. Such properties generate local tax revenues, provide employment opportunities, and serve as anchors for the local economy. Each alternative and its associated design options would have a different distribution of acquisitions in the study area. Table 4.3-4 shows the number of properties in each city that would be fully acquired for each alternative.

The Preferred Alternative would have the second fewest commercial properties acquired after the SR 99 to I-5 Alternative. The SR 99 Alternative would have the most commercial acquisitions, distributed fairly evenly between the cities of Des Moines, Kent, and Federal Way. The City of SeaTac would experience relatively few commercial property acquisitions under any of the alternatives. Commercial property acquisitions would result in business and employee displacements, as well as impacts on local property tax revenue.

TABLE 4.3-4
Commercial Property Acquisitions by City

Alternative	Total Number of Commercial Parcels Acquired[a]	Number of Commercial Parcels Acquired in Each City[a]			
		SeaTac	Des Moines	Kent	Federal Way
Preferred Alternative	**25** (11-25)	**1** (1-1)	**2** (0-2)	**12** (0-12)	**10** (1-10)
SR 99 Alternative	**38** (31-69)	**0** (0-1)	**11** (2-17)	**16** (12-26)	**11** (11-15)
SR 99 to I-5 Alternative	**18** (15-26)	**0** (0-1)	**7** (7-11)	**7** (7-7)	**4** (1-8)
I-5 to SR 99 Alternative	**34** (34-62)	**0** (0-0)	**1** (1-3)	**22** (22-37)	**11** (11-15)

[a] Parcels fully acquired. The range of full acquisitions for alternative options is shown in parentheses.

Displacements

Table 4.3-5 shows, by alternative, the number of commercial, industrial, public, or institutional properties projected to be partially or fully acquired, and estimates how many businesses and employees would be displaced. Section 4.1, Acquisitions, Displacements, and Relocations, provides additional information.

Sound Transit estimated the number of employees for displaced businesses using regional employment density averages for various types of businesses (retail, office, industrial, etc.) and King County Assessor information on land use and net square footage of the affected buildings. Employee displacement calculations were based on fully acquired properties. The analysis assumed that affected buildings were completely occupied, giving a conservative estimate of affected employment in the study area.

As shown in Table 4.3-5, the Preferred Alternative would have the second fewest business displacements and the fewest employee displacements. The maximum number of employees displaced would be approximately 1,040 for the SR 99 Alternative when combined with station options that increase displacements along SR 99. This represents less than 4 percent of the 2010 employment base for either the SR 99 corridor or the I-5 corridor. It is less than 3 percent of the projected 2035 employment base for either corridor.

TABLE 4.3-5
Properties Affected and Displacements by Alternative

Alternative		Total Commercial, Industrial, Public, and Institutional Parcels Affected		Displacements	
		Partial	Full	Businesses	Employees
Preferred Alternative		**40**	**51**	**42**	**370**
Kent/Des Moines Station Options	Kent/Des Moines At-Grade	-8	-14	-16	-100
	Kent/Des Moines I-5	-12	-8	-12	-50
Landfill Median Alignment Option		-2	--	--	--
S 272nd Star Lake Elevated Station Option		--	--	--	--
S 317th Elevated Alignment Option		--	--	--	--
Federal Way City Center Station Options	Federal Way I-5	-2	-3	-4	-40
	Federal Way S 320th Park-and-Ride	-1	-9	-19	-260
SR 99 Alternative		**171**	**40**	**101**	**580**
S 216th Station Options	S 216th West	-2	+4	+13	+60
	S 216th East	-2	+3	+5	+10
Kent/Des Moines Station Options	Kent/Des Moines HC Campus	-4	-2	-7	+40
	Kent/Des Moines HC from S 216th W	-20	+7	+14	+200
	Kent/Des Moines SR 99 Median	+6	-8	+2	-10
	Kent/Des Moines SR 99 East	-5	-6	+8	-80
S 260th Station Options	S 260th West	-27	+13	+18	+140
	S 260th East	-11	+9	+18	+80
S 272nd Redondo Trench Station Option		-29	+6	-1	+60
Federal Way SR 99 Station Option		-14	+4	-13	-20
SR 99 to I-5 Alternative		**43**	**28**	**46**	**420**
S 216th Station Options	S 216th West	-4	+4	+7	+60
	S 216th East	-4	+3	-1	+10
Landfill Median Alignment Option		-2	--	-6	--
Federal Way City Center Station Options	Federal Way I-5	-2	+4	-4	+10
	Federal Way S 320th Park-and-Ride	-1	-2	-19	-210
I-5 to SR 99 Alternative		**158**	**51**	**96**	**500**
S 260th Station Options	S 260th West	-22	+6	+11	+50
	S 260th East	-11	+9	+18	+80
S 272nd Redondo Trench Station Option		-29	+6	-1	+60
Federal Way SR 99 Station Option		-14	+4	-13	-20

Some businesses may relocate to other areas or permanently close when their property is purchased. In these cases, jobs associated with the displaced businesses might be lost. However, a number of displaced businesses and jobs would not be lost permanently. Sound Transit provides relocation assistance to displaced businesses, and on past projects it has successfully helped many businesses who chose to relocate within the project area. Section 4.1.5, Relocation

Opportunities, provides further detail, and Section 4.1.6 summarizes the Sound Transit Acquisition and Relocation Policy.

Impacts of Acquisitions on Tax Base of Cities

Residential and commercial properties acquired by Sound Transit would be removed from the tax rolls and would no longer generate property tax revenues. Table 4.3-6 presents the initial impacts on revenues by alternative, based on 2013 assessed property values and city tax levy rates. It also shows the percent of lost annual city tax revenue. The values represent only property tax impacts on the cities of SeaTac, Kent, Des Moines, and Federal Way; the project would not acquire any properties and would have no property tax impacts in unincorporated King County. The Preferred Alternative and the SR 99 to I-5 Alternative would have lower initial property tax impacts and the SR 99 Alternative and the I-5 to SR 99 Alternative would have the most initial property tax impacts. Various station options would increase or reduce property tax impacts by requiring additional properties beyond the alternative, avoiding properties, or using publicly owned property.

These "initial property tax impacts" would be a reduction in property tax revenue, but the long-term effects of acquisition depend on other factors. For example, because property tax would no longer be collected from parcels fully acquired and retained by Sound Transit, tax rates charged to remaining taxpayers could increase slightly to recover these funds.

Because cities derive tax revenue from a variety of sources, the initial property tax impacts would not be the project's only effect on municipal tax revenue. Moreover, tax impacts, both initial and long-term, vary with the type of property acquired. Converting commercial or industrial properties to transportation use could also reduce Business and Occupation (B&O) and sales tax revenue if the business chooses to close or relocate to a different jurisdiction.

Other factors would offset likely tax revenue reductions. Some of the land acquired would be needed only during construction and would be redeveloped after project completion, allowing for new (possibly increased) tax revenues. Enhanced transit service, in combination with other factors, would likely promote future private development and investment in the transit station areas, leading to long-term gains in city property and sales tax revenue. This is discussed in greater

TABLE 4.3-6
Initial Property Tax Impact by City

Alternative	Total Annual Initial Property Tax Impact[a]	Annual Initial Property Tax Impact by City and Percentage of Budgeted Property Tax Revenue							
		SeaTac		Des Moines		Kent		Federal Way	
		%	$	%	$	%	$	%	$
Preferred Alternative	**- $77,394** (- $31,712- $77,394)	- **0.1 %** (- 0-0.1)	- **$7,815** (- $7,815- $7,815)	- **0.3%** (- 0.2-0.3)	- **$12,660** (- $9,342- $12,660)	- **0.1%** (- 0.1-0.1)	- **$22,976** (- $13,743- $22,976)	- **0.3%** (- 0.0-0.3)	- **$33,943** (- $485- $34,270)
SR 99 Alternative	- **$91,379** (- $77,856- $141,544)	**0.0%** (0.0-0.0)	**$0.00** (- $0.00- $1,791)	- **0.4%** (- 0.1-0.9)	- **$14,269** (- $4,808- $46,475)	- **0.2%** (- 0.2-0.3)	- **$29,275** (- $24,833- $48,894)	- **0.5%** (- 0.5-0.5)	- **$47,836** (- $45,341- $49,838)
SR 99 to I-5 Alternative	- **$59,716** (- $35,720- $74,610)	**0.0%** (0-0)	**$0.00** ($0.00- $1,791)	- **0.4%** (- 0.4-0.6)	- **$14,417** (- $14,417- $22,947)	- **0.1%** (- 0.1-0.1)	- **$20,818** (- $20,818- $21,048)	- **0.2%** (- 0.0-0.3)	- **$24,481** (- $485- $30,615)
I-5 to SR 99 Alternative	- **$95,228** (- $92,733- $116,579)	**0.0%** (0.0-0.0)	- **$1,156** (- $1,156- $1,156)	- **0.4%** (- 0.4-0.6)	- **$15,462** (- $15,462- $21,033)	- **0.2%** (- 0.2-0.3)	- **$30,775** (- $30,775- $50,124)	- **0.5%** (- 0.5-0.5)	- **$47,836** (- $45,341- $49,838)

[a] Impacts are based on 2013 municipal budgets and levy rates.

detail in the Positive Indirect Impacts and Potential for Transit-Oriented Development subsections later in this section.

Overall, removing property from the tax rolls would have a minor impact on municipal budgets. For almost all alternatives and options, the initial property tax impact would represent less than 0.5 percent of the city's budgeted property tax revenue. The greatest impact would be approximately 1.3 percent for the City of Des Moines with the SR 99 Alternative with the potential additional station at S 216th Street (West option), the Kent/Des Moines HC Campus from S 216th Street West Station Option, and the potential additional station at S 260th Street (West option).

Impacts on Regional Transportation of Goods and Services

The primary operational effects on regional transportation of goods and services would be changes in regional freight mobility on I-5, SR 99, and the surrounding surface street network. As described in Chapter 3, Transportation Environment and Consequences, 2035 peak travel times in the I-5 and SR 99 corridors are anticipated to moderately increase relative to current conditions.

Future regional freight conditions would be similar relative to the No Build Alternative. Localized improvements in freight access could occur because of reduced VMT and improved intersection operations. The FWLE is not expected to adversely affect freight mobility because the light rail line is separated from roadway travel lanes and would allow some motorists to avoid traffic congestion. Chapter 3 contains a detailed discussion of transportation impacts.

Indirect Impacts

FWLE operation could have both positive and negative indirect impacts on economic conditions in the study area. Light rail facilities provide additional transit access, which can increase property values near stations and increase the potential for development and redevelopment in station areas. It can also change existing traffic patterns and vehicular access for business patrons.

Positive Indirect Impacts

Light rail projects often increase pedestrian activity near stations and can bring more customers to nearby businesses. Increased access to transit causes increased visibility and exposure to large volumes of pedestrian traffic, making surrounding properties more desirable for commercial or mixed-use development. Convenient access to both transit and commercial businesses can foster residential or mixed-use

development near stations. Retail and residential uses around light rail stations attract employment uses (particularly office and service).

Furthermore, improved access to high-capacity transit, combined with land use regulations that are conducive to a mix of residential and commercial uses and an active real estate market, can encourage increased development density near transit stations. Some station areas are more conducive to this pattern of development than others. As described in Section 4.2, Land Use, the greatest potential for TOD occurs in the Federal Way City Center station area and, to a lesser extent, the S 216th and Kent/Des Moines station areas.

The FWLE could lead to increased property values near stations, with an associated increase in property tax revenue for cities. If the higher-density mixed-use land use patterns associated with TOD emerge, the greater density of businesses, employees, and residences would also lead to increased sales and B&O tax revenue for cities.

Station Impacts on Property Value

Recent studies in Denver, Buffalo, Washington D.C., San Francisco, and Portland (OR) show that residential and commercial properties near light rail transit stations are typically valued higher than similar properties without access to high-capacity transit (Jackson, 2010; Hess and Almeida, 2007; Cervero et al., 2004).

Increased property values near FWLE light rail stations are, however, not assured. Property-value increases generally require a strong demand for real estate, locations in neighborhoods free from signs of stagnation and distress, and public policies such as zoning bonuses that further leverage TOD and transit system expansion that produces the spillover benefits of a highly integrated transportation network. Property values are also affected by external forces and might change in response to fluctuations in the economy, consumer confidence, and local development pressures. In addition, because TOD takes time to evolve, property value benefits will also take time to accrue (Cervero et al., 2004).

Negative Indirect Impacts

While the presence of light-rail facilities often has positive economic effects on the surrounding area, it is also possible for light rail to have negative effects. Some commercially zoned property would be removed from a city's developable land base, reducing that city's overall commercial development capacity until additional property is zoned for commercial uses or zoning regulations are amended to allow for more intense development.

FWLE Corridor Development Capacity

Sound Transit analyzed impacts on commercial and residential development potential for the Preferred and SR 99 alternatives to assess corridor-wide effects on potential development capacity. The results of this analysis can be found in the 2016 addendum to the FWLE TOD report.

The FWLE would acquire commercially zoned properties in SeaTac, Des Moines, Kent, and Federal Way, resulting in reduced potential for long-term commercial growth, depending on how much of the land base is acquired and whether the city modifies

zoning elsewhere to allow for increased density to generate greater tax revenue. Table 4.3-7 shows how much of each city's commercially zoned land base would be fully acquired for each alternative. Ranges are provided to account for station and alignment options.

TABLE 4.3-7
Percent of Total Commercially Zoned Land Within Each City to be Acquired for FWLE

Alternative	SeaTac		Des Moines		Kent		Federal Way	
	Commercial %	Mixed Use %	Commercial %	Mixed Use %	Commercial %	Mixed Use %	Commercial %	Mixed Use %
Preferred Alternative	**0** (0-0)	**0.1** (0.1-0.1)	**0.2** (0.0-0.2)	**0** (0-0)	**1.1** (0.4-1.1)	**0.1** (0.0-1.0)	**0** (0-0)	**3.1** (3.1-4.3)
SR 99 Alternative	**0** (0-0)	**0** (0-0)	**2.2** (0.6-7.5)	**0** (0-0)	**1.2** (1.0-3.2)	**0** (0-0.2)	**2.4** (2.3-2.4)	**3.9** (3.9-5.2)
SR 99 to I-5 Alternative	**0** (0-0)	**0** (0-0)	**1.5** (1.5-2.9)	**0** (0-0)	**0.6** (0.6-0.6)	**0.2** (0.2-0.2)	**0** (0-0)	**2.5** (2.5-4.2)
I-5 to SR 99 Alternative	**0** (0-0)	**0.1** (0.1-0.1)	**0** (0-1.0)	**0** (0-0)	**1.2** (1.2-3.2)	**0.3** (0.3-0.3)	**2.4** (2.3-2.4)	**3.9** (3.9-5.2)

Note: Range indicates range of impacts with options.
Sources: King County Assessor, City of SeaTac, City of Federal Way, City of Des Moines, City of Kent.

In most cases, the project would impact only a small portion of the city's commercially zoned land. The SR 99 and I-5 to SR 99 alternatives would have the most impacts with the potential to affect more than 6 percent of the commercially zoned land in Federal Way, if commercial and mixed use zoning categories are considered together.

Light rail facilities can also adversely affect property values. Property values can be negatively affected if one or more of the components of a mixture of residential, retail, and transit development in proximity of a station is missing. For example, if transit stations are located in areas where local land use and zoning regulations are not conducive to mixed-use, retail, or high-density residential development, such as existing single-family neighborhoods, light rail stations may be viewed negatively, rather than as a benefit. Also, spillover parking from station areas could harm property values and sales for businesses near stations that depend on vehicular access.

Potential negative visual impacts could arise from the FWLE's alteration of vegetation and buildings and the introduction of elevated structures. For example, elevated structures may reduce the visibility of adjacent businesses or retail signage, which could affect patronage. The rail lines between stations could also decrease property values by exposing nearby properties to additional noise,

light and glare, vibrations, and view impacts, while providing no amenities to increase property values. These impacts are more often associated with elevated, and to a lesser degree, at-grade rail lines, and are generally negligible for tunnel or trench rail lines. These impacts and potential mitigation measures are described in Sections 4.5, Visual and Aesthetic Resources, and 4.7, Noise and Vibration.

As described in Section 3.4.4, Parking, all of the FWLE build alternatives would affect the amount of parking available in the project vicinity. While new parking would be provided at most stations, all of the alternatives would result in a net reduction in the amount of private, off-street parking in the area. A lack of parking can deter patrons from frequenting local businesses but this effect may be offset by the increased availability of transit, depending on the type of business. Businesses that provide services or sell easily portable goods would be less affected by reductions in available parking than businesses that sell larger goods.

As with potential positive indirect impacts, potential negative indirect impacts are not guaranteed. The same external forces previously described, such as real-estate demand, local zoning, and economic climate, can combine in different ways to have either positive or negative indirect impacts.

4.3.5 Potential Mitigation Measures

Long-term operation of the FWLE is not anticipated to result in adverse local and regional economic effects. Potential adverse effects on neighboring property values would be mitigated with commitments described in other sections of the Final EIS, including Chapter 3, Transportation Environment and Consequences; Section 4.1, Acquisitions, Displacements, and Relocations; Section 4.5, Visual and Aesthetic Resources; and Section 4.7, Noise and Vibration. No additional mitigation for economic effects would be required. Mitigation measures for economic impacts during construction are described in Chapter 5.

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4.4 Social Impacts, Community Facilities, and Neighborhoods

4.4.1 Summary

The FWLE alternatives would generally travel along major transportation corridors and the edges of neighborhoods, minimizing potential community facility and neighborhood impacts. None of the alternatives would bisect a residential neighborhood, adversely affect community cohesion, or change access to or from neighborhoods. The FWLE would affect neighborhoods by removing residences along the edges and creating noise and visual impacts for some remaining residences. Sound Transit would mitigate impacts from property acquisition, new sources of noise, and changes to the visual character along the edges of neighborhoods. Such mitigation would limit changes to the overall character of neighborhoods.

The Preferred Alternative would not displace any community facilities and would have fewer noise impacts before mitigation than the other action alternatives. It would displace the fewest businesses but the most residents, due to the acquisition of several multi-family buildings and one mobile home park between S 216th Street and S 240th Street. Visual impacts would occur for most of the neighborhoods adjacent to I-5. Since these are primarily single-family neighborhoods, the number of visual impacts is less than the SR 99 Alternative. Sound Transit would use mitigation measures to minimize visual impacts for all alternatives, including landscaping, minimizing removal of mature vegetation, and wall treatments for retaining or sound walls.

The SR 99 Alternative would displace community facilities and have the most noise impacts before mitigation. It would displace the most businesses, but the fewest residences.

The FTA expects to make a final environmental justice determination for the project in its Record of Decision (ROD). Based on the analysis in Chapter 7, Environmental Justice, the expected determination is that the FWLE would not result in disproportionately high and adverse effects on minority and/or low-income populations.

Study Area

The study area for social impacts, community facilities, and neighborhoods includes a 1/2-mile area around each FWLE alternative. Because of the proximity of the alternatives, there is some overlap in the 1/2-mile areas. The overall study area includes neighborhoods within SeaTac, Des Moines, Kent, Federal Way, and unincorporated King County.

4.4.2 Introduction

Consistent with FTA guidance, four key neighborhood and community issues are used to evaluate how the FWLE could affect the study area:

- Changes in neighborhood quality
- Barriers to social interaction
- Impacts on community resources
- Impacts on safety and security

Much of the analysis for this section relies on findings described in other sections and chapters, including Chapter 3, Transportation; Section 4.1, Acquisitions, Displacements, and Relocations; Section 4.2, Land Use; Section 4.3, Economics; Section 4.6, Air Quality and Greenhouse Gases; Section 4.7, Noise and Vibration; Section 4.14, Public Services; and Section 4.17, Parkland and Open Space.

4.4.3 Affected Environment

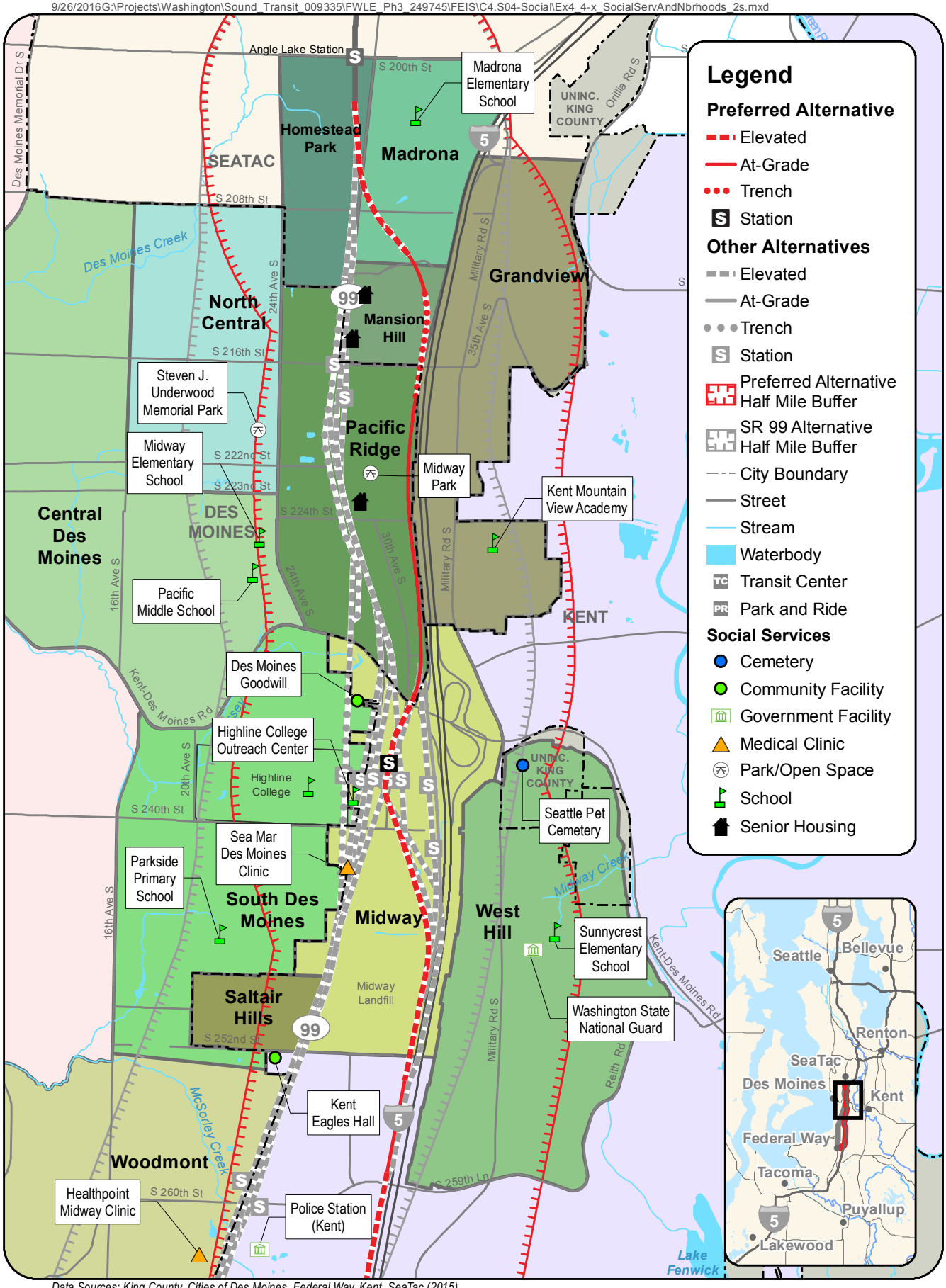
This section describes demographics and neighborhood characteristics, including location, development pattern, community resources, and accessibility. Exhibits 4.4-1 and 4.4-2 identify designated neighborhood boundaries within the study area and the locations of community facilities, including parks, schools, religious institutions, social services, and public service facilities.

Section 4.14, Public Services, Safety, and Security, describes public services including public and private schools, fire stations, police stations, and hospitals. Section 4.17, Parks and Recreational Resources, provides information about parks within the study area.

4.4.3.1 Population Characteristics

Table 4.4-1 compares the demographics of the study area to the four cities in the study area and King County. The population within the study area is both ethnically and linguistically diverse, with larger concentrations of Korean, African (mostly Somali), and Hispanic populations than King County as a whole.

Based on U.S. Census data, many residents in the SR 99 corridor are transit-dependent, and many in both the I-5 and SR 99 corridors are low-income. Chapter 7, Environmental Justice, provides information on the minority and low-income populations, including Sound Transit's outreach efforts to them.



Legend

Preferred Alternative
- Elevated
- At-Grade
- Trench
- Station

Other Alternatives
- Elevated
- At-Grade
- Trench
- Station
- Preferred Alternative Half Mile Buffer
- SR 99 Alternative Half Mile Buffer
- City Boundary
- Street
- Stream
- Waterbody
- Transit Center
- Park and Ride

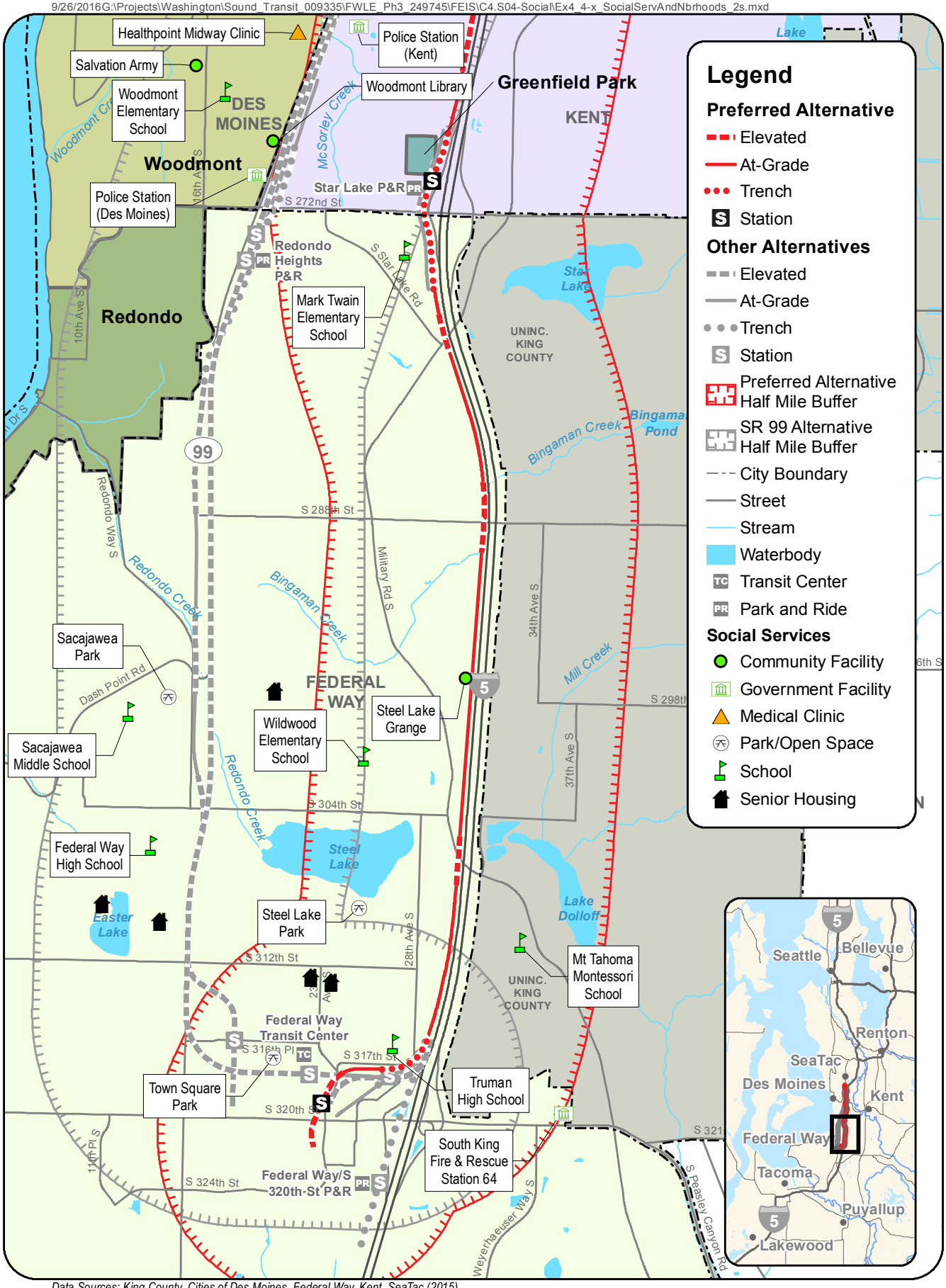
Social Services
- Cemetery
- Community Facility
- Government Facility
- Medical Clinic
- Park/Open Space
- School
- Senior Housing

Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac (2015).

N

0 0.25 0.5 1 Miles

EXHIBIT 4.4-1
Social Services and Neighborhoods (North)
Federal Way Link Extension



Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac (2015).

N

0 0.25 0.5 1 Miles

EXHIBIT 4.4-2
Social Services and Neighborhoods (South)
Federal Way Link Extension

TABLE 4.4-1
Population Characteristics

	I-5 Corridor	SR 99 Corridor	SeaTac	Des Moines	Kent	Federal Way	King County
Total Population	63,717	54,330	27,606	30,403	122,620	91,676	2,008,997
Population under 18 (%)	24	24	21	21	26	24	21
Population over 65 (%)	10	11	11	15	9	12	12
Minority (%)	58	61	65	46	52	50	37
Low-Income (%)	21	21	23	14	17	16	12
Median Household Income	$53,862	$48,236	$45,573	$58,308	$57,490	$54,186	$73,035
Households with No Vehicle (%)	9	12	9	7	8	9	10
Households with Limited English Proficiency (%)	19	20	23	16	18	15	11

Source: U.S. Census Bureau, 2015.

4.4.3.2 Study Area Characteristics

I-5 and SR 99 are major roadways that link the study area communities with the larger Puget Sound Region. They also can be barriers to interaction within these communities because of their scale.

Community cohesion in the larger study area neighborhoods is low because of barriers to interaction, few linkages between the smaller single-family subdivisions, and the frequent turnover that may occur in the larger apartment complexes. Community cohesion is likely to be higher within the smaller developments than the larger neighborhoods because of the internal opportunities to interact. Residents within both the larger and smaller areas may interact at schools, parks, libraries, community centers, religious facilities, and local retail shops in the study area. However, many community resources for residents are outside the study area.

Community Cohesion

Community cohesion is the degree to which residents have a sense of belonging to their neighborhood. It refers to the degree of interaction among the individuals, groups, and institutions that make up the community. To assess community cohesion, access and linkages, community facilities, and local businesses in the surrounding area that provide opportunities for residents to gather and interact are considered.

I-5 Corridor

The I-5 study area is primarily residential, with limited commercial development except near the Kent-Des Moines Road and S 320th Street interchanges. Until recently, the study area contained large areas that were unincorporated King County, and development was somewhat unplanned and disconnected. The residential neighborhoods in the study area tend to consist of older, established single-family housing that developed from the 1950s to 1970s as suburbs for workers in Seattle or Tacoma. The residential

neighborhoods to the west of I-5 include are mixed with some newer single-family and multi-family housing developments, including mobile home parks. These areas have been annexed by adjacent cities since 1990, but because of the patterns of growth, they are not part of a larger connected neighborhood. The area east of I-5 is primarily single-family residential developments and includes areas still within unincorporated King County.

The study area has few bicycle lanes and non-motorized trails. Cul-de-sacs in residential developments limit interaction between neighborhoods or subdivisions, but provide opportunities for interaction within specific residential developments. Similarly, mobile home parks and apartment complexes experience limited interaction with other neighborhoods because of little physical connectivity, but can provide opportunities for interaction internally.

There are few crossings of I-5 in the study area, which impedes interaction between the neighborhoods west and east of I-5. Some local streets provide access between neighborhoods, but most lack sidewalks and bike lanes.

SR 99 Corridor

The study area for SR 99 includes a mix of commercial and residential uses. SR 99 was the first road linking the region's primary economic centers of Seattle and Tacoma. Construction of I-5 in the 1960s shifted regional traffic patterns, but SR 99 has remained a major arterial. In the last decade, it has received high-occupancy vehicle/transit lanes, sidewalks, lighting, and landscaping, which have improved connections and accessibility along and across the roadway. Other roadways in the area have fewer sidewalks and are less pedestrian- and bicycle-friendly.

Residential uses are primarily multi-family in close proximity to SR 99. Commercial development along SR 99 buffers noise and traffic for residents farther east or west of the roadway, but limits interaction between neighborhoods on either side. Grocery stores, clothing stores, automotive services, hair salons, and religious facilities provide residents with opportunities to interact.

4.4.3.3 Neighborhoods by Local Jurisdiction

Most neighborhood boundaries are in both the I-5 and SR 99 study areas. Federal Way does not have city-designated neighborhoods, so its residential areas are described in general.

City of SeaTac

The FWLE study area in SeaTac includes the Madrona, Homestead Park, and Mansion Hill neighborhoods west of I-5, and the Grandview neighborhood east of I-5 (Exhibit 4.4-1). Madrona includes single-family residences, some large apartment complexes, and a mobile home park, as well as Madrona Elementary School, which provides an opportunity for interaction. The apartment complexes offer opportunities for interaction between residents, but reduce overall cohesion in the neighborhood.

Homestead Park is mostly commercial development. It also includes a large vacant area previously occupied by mobile homes that the Port of Seattle relocated as mitigation for noise from Sea-Tac International Airport. Washington State Department of Transportation (WSDOT) plans to use this area for the SR 509 Extension Project. Although some residential areas remain, the neighborhood lacks opportunities for interaction and has limited cohesion.

Mansion Hill consists primarily of single-family homes and includes some vacant property along the neighborhood edge that WSDOT acquired for the SR 509 Extension Project. As an older, established neighborhood, there is likely some cohesion within this neighborhood.

Grandview consists mostly of single-family residences. It includes a school and dog park that provide opportunities for interaction and likely cohesion in the neighborhood.

City of Des Moines

Des Moines has six neighborhoods in the study area: North Central, Pacific Ridge, Central Des Moines, South Des Moines, Woodmont, and Redondo (Exhibit 4.4-1). The North Central neighborhood is mostly vacant land the Port of Seattle acquired for noise mitigation and is being redeveloped as the Des Moines Creek Business Park. There are a few residences, a large park, a post office, and religious facilities.

SR 99 bisects Pacific Ridge. Most residential development is between SR 99 and I-5 and includes a mixture of single-family houses, mobile home parks, and multi-family residences (smaller individual buildings and larger complexes). Many of the housing units are in multi-family complexes, which may reduce community cohesion in the overall Pacific Ridge neighborhood. Opportunities for interaction include Midway Park and religious facilities along SR 99.

The Central Des Moines neighborhood is mostly single-family residential developments with some multi-family complexes. It includes Midway Elementary School, Pacific Middle School, and Mt. Rainier High School. Opportunities for interaction in the neighborhood include the schools, a public swimming pool at the high school, and religious institutions. Given the number of places for interaction, the neighborhood likely has cohesion.

South Des Moines includes single- and multi-family residential developments, along with Highline College and some commercial development adjacent to SR 99. Highline College is one of the larger colleges in Washington and includes branches of Central Washington University and Heritage University and a preschool/Head Start early learning center. It offers a number of resources for the general public and provides opportunities for interaction. Parkside Elementary School and Parkside Park also provide opportunities for interaction, and the single-family and multi-family residential developments likely have internal cohesion.

Woodmont and Redondo are primarily single-family residential neighborhoods where cohesion is likely high. Community facilities include Woodmont Elementary School, Woodmont Library, and religious institutions. These community facilities provide opportunities for interaction.

City of Kent

Kent neighborhoods in the study area include Midway, West Hill, Saltair Hills, and Greenfield Park (Exhibits 4.4-1 and 4.4-2). Midway is not a City-recognized neighborhood, but the adopted *Midway Subarea Plan* (City of Kent, 2011) is intended to support mixed-use development in the area bounded by SR 99, I-5, Kent-Des Moines Road, and S 240th Street. This area includes primarily commercial uses and one community resource, a post office. Residential development is mostly mobile home parks and small apartment complexes interspersed with commercial development, a pattern that reduces the likelihood of cohesion. The mobile home parks range from 18 to 34 units, and residents may rent or own their lot and/or their mobile home. Opportunities for interaction among residents in the Midway neighborhood are low because of the few and disconnected residential areas, lack of community resources, and the commercial nature of the neighborhood related to automotive

services, warehouse/distribution, and offices, which limits opportunities to interact with others in the larger neighborhood.

West Hill is predominantly single-family residential. Community facilities include Sunnycrest Elementary School, religious institutions, and small neighborhood parks. Given the number of places for interaction, it likely has cohesion.

Saltair Hills is primarily single-family residential. Although there are no community facilities, the neighborhood has a central message board/kiosk, which contributes to cohesion. A retail complex along SR 99 includes a number of Hispanic businesses that provide interaction opportunities for this population.

Greenfield Park is a small, isolated single-family development. It has no community facilities, but its neighborhood council likely provides some cohesion and opportunities for interaction.

City of Federal Way

The City of Federal Way does not have any designated neighborhoods, but the study area includes single-family and multi-family developments that likely have internal cohesion. Community facilities include religious institutions, schools, and parks such as the Town Square Park and the larger Steel Lake Park. These opportunities for residents from the surrounding neighborhoods to interact likely create a sense of community cohesion.

4.4.4 Environmental Impacts

This section describes the potential beneficial and adverse impacts on social and community facilities within the study area, consistent with FHWA's publication *Community Impact Assessment: A Quick Reference for Transportation* (FHWA, 1996).

4.4.4.1 No Build Alternative

With the No Build Alternative, the neighborhoods and communities will develop according to adopted plans, dependent upon economic conditions within the corridor. The neighborhoods with the greatest changes planned are Pacific Ridge in Des Moines (where the SR 509 Extension Project would potentially displace over 100 residences), Midway in Kent, and the Federal Way City Center. These neighborhoods would likely realize improvements to the street and sidewalks and denser development of mixed uses that would improve cohesion, but other neighborhoods would not be expected to change. Under the No Build Alternative, study area residents and those who

travel in or through the study area would not receive a more reliable and efficient mode of transportation and would continue to have inadequate transit accessibility and underserved transit-dependent populations.

4.4.4.2 Build Alternatives

Direct Impacts

Impacts Common to All Alternatives

The FWLE would positively affect neighborhood quality by improving transportation access, reliability, and linkages to the surrounding region. Neighborhoods (particularly those near the stations) would experience improved access, residential infill, employment growth, and greater patronage of local businesses. Potential meeting points at stations could enhance community cohesion.

The majority of the neighborhood impacts would occur along the edges of neighborhoods and include the removal of residential units and mature vegetation. The guideway itself would affect views for some people, depending on the location and conditions. Noise mitigation such as freestanding sound walls would also affect the visual character along the edge of adjacent neighborhoods in areas where there is no vegetation screening. The overall character of the neighborhoods is not likely to change materially because the changes are along the edges of the neighborhoods and Sound Transit would mitigate the noise and visual impacts.

All of the FWLE alternatives and options, except the Kent/Des Moines SR 99 Median Station Option to the SR 99 Alternative, would acquire at least one of the four mobile home parks in Midway. These parks do not have nearby community facilities and are surrounded by nonresidential land uses, reducing somewhat the impact of the displacements.

For all residential acquisitions, Sound Transit would offer relocation assistance that considers the needs of those being relocated, to help reduce inconveniences or hardships. This includes identifying replacement housing close to commercial and community facilities, schools (if applicable), places of employment, and access to transit if residents are transit-dependent. There are opportunities for residential relocation in the study area, but friends and neighbors in individual developments or neighborhoods could be affected by increased distance and other disruptions caused by relocating.

The FWLE would also displace some businesses (such as an ethnic grocery store) that tend to serve mostly minority populations, but there are other businesses that provide similar services in the study area, which would reduce the impacts on patrons.

Properties acquired for construction but not permanently needed for the FWLE would likely be redeveloped consistent with local zoning. This could change the character of those parts of neighborhoods around stations. Depending on the zoning and suitability for residential uses, a portion of these properties would likely be redeveloped as affordable housing.

The FWLE would not create new barriers to interaction because the alternatives are generally adjacent to I-5 or SR 99, which already act as neighborhood boundaries. The FWLE would operate on an exclusive guideway, with local access maintained under or over it. There could be access changes or restrictions to adjacent properties from the station configurations. Pedestrian and bicycle mobility would be maintained as all of the alternatives are grade-separated and do not bisect any non-motorized connections. The project would improve non-motorized access to regional transit. FWLE improvements would meet the Americans with Disabilities Act requirements for station access for users with disabilities. The FWLE would complement local bus service, which would be restructured to operate collaboratively with FWLE, with some routes modified to provide more accessible or frequent service to the study area and connect to light rail stations. Refer to sections 3.4.2, Transit Operation, and 3.4.6, Non-motorized Facilities, in Chapter 3, Transportation, for information.

Station parking could affect traffic operations on adjacent roadways, but impacts would be mitigated to No Build conditions. The potential for hide-and-ride parking (when transit users park in residential neighborhoods and commercial areas near transit stations) is low. In most areas surrounding stations, residential development is too far away from the station to be attractive, or no on-street parking is available, or the stations are expected to have excess parking capacity.

As described in Section 4.14, Public Services, Safety, and Security, crime around stations generally reflects the crime rates in the surrounding neighborhoods. Light rail projects do not increase crime rates. Sound Transit would also employ measures to minimize crime

at the stations, so safety and security impacts on adjacent neighborhoods are not anticipated.

Impacts by Alternative

Preferred Alternative

The Preferred Alternative would be mostly in the WSDOT right-of-way, directly parallel to I-5, which is already a barrier to access between neighborhoods. It would displace the second most residences. Most displacements would be in multi-family buildings in the Pacific Ridge neighborhood, north of Kent-Des Moines Road. These displacements would be disruptive to the affected residents, although Sound Transit would provide mitigation. However, they would not materially impact the overall neighborhood quality because they would occur along the edge of the neighborhood. The remaining adjacent residents would notice a visual change from the removal of nearby buildings and vegetation.

The Preferred Alternative would acquire the 21-unit Jackson Mobile Home Park and a small apartment complex in the Midway neighborhood. In Federal Way, two mobile homes would be displaced on the eastern edge of the 400-unit Camelot Square Mobile Home Park, south of S 288th Street, which would not affect cohesion in the development.

The Preferred Alternative would have the fewest business displacements and would not affect any medical or community facilities.

The **S 272nd Star Lake Elevated Station Option** would affect one community facility (Mark Twain Elementary School) by decreasing the area of the existing playfield which would also decrease the area available for potential future school construction. There would be no additional social impacts from the **Landfill Median Alignment Option** or the **Federal Way I-5 Station Option**.

The **Kent/Des Moines I-5 Station Option** would have more multi-family residential displacements than the Preferred Alternative, including the full acquisition of two additional mobile home parks in Midway. The **Kent/Des Moines At-Grade Station Option** would reduce residential displacements compared to the Preferred Alternative. The station would be south of S 240th Street and closer to the edge of the neighborhood, avoiding impacts on some multi-family residences and the Jackson Mobile Home Park.

The **S 320th Park-and-Ride Station Option** would displace 20 mobile home units on the east edge of the Belmor Park Golf & Country Club Manufactured Home Community. This mobile home park is a gated 55-and-up retirement community with approximately 300 units and several community amenities, including a golf course. The displacement of the mobile homes would be disruptive to the affected residents, but would not affect the overall cohesion of the community or the community amenities.

SR 99 Alternative

The SR 99 Alternative would displace the fewest residences but the most businesses. While the effect on residential neighborhoods would be limited, the alternative would displace small businesses that mostly serve local populations. There are locations in the study area available and suitable for business relocation, which would minimize this impact. The SR 99 Alternative would also displace leased administrative offices at Highline College, but these offices would likely be relocated nearby. Visual changes along SR 99 would not affect adjacent neighborhood quality.

The **Federal Way SR 99 Station Option** would have no additional impacts.

The **S 216th West Station Option** would displace more businesses and be closer to residences west of SR 99, but would not have additional neighborhood or community impacts. The **S 216th East Station Option** would displace 26 units within the Pine Terrace Mobile Home Park south of S 216th Street and east of SR 99. This park has 75 units and a laundry facility, but is expected to be redeveloped as the Waterview Crossing mixed-use project before the FWLE begins construction. See further discussion in Chapter 6, Cumulative Impacts.

The **Kent/Des Moines HC Campus Station Option** would displace the Jackson Mobile Home Park, one apartment building in Midway, one apartment building west of SR 99, and single-family residences south of Kent-Des Moines Road. This option would have visual impacts at residences adjacent to the alignment. It would not create social barriers because it would be on the edge of the single-family neighborhood and between commercial and multi-family uses. The loss of single-family residences in a cohesive neighborhood would have a greater effect on the Midway neighborhood than the other Kent/Des Moines station options in more commercially developed areas with less neighborhood cohesion. The **Kent/Des Moines HC**

Campus Station Option from S 216th West Station Option would displace four additional mobile homes from the Mar Villa 20-unit park north of Kent-Des Moines Road. This mobile home park is adjacent to commercial development on three sides and an apartment building, and is not part of a larger neighborhood.

The **Kent/Des Moines HC Campus Station Option** would displace the Sea Mar Community Health Center's Des Moines Medical and Dental Clinic, a neighborhood and social amenity that provides medical and dental care services to low-income and minority populations (mainly Hispanic). Current zoning would permit this facility to relocate within the same general area to minimize impacts on the populations served, and its operations could transition to the new facility without any gap in service. However, there may not be any suitable buildings in the area, requiring Sea Mar to build a new facility. If the Kent/Des Moines HC Campus Station Option were combined with the S 216th West Station Option, it would also displace the Citadel Church and the Open Door Baptist Church. There are relocation opportunities available for both churches in the area.

The **Kent/Des Moines SR 99 Median Station Option** would not displace any mobile home parks, but would displace two apartment buildings in the Midway neighborhood and one on the west side of SR 99. The **Kent/Des Moines SR 99 East Station Option** would displace two mobile home parks and two apartment buildings in the Midway neighborhood. One of these parks, Tip Top Trailer Courts, is primarily motorhome recreational vehicles, which would be easier to relocate to properties that offer long-term or permanent spaces than the older mobile homes at the other mobile home park.

The **S 260th Street West Station Option** would displace the Sea Mar Des Moines Medical and Dental Clinic described above, along with the Seattle Full Gospel Church and the Iglesia Cristiana Pentecostes Filidelphia. Relocation opportunities for the churches should be available in the study area. Relocation for the Sea Mar Des Moines Clinic would be as described above. The **S 260th East Station Option** would not have any additional impacts.

The **S 272nd Redondo Trench Station Option** would be closer to single-family and multi-family residential developments west of SR 99. It would have visual quality impacts for residents north and south of Dash Point Road from the proximity and vegetation removal. South of Dash Point Road, the alignment would be closer to

Sacajawea Middle School and Park and Federal Way High School, but would not have additional impacts on these facilities. This alignment would not create any new barriers for residents adjacent to the alignment, and does not bisect any neighborhoods.

SR 99 to I-5 Alternative

The SR 99 to I-5 Alternative would have similar impacts to the SR 99 Alternative north of Kent/Des Moines Road and to the Preferred Alternative south of S 240th Street. The Kent/Des Moines Station for this alternative would be in the center of the Midway neighborhood. Residential displacements would include multi-family residences and two mobile home parks in the Midway area. Impacts for the station options associated with this alternative would be similar to those for the SR 99 Alternative and the Preferred Alternative.

I-5 to SR 99 Alternative

The I-5 to SR 99 Alternative would have impacts similar to the Preferred Alternative north of Kent/Des Moines Road and to the SR 99 Alternative south of S 240th Street. The Kent/Des Moines station for this alternative would be in the center of the Midway neighborhood. This alternative would displace multi-family residences and two mobile home parks. Impacts for the station options associated with this alternative would be similar to those for the SR 99 Alternative, with all station options avoiding displacing the Sea Mar Des Moines Clinic.

Indirect Impacts

The FWLE could have indirect effects on community cohesion and neighborhood quality. Station area improvements could provide new meeting places for nearby residents and employees, improving community cohesion.

The increased transportation options could make the neighborhoods adjacent to the light rail stations more attractive for commercial and residential redevelopment and for transit-oriented development (TOD). Increased transit access and TOD potential could enhance neighborhood walkability and safety. The character of the neighborhoods in the station areas would likely change as a result of the new development and redeveloped properties. Refer to Section 4.2, Land Use, for information on TOD and applicable goals and policies.

Station area redevelopment could promote economic activity by expanding neighborhood business districts, and could increase property values (refer to Section 4.3, Economics, for information on potential economic benefits). Property values (and therefore property taxes) in the station areas may increase. Increased property values could cause higher rents, and could also have a negative effect on existing home-owners, resulting in some deciding to move from the neighborhoods and potentially affecting cohesion.

Jurisdictions along the FWLE corridor have adopted goals and policies in their comprehensive plans related to the provision of affordable housing options including areas zoned to allow for affordable housing opportunities and providing incentives and programs to developers to construct affordable housing. Sound Transit also has adopted a TOD policy that includes goals for providing affordable housing in station areas on properties acquired for construction, but not permanently needed for the FWLE.

Affordable Housing

New state legislation creates requirements to maximize opportunities for affordable housing associated with Sound Transit projects. Because the law is conditioned on passage of ST3, Sound Transit has not yet determined how it will implement the law. Many of the future Sound Transit owned parcels in the FWLE station areas will likely be evaluated for suitability for housing. Affordable housing may become part of all station areas.

4.4.5 Potential Mitigation Measures

The project would incorporate measures to minimize the impacts on neighborhood quality, social interaction, and safety and security, and FWLE operation would generally provide a net benefit to neighborhood quality. Therefore, no mitigation would be necessary beyond the mitigation described in other sections of this Final EIS.