

Chapter 3. Affected Environment, Significant Impacts, and Mitigation Measures

This chapter describes the impacts of the Preferred Alternative for the same natural and built environment elements as the 10-Year Update Draft Environmental Impact Statement (DEIS) issued August 29, 2006. Consistent with the analysis conducted for the DEIS, this analysis is programmatic and follows similar methodologies as the DEIS.

This final environmental impact statement (FEIS) chapter should be read in the context of the DEIS since the *Affected Environment* and *Mitigation Measures* sections are not repeated, except for updated transportation mitigation measures. This chapter describes how the impacts of the Preferred Alternative would be similar or different from the alternatives described in the DEIS, particularly Alternatives 2 and 3.

Similar to the DEIS, the analysis of the Preferred Alternative reviews total growth and location of growth for a variety of natural and built environment topics. Impacts are sometimes described in the context of other alternatives. The following describes the Preferred Alternative in relation to Alternatives 2 and 3, the DEIS action alternatives:

- **Unincorporated Urban Growth Area (UGA) Expansion.** Under the Preferred Alternative, total UGA expansion of 12.7 square miles would be intermediate to expansions proposed under Alternatives 2 (13.4 square miles) and 3 (19.2 square miles). Alternative 1 continues the December 2005 boundaries of the Comprehensive Plan.
- **Unincorporated UGA Population Growth.** The Preferred Alternative population in UGAs is highly similar to Alternative 2, with 56,865 persons projected under the Preferred Alternative in comparison to 56,869 persons for Alternative 2. These populations are in the range of Alternatives 1 and 3, which are 48,782 persons for Alternative 1 and 75,035 persons for Alternative 3.

- **Unincorporated UGA Employment Growth.** The Preferred Alternative employment projection in UGAs is equal to 36,000 jobs, between Alternative 1 at 20,000 jobs and Alternative 2 at 38,000 jobs. Alternative 3 proposes 47,000 jobs.

For a summary comparison of the impacts of the Preferred Alternative and the DEIS Alternatives 1, 2, and 3, please also see Chapter 1, *Summary*.

3.1. Natural Environment

3.1.1. Earth

Countywide

Earth resources consist of geologic features, as well as processes such as soil and slope stability during erosion, mass failure, and seismic events. Geologic conditions limit development in some areas. Soil disturbance caused by development can exacerbate geologic hazards; accordingly, development activities in such conditions may require measures to prevent the loss of soils or damage to structures.

Densification in current UGAs and UGA expansion areas would increase the extent of impervious surfaces, modify soil structures, and allow potential for chronic contamination. Impacts of the Preferred Alternative would be in the range of Alternatives 1 and 2. Alternative 1 retains December 2005 UGA boundaries, and Alternative 2 expands UGAs by 35%. The Preferred Alternative expands UGAs by 33%. The Preferred Alternative impacts would be slightly less than Alternative 2 and less than Alternative 3 which provides a 50% UGA expansion.

Under the Preferred Alternative, within all UGAs, the allowed density of areas zoned Urban Restricted would equal 1–5 dwelling units per acre (du/ac), similar to the density range under Alternatives 1 and 3. In comparison to Alternative 2, which allows 1–4 du/ac, the Preferred Alternative density range would allow for slightly higher densities at 1–5 du/ac within areas containing geologic hazard areas in Kingston and East Bremerton. The purpose of the Urban Restricted zone is, however, to promote densities that are consistent with the natural characteristics of the land; therefore, the densities would occur on the developable area of a property avoiding environmental constraints.

The Preferred Alternative would be the same as Alternative 1 in Poulsbo and the same as in Alternative 2 in the West Bremerton, ULID #6, and SKIA UGAs.

In Central Kitsap, the impacts of the Preferred Alternative would be the same as under Alternative 2, except that the Rolling Hills Golf Course, a portion of which is an area of moderate erosion hazard, would be designated Urban Reserve instead of Urban Low. In addition, an area near Perry Drive that contains an area of moderate erosion hazard would be zoned Urban Restricted instead of Mixed Use. These classifications under the Preferred Alternative would allow a less intense development pattern than the pattern allowed under Alternative 2.

The impacts of the Preferred Alternative would be between Alternatives 2 and 3 in Gorst where the UGA would expand to the west with the expansion area partially overlaying an area of moderate soil erosion hazard.

In Port Orchard, the amount of UGA expansion to the northeast would be less under the Preferred Alternative than under Alternatives 2 or 3, and would exclude areas of high and moderate

geologic hazard. In addition, the area of proposed UGA expansion near Mile Hill Drive, which contains areas of moderate geologic hazard, would be zoned as rural, similar to Alternative 1.

A small UGA expansion to the southwest of Port Orchard near State Route (SR) 16, as proposed under Alternative 3, would occur near Bethel-Burley Road SE similar to Alternative 3. Areas of moderate geologic hazard are mapped in this location.

Silverdale Sub-Area

In Silverdale, impacts of the Preferred Alternative would be the same as under Alternative 2 except that an area of moderate geologic hazard near Dickey Road that is proposed for zoning as Urban Low under Alternative 2 would be zoned Industrial, retaining this designation as under Alternative 1.

3.1.2. Air Quality

Air pollutant emissions would increase under each alternative based upon its growth level. Impacts of the Preferred Alternative due to construction and stationary sources would be similar to those described for all alternatives. During construction, fugitive dust and construction vehicle tailpipe emissions would contribute to temporary increases in ambient concentrations of particulate matter and temporarily degrade air quality near the construction sites; however, regional impacts would typically be far outweighed by emissions from cars and trucks in the neighborhoods surrounding the construction site.

Kitsap County is classified as an air quality attainment area, so transportation projects are not subject to state or federal transportation conformity regulations. Moreover, emissions from Kitsap County are only a small fraction of Puget Sound's regional emissions. Regardless, vehicle emissions from Kitsap County could contribute to regional air quality concerns (e.g., elevated ozone concentrations at the Olympic Mountains or Mount Rainier). Therefore, the Puget Sound Regional Council (PSRC) includes motor vehicle emissions from Kitsap County in the agency's transportation plans and regional air quality assessments.

The forecasted countywide population for the Preferred Alternative at 2025 is less than PSRC estimates for 2030 as tested in its air quality conformity analyses – 327,813 versus 339,904 persons respectively. Vehicle miles traveled (VMT) for the Preferred Alternative are slightly higher than the forecasted values for the PSRC conformity analysis, but well within the range of the DEIS alternatives:

- PSRC conformity analysis – 5,431,704
- Alternative 1 – 6,921,640
- Alternative 2 – 7,299,470
- Preferred Alternative – 7,389,710
- Alternative 3 – 8,005,100

It is unlikely that the forecasted VMT under the Preferred Alternative or the other alternatives would cause significant regional air quality impacts. The countywide VMT for the Preferred Alternative would be a small fraction of the regional VMT (6.5% of the forecasted VMT for the Puget Sound region, which equal 114,000,000 at 2030), and the forecasted Puget Sound regional vehicular emissions for ozone precursors (VOC and NO_x) are in turn less than 20% of the allowable emission budgets designed to protect regional air quality; in other words, there is an 80% cushion before regional emission non-attainment levels are exceeded. Therefore, it is concluded that future countywide emissions from residential areas, commercial activity, and motor vehicles would not cause significant regional air quality impacts.

3.1.3. Water Resources (Surface and Ground)

Land use patterns influence the quantity of surface water (how much), the quality of surface water (how clean), and the rate at which surface water flows (how fast). Surface water conditions are critical to maintaining the designated uses of surface waters; including aquatic life; recreation (e.g., swimming, fishing); water supply; and other miscellaneous uses such as wildlife, shellfish and seaweed harvesting, commerce and navigation, boating, and aesthetics.

Surface water conditions also affect the extent of road, home, business, and property flooding, and groundwater recharge. Groundwater provides a source of drinking water (Kitsap County's only source outside of Bremerton's service area), base flows to streams, direct input into lakes, prevention of seawater intrusion, and other benefits.

All alternatives would result in increased urbanization of unincorporated Kitsap County lands in UGAs and would allow further rural development. Currently, there are several thousand acres of unincorporated buildable (vacant or partially used) lands in UGAs subject to land use designation by the County. The number of buildable acres varies by alternative due to different Comprehensive Plan designations/densities and UGA sizes. Alternative 1 (No-Action) includes 4,000 acres of buildable land within December 2005 UGA boundaries. The Preferred Alternative would result in approximately 5,600 buildable acres and a 33% UGA expansion. Alternative 2 includes 5,700 buildable acres and a 35% UGA expansion. Alternative 3 includes about 7,100 acres of buildable land and a 50% UGA expansion.

Streams

Under the Preferred Alternative, impacts on streams would occur from the alteration of watershed runoff processes and streamflow patterns by the conversion of forested areas to lawns or other landscaped areas and through the creation of impervious surfaces. In addition, changes to land use patterns could lead to declining summer base flows and decreased water quality in streams because of increased runoff from roads and urban development.

With similar UGA expansions and buildable acres, impacts on streams under the Preferred Alternative are expected to be similar to those under Alternative 2, with some exceptions.

- Impacts on streams in the Foulweather Bluff basin would be similar to those under Alternative 3 since the Kingston UGA boundaries are similar and both alternatives would implement the Rural Wooded Incentive Program (RWIP).
- Impacts on streams in the Liberty Bay basin containing the Poulsbo UGA would be in the range of Alternatives 1 and 2. This is due to the Preferred Alternative and Alternative 1 having similar UGA boundaries. However, there would be a slight increase in potential impervious surfaces due to the RWIP implemented under the Preferred Alternative, but less than impervious surfaces due to Urban Low Residential and Industrial expansions under Alternative 2.
- Impacts on the Dyes Inlet basin would be similar to Alternative 2, except for a slight increase in impervious surface in the Silverdale UGA where Industrial classifications would be redesignated, along Dickey Road, instead of the Urban Low classifications under Alternative 2.
- Impacts on the Burke Bay basin would be less than under Alternative 2 as a result of several land use changes in the Central Kitsap UGA under the Preferred Alternative, including the reduction in UGA boundaries north of Waaga Way and areas changed from higher urban categories (Mixed Use and Urban Low Residential) to Urban Restricted and Urban Reserve.
- Impacts on the Sinclair Inlet basin would be between Alternatives 2 and 3 in the portion of the basin containing the Gorst UGA, because the amount of Gorst UGA expansion is between these alternatives. On the other hand, impacts on the Sinclair Inlet basin in the Port Orchard UGA would reduce impervious surfaces in northeast Port Orchard where the UGA boundary is reduced near Baby Doll Road in comparison to Alternatives 2 and 3.
- Impacts on Colvos Passage are expected to be similar to Alternative 1 with Mile Hill Drive retaining rural categories.
- Impacts on Burley Lagoon basin are expected to be similar to Alternative 2, because the Preferred Alternative has a similar Port Orchard UGA boundary in this location.
- Impacts on the North Bay and Lower Hood Canal basins are expected to be similar to Alternative 3 with similar SKIA UGA expansions and implementation of the RWIP.
- Increased impervious surfaces in the Minter Bay and Upper Hood Canal basins are expected to be similar to Alternative 3 with the implementation of the RWIP.

Wetlands

Direct and indirect impacts on wetlands are anticipated under the Preferred Alternative because of continued urbanization within watersheds. Impacts on wetlands under the Preferred Alternative would be similar to those under Alternative 2, with a few exceptions. Impacts on wetlands in the Poulsbo UGA would be similar to those under Alternative 1 where the UGA boundary would be retained and a change from Poulsbo Urban Transition Area to Industrial would not be implemented. In Central Kitsap, impacts are expected to be in the range of Alternatives 1 and 2

given the lesser UGA boundary and land use categories of Urban Restricted and Urban Reserve replacing Urban Low and Mixed Use.

Impacts on wetlands in the Gorst UGA would be between Alternative 2 and 3, because the amount of UGA expansion is between these two alternatives. Impacts on wetlands in the Port Orchard UGA would be less than under Alternative 2 because of UGA reductions near Baby Doll Road and Mile Hill Drive.

Frequently Flooded Areas

All alternatives including the Preferred Alternative would probably exacerbate flooding in mapped flood hazard areas to a small degree, mainly due to streamflow changes. The County's Critical Areas Ordinance (CAO) regulations (KCC 19.500) designate special flood hazard areas and establish permit requirements to protect public health, safety, and welfare from harm caused by flooding. All alternatives including the Preferred Alternative would likely increase flooding along the smaller streams in the county.

Groundwater

Impacts on groundwater quantity under the Preferred Alternative would generally result in reduced groundwater recharge and increased demand for groundwater as a potable water supply. Impacts on groundwater quality under the Preferred Alternative would result in higher levels of nonpoint source pollution and specific contaminants (point source pollutants) that can enter the groundwater at specific discharge points. See the discussion of basin level effects under "Streams" above.

Impacts on groundwater under the Preferred Alternative would be similar to Alternative 2, with some exceptions. Impacts on groundwater in the Silverdale UGA would be similar to Alternative 1 and greater than Alternative 2 as a result of a redesignation of Urban Low residential land to Industrial land in a Category 1 Critical Aquifer Recharge Area (CARA). Impacts on groundwater in the Central Kitsap UGA would be less than under Alternative 2 as a result of UGA reduction north of Waaga Way and reduced land use densities in Category 1 CARAs in the Illahee vicinity. Impacts on groundwater in the Gorst UGA would be between Alternative 2 and 3 as a result of an intermediate UGA expansion in a Category 1 CARA. Impacts on groundwater in the Port Orchard UGA would be less than under Alternative 2 as a result of UGA reduction along Baby Doll Road and Mile Hill Drive where some Category 1 and 2 CARAs are mapped.

Silverdale Sub-Area

Impacts on surface water and groundwater resources under the Preferred Alternative would be similar to Alternative 2, with minor exceptions. Impervious surfaces and runoff to Dyes Inlet would increase as a result of redesignation of Urban Low Residential land to Industrial land in the western portion of the UGA. Groundwater impacts in this area would also increase, as it is in a

Category 1 CARA. Impervious surfaces and runoff would decrease in a small area near Clear Creek because of a redesignation of Urban Low Residential land to Urban Restricted land.

3.1.4. Plants and Animals

Under all alternatives, the amount and type of vegetation in the county would change over time as currently planned and future projects are implemented. Direct impacts would include removal of vegetation for development or changes in habitat for particular plant species or groups. Indirect impacts may occur as a result of introduction and establishment of nonnative invasive species, which can out compete and displace native species.

There would be no impacts on known populations of rare plant species in Kitsap County under any of the alternatives, because there are no known occurrences of such species within existing UGA boundaries or those proposed under the Preferred Alternative or Alternatives 2 or 3. There is, however, a potential for impacts on currently unmapped rare plants under all alternatives, including the loss of currently unknown populations due to development.

Under all alternatives, the amount of wildlife habitat in the county would decrease over time. Direct impacts would include loss or conversion of habitat to either unsuitable or less suitable types for many wildlife species currently occupying those habitats. Development of currently vacant or underdeveloped parcels could lead to fragmentation of wildlife habitat, potentially reducing habitat connectivity. Indirect effects common to all alternatives could include a reduction in wildlife habitat quality and function due to increased human disturbance and associated factors in areas adjacent to wildlife habitat.

The number of buildable acres varies by alternative due to different Comprehensive Plan designations/densities and UGA sizes; therefore, the degree of impact to plants and animals would vary. Alternative 1 (No-Action) includes 4,000 acres of buildable land within December 2005 UGA boundaries. The Preferred Alternative would result in approximately 5,600 buildable acres and a 33% UGA expansion. Alternative 2 includes 5,700 buildable acres and a 35% UGA expansion. Alternative 3 includes about 7,100 acres of buildable land and a 50% UGA expansion. The Preferred Alternative impacts are expected to be generally close and slightly less than Alternative 2 overall with some locational differences.

Vegetation and Habitat Types

Under the Preferred Alternative, impacts on vegetation and habitat types would be as described under Alternative 2 for Kingston, Silverdale, ULID #6, and SKIA UGAs, due to the similarity of UGA boundaries. Impacts on vegetation would be the same as Alternative 1 for Poulsbo with no UGA expansion.

Impacts on vegetation and habitat types in Central Kitsap would be between those under Alternatives 1 and 2, since the amount of proposed UGA expansion north of Waaga Way would be reduced below what was proposed for Alternative 2. Greater areas of Urban Restricted may

also result in less clearing and habitat change where densities are lower to account for critical areas.

Impacts on vegetation in Gorst may be greater under the Preferred Alternative than under Alternatives 1 and 2, but less than under Alternative 3, because of proposed intermediate UGA expansion to the west under the Preferred Alternative. No priority habitat types have been documented in this area (WDFW 2006).

Impacts on vegetation and habitat types in Port Orchard would be reduced compared to Alternative 2 to the northeast near Baby Doll Road and east along Mile Hill Drive, where the amount of UGA expansion is less under the Preferred Alternative (compared Alternatives 2 or 3).

Under the Preferred Alternative, impacts on rare plant species would be as described under Alternative 2, with no additional sites of documented rare plant species affected.

A small UGA expansion to the southwest of Port Orchard near SR 16, as proposed under Alternative 3, would occur near Bethel-Burley Road SE; impacts on vegetation and wildlife habitat would be similar to Alternative 3. No priority habitat types have been documented in this area (WDFW 2006).

Under the Preferred Alternative, within all UGAs, the allowed density of areas zoned Urban Restricted would be 1–5 du/ac, similar to the density range under Alternatives 1 and 3. In comparison to Alternative 2, which allows 1–4 du/ac, the Preferred Alternative density range would allow for slightly higher densities at 1–5 du/ac within areas containing vegetation and habitat. The purpose of the Urban Restricted zone is, however, to promote densities that are consistent with the natural characteristics of the land; therefore, the densities would occur on the developable area of a property avoiding environmental constraints such as critical areas. Where such vegetation and habitats are not protected by the CAO, slightly greater direct and indirect impacts could occur at the top end of the density range.

Listed Fish and Wildlife

Impacts under the Preferred Alternative on fish and wildlife species listed as threatened or endangered would be similar to the impacts under Alternative 2, except that reducing the amount of UGA expansion proposed to the northeast of Port Orchard would reduce potential impacts on bald eagles. Under the Preferred Alternative, the bald eagle nest that would occur within the Port Orchard UGA boundary under Alternatives 2 and 3 would remain outside of the boundary, and as such would have a lower potential for long-term disturbance from construction.

The Preferred Alternative includes some coordinated stormwater and wastewater capital projects intended to improve fish habitat.

Other Terrestrial and Aquatic Species

Impacts of the Preferred Alternative on other terrestrial and aquatic species would be similar to those described under Alternative 2.

Impacts on fish and wildlife in Central Kitsap would be between those identified under Alternatives 1 and 2, because proposed UGA expansion north of Waaga Way would be less than that proposed under Alternative 2. Impacts on fish and wildlife in Gorst may be higher under the Preferred Alternative than Alternative 1 or 2, because of a slightly larger UGA expansion to the west. No priority terrestrial or aquatic species have been documented in this area (WDFW 2006).

Impacts on fish and wildlife to the northeast of Port Orchard would be reduced compared to Alternative 2, because UGA expansion under the Preferred Alternative would be less than under Alternative 2 or 3. UGA expansion to the southwest of Port Orchard (near Bethel-Burley Road SE) under Alternative 3 would occur, resulting in impacts on wildlife habitat, where it exists, similar to those identified under Alternative 3. No priority terrestrial or aquatic species have been documented in this area (WDFW 2006).

3.2. Built Environment: Land Use and Transportation

3.2.1. Land and Shoreline Use

The Preferred Alternative reflects DEIS Alternative 2 with the following revisions:

- Allowed residential densities in the Urban Restricted zone would range from 1–5 du/ac, compared to 1–4 du/ac under Alternative 2; this is similar to Urban Restricted densities analyzed under Alternatives 1 and 3.
- The overall amount of commercially designated land in the unincorporated county would be reduced compared to Alternative 2.
- Changes to the Transfer of Development Rights (TDR) program proposed under Alternative 2 include allowing for rural properties that have sold a development right to restore the right by purchasing one from another rural property and restoring development rights to properties if and when they are added to the UGA. TDR regulations allow the County flexibility to determine, at the time of a comprehensive plan docking resolution, whether to require TDRs for sub-area or comprehensive planning efforts.
- Inclusion of the RWIP that was analyzed under Alternative 3. This program would allow subdivision of some Rural Wooded designated parcels to greater densities than would otherwise be permitted under the Rural Wooded designation in exchange for preservation of a portion of the site as open space and forestry uses.
- In specific UGAs, the Preferred Alternative includes the following changes from Alternative 2:
 - In the Poulsbo UGA, the Preferred Alternative excludes one parcel that would have come into the UGA under Alternative 2 and retains the existing land use designations for all areas currently within the UGA; it is therefore the same as Alternative 1.
 - In the Silverdale UGA, the Urban Low Residential area on Dickey Road, which is adjacent to Industrial land, would be designated Industrial, similar to Alternative 1; an area designated Urban Low Residential near Clear Creek would be designated Urban Restricted, similar to the designations to its north, west and south; and the Neighborhood Commercial area on Anderson Hill Road in downtown would be converted to Mixed Use, as analyzed under Alternative 3.
 - The Central Kitsap UGA has a number of changes, which generally reflect lower densities in comparison to Alternative 2. Under the Preferred Alternative, there would be no UGA expansion north of Waaga Way (under Alternative 2 that land would have been included in the UGA as Urban Restricted). Along Wheaton Way, a small number of the properties proposed for Mixed Use designation under Alternative 2 would be Highway Tourist Commercial, similar to Alternative 1. Due to the presence of streams, steep slopes, and wetlands and in some cases, a Category 1 CARA, some areas are proposed

- for lower densities in comparison to Alternative 2. The area west of Sunset Avenue, designated Urban Low Residential under Alternative 2, would be Urban Restricted, as would areas adjacent to Fir Drive. The area on both sides of Perry Avenue in the southern portion of the UGA (north of Sylvan Way) designated Mixed Use under Alternative 2, would be Urban Restricted. The Rolling Hills Golf Course would be designated Urban Reserve (a rural designation), similar to current zoning classifications.
- In the Gorst UGA, additional land between West Belfair Valley Road and SR 3 would be included in the UGA as Urban Restricted and Urban Low Residential. This amount of expansion is between that proposed under Alternatives 2 and 3.
 - In the Port Orchard UGA, there would be less UGA expansion, yet some changes would reflect greater potential densities. The UGA boundaries would be reduced in the northeast around the Baby Doll Road area compared to Alternative 2. Alternative 2's extension of the UGA as Neighborhood Commercial along Mile Hill Drive would not occur (the UGA would expand only to include the County's Howe Farm Park). In the Bethel Road corridor, there would be some small expansions of Highway Tourist Commercial areas, similar to Alternative 3. UGA expansions that were to be designated Highway Tourist Commercial under Alternative 2 along Bethel Road, south of Sedgwick Road, would be designated Mixed Use, allowing the potential for more compact development with residences. There would be a small UGA expansion in the southwest between SR 16 and Bethel-Burley Road, similar to Alternative 3. Some agricultural properties near the corner of Glenwood and Sidney that were included in the UGA under Alternative 2 would not be included under the Preferred Alternative.
 - The Preferred Alternative would be the same as Alternative 2 in the East and West Bremerton, ULID #6, and SKIA UGAs.

Maps of the Preferred Alternatives are included as Figures 2.6-1 through 2.6-8 in Chapter 2, *Alternatives*. Figures 2.6-5 through 2.6-6 show changes under the Preferred Alternative compared to Alternative 2.

Land Use Patterns

On a countywide basis, land use impacts under the Preferred Alternative would generally be similar to those under Alternative 2. The overall land use pattern would be similar, but with a slightly smaller amount of UGA expansion, and with some population and densification distributed differently. UGA boundaries would expand by approximately 12.7 square miles, or 33% over existing boundaries, compared to an expansion of 13.4 square miles, or 35%, under Alternative 2. The unincorporated UGAs would comprise 51.1 square miles under the Preferred Alternative, compared to 51.8 square miles under Alternative 2; in both cases, this expansion is about 15.4% of unincorporated county land.

Like Alternative 2, many areas of densification would be focused in nodes that would include the new Mixed Use zone. As with Alternative 2, single-family uses would still dominate and the character of new single-family developments would be mostly suburban in appearance, similar to

the existing density range. Similar to Alternative 2, within the UGAs, the majority of population growth would be focused in the Silverdale, Central Kitsap, Port Orchard, and ULID #6 UGAs, and the predominant pattern along the UGA boundaries with rural areas would remain Urban Low Residential. However, there would be somewhat less densification within portions of the Central Kitsap UGA that would occur than under Alternative 2, but somewhat greater densification in portions of the Port Orchard UGA. Reflecting these changes in densification, population growth would also be somewhat lower in the Central Kitsap UGA and somewhat higher in the Port Orchard UGA than under Alternative 2.

As with Alternative 2, the new Industrial Multi-Purpose Recreational Area (IMPRA) designation in specific portions of the SKIA UGA would be reserved for development of employment uses, such as a speedway or other unique uses. Other areas of employment growth include Silverdale and Port Orchard UGAs.

Table 3.2-1 shows Land Use Map categories for the Preferred Alternative compared with Alternative 2. (See Table 2.6-8 in Chapter 2, *Alternatives*, for acre comparisons with Alternatives 1 and 3 as well.) As with Alternative 2, the predominant uses in terms of acreage would continue to be Urban Low Residential within UGAs and Rural Residential uses outside of UGAs. As with Alternative 2, with Plan adoption, the Comprehensive Plan land use designations would be consolidated into a smaller number of categories. (Chapter 2, *Alternatives*, Table 2.6-9, contains proposed consolidations.)

Table 3.2-1. Summary of Land Use Designations for the Preferred Alternative and Alternative 2

Plan Designation	Alternative 2		Preferred Alternative	
	Acres	Percentage of Total	Acres	Percentage of Total
Urban Residential Designations	18,837	7.4%	18,566	7.3%
Urban Cluster Residential	1,287	0.5%	1,287	0.5%
Urban High Residential	457	0.2%	457	0.2%
Urban Low Residential	12,774	5.0%	12,432	4.9%
Urban Medium Residential	794	0.3%	794	0.3%
Urban Restricted	3,525	1.4%	3,596	1.4%
Rural Designations	155,981	61.4%	156,397	61.5%
Forest Resource Lands	3,157	1.2%	3,157	1.2%
Limited Area of More Intense Rural Development	1,243	0.5%	1,243	0.5%
Rural Protection	26,767	10.5%	26,786	10.5%
Rural Residential	73,477	28.9%	73,789	29.0%
Rural Wooded	49,333	19.4%	49,333	19.4%
Urban Reserve	2,003	0.8%	2,089	0.8%
Commercial Designations	2,649	1.0%	2,564	1.0%
Highway/Tourist Commercial	1,384	0.5%	1,186	0.5%
Manchester Village Commercial	6	0.0%	6	0.0%

Plan Designation	Alternative 2		Preferred Alternative	
	Acres	Percentage of Total	Acres	Percentage of Total
Neighborhood Commercial	289	0.1%	179	0.1%
Regional Commercial	536	0.2%	536	0.2%
Rural Historic Town Commercial	14	0.0%	14	0.0%
Rural Historic Town Waterfront	35	0.0%	35	0.0%
Squamish Village Commercial	12	0.0%	12	0.0%
Urban Commercial	29	0.0%	21	0.0%
Urban Village Center	40	0.0%	40	0.0%
Mixed Use	305	0.1%	535	0.2%
Industrial	3,960	1.6%	4,003	1.6%
Business Center	1,164	0.5%	1,164	0.5%
Business Park	72	0.0%	72	0.0%
Industrial	2,724	1.1%	2,767	1.1%
Other	72,752	28.6%	72,650	28.6%
Airport ¹	260	0.1%	260	0.1%
Incorporated City	33,567	13.2%	33,567	13.2%
Lake	97	0.0%	97	0.0%
Military	8,267	3.3%	8,267	3.3%
Mineral Resource	3,007	1.2%	3,007	1.2%
Park/Open Space	5,145	2.0%	5,041	2.0%
Poulsbo Urban Transition Area	774	0.3%	776	0.3%
Public Facility	1,794	0.7%	1,794	0.7%
Road/ROW	14,395	5.7%	14,395	5.7%
Salt Water	2	0.0%	2	0.0%
Tribal Land	4,039	1.6%	4,039	1.6%
Industrial Multi Purpose Recreational ²	1,405	0.6%	1,405	0.6%
Total	254,179	100%	254,182	100%

¹The Airport designation is included in "Other." ²Since the uses are not determined for the IMPRA, it is included under Other.

Source: Kitsap County GIS Data

The Preferred Alternative would result in additional buildable acres over Alternative 1 (No-Action). Figure 3.2-1 and Figure 3.2-2 show gross vacant and underutilized land. Table 3.2-2 shows net developable acres. Under the Preferred Alternative, there would be approximately 5,600 developable acres within the unincorporated and expanded UGA lands, on which additional growth could occur, based on the County's Updated Land Capacity Analysis (ULCA) for 2025. This compares to approximately 5,700 developable acres under Alternative 2. Table 3.2-2 shows that the Silverdale UGA would have the greatest amount of developable land, although the amount for this UGA is nearly the same as with Alternative 2 (1,213 compared to 1,214 acres). Under Alternative 2, the Port Orchard UGA had the greatest amount of developable land with 1,247 acres, compared to 1,185 acres under the Preferred Alternative; however, under

the Preferred Alternative, UGA boundaries are smaller in northeast and east Port Orchard along Baby Doll Road and Mile Hill Drive. Similar to Alternative 2, the largest amount of developable land across the unincorporated UGAs would be in the residential designations.

Table 3.2-2. Developable Land under the Preferred Alternative

UGA	Net Developable Area (acres)			Total Net Developable Area
	Residential Designations	Commercial and Mixed Use Designations	Industrial Designations	
Kingston	308	21	5	334
Poulsbo	215	0	5	220
Silverdale	811	129	273	1,213
Central Kitsap	704	42	0	747
East Bremerton	139	3	0	142
West Bremerton	111	7	16	134
Gorst	6	22	13	41
Port Orchard	885	266	33	1,185
ULID #6	679	3	30	713
SKIA	0	0	895	895
Total	3,860	493	1,272	5,624

Note: Acres are based on the ULCA excluding the sewer reduction factor. Differences in totals shown and the actual sums are because of rounding.
 Source: Kitsap County ULCA

Conversion of Uses

Similar to Alternative 2, conversions in the Preferred Alternative from primarily single use land to a mix of uses (including residential, office, and commercial uses) would occur in new Mixed Use zones, achieving a more pedestrian-oriented, and more intensive character than currently exists in the unincorporated county UGAs. As a result, areas in growth nodes and corridors would experience significant pressure to redevelop. Similar to Alternative 2, upzoning in the Preferred Alternative would increase capacity for growth in already urbanized areas, primarily along major road corridors, creating nodes of growth with increased urban character and activity. These areas would be somewhat less intensive along Wheaton Way and Perry Avenue in the Central Kitsap UGA, and along Mile Hill Drive in the Port Orchard UGA where upzoning would also affect less area and extend less into the existing rural area. There would also be less potential for intensification along Fir Drive in the Central Kitsap UGA, and less potential for the Rolling Hills Golf Course property to change to a more intensive use. Somewhat greater intensification would occur along Anderson Hill Road in downtown Silverdale, along Bethel Road in the Port Orchard UGA, and in the western portion of the Gorst UGA, than under Alternative 2. While many of these areas would intensify with a mix of uses, intensification in the western portion of the Gorst UGA would be primarily single-family uses at greater densities than would be allowed in the rural area. The changes to land use designations under the Preferred Alternative include

those associated with 82 property-owner-initiated land use reclassification requests (LURRs), compared to 83 LURRs under Alternative 2.

Under the Preferred Alternative, approximately 25% of new housing units would be multifamily units, a somewhat greater proportion than the 22% under Alternative 2. Single-family uses would still dominate at 75% of new units (compared to 78% under Alternative 2). Similar to Alternative 2, the Preferred Alternative would broaden the density range to 4–30 du/ac from 5–24 du/ac and increase allowable heights. Buildings of up to 65 feet could be developed in new Mixed Use areas as well as in Urban High Residential and some commercial areas.

Changes in Activity Levels and Patterns

Changes in activity levels associated with intensification of land uses would be similar to Alternative 2 but would affect a smaller area in locations where smaller UGAs would occur, such as at the western edge of the Poulsbo UGA, land north of Waaga Way adjacent to the Central Kitsap UGA, and in northeast and east Port Orchard UGA along Baby Doll Road and Mile Hill Drive. Somewhat higher activity levels would be expected where the Gorst UGA expands to the west compared with Alternative 2, but still less than Alternative 3 due to an intermediate UGA expansion.

Also relative to Alternative 2, changes in activity level associated with intensification within existing UGA boundaries would affect less area along Perry Avenue, as well as east/southeast of the Rolling Hills Golf Course in the Central Kitsap UGA. There would also be less potential for changes in activity levels along Fir Drive. Increased activity levels under the Preferred Alternative would be somewhat more pronounced than under Alternative 2 along Bethel Road in the Port Orchard UGA, where more area would be designated Mixed Use, and to a lesser extent along Anderson Hill Road in Silverdale where Neighborhood Commercial would be changed to Mixed Use. Activity levels in employment areas of the SKIA and Gorst UGAs would be similar to Alternative 2. As with Alternative 2, densities in TDR-receiving zones could result in somewhat greater increases in activity levels but would require site-specific review at that time.

Similar to Alternative 3, the Preferred Alternative includes the RWIP. The RWIP would result in increased activity associated with residential use on participating properties in the Rural Wooded designation. The clustered, higher density rural residential uses would be buffered by land preserved in exchange for the density incentive and by other rural land developed at lower densities, reducing the potential for compatibility impacts. Associated activities levels would vary with the density of clusters and the amount of preserved open space (with clusters at the high end of the density range, more rural area would be preserved as permanent open space).

Land Use Compatibility

The Preferred Alternative would result in a lower potential for land use compatibility impacts than Alternative 2, particularly in the Silverdale, Central Kitsap, and Port Orchard UGAs. In the western portion of Silverdale, the removal of a pocket of Urban Low Residential surrounded by Industrial on three sides would result in less potential conflicts with industrial uses. There would

also be fewer conflicts between Urban Low Residential and Urban Restricted in northeast Silverdale and in the eastern portion of the Central Kitsap UGA, and less potential for conflict between rural and commercial uses along Mile Hill Drive outside of the existing Port Orchard UGA boundary. Further, the Preferred Alternative would likely result in less pressure for future urban development on bordering rural lands in the Central Kitsap and Port Orchard UGAs compared to Alternative 2, due to smaller UGA boundaries, and would provide somewhat greater protection of rural lands in these areas. The Preferred Alternative would increase the amount of Urban Restricted land to a somewhat greater degree than Alternative 2. While these areas could experience compatibility impacts with neighboring Urban Low Residential land, the land use pattern under the Preferred Alternative allows for fewer areas of potential conflict, particularly in the Central Kitsap and Port Orchard UGAs. Under the Preferred Alternative, there would be potential for compatibility impacts between the Urban Reserve, a rural designation, and neighboring urban designations around the Rolling Hills Golf Course in the Central Kitsap UGA. However, the present golf course activity can continue.

In Rural Wooded designations, the RWIP under the Preferred Alternative could increase the potential for localized compatibility impacts where clustered residential uses are developed adjacent to lower density uses, similar to Alternative 3. The density of clustered residences could be up to 1 du/5 ac, in clusters of up to 25 units. However, a 100-foot vegetated buffer would be required between clustered uses and adjacent properties, and a 150-foot buffer would be required between adjacent clusters. Buffers would be encouraged to include site-obscuring native vegetation, and to maximize retention of rural character. This would minimize the potential for compatibility impacts.

Capability of Land to Absorb Densities

Under the Preferred Alternative, the UGAs would be sized to accommodate 36,444 in new population in 2025, compared to 36,448 under Alternative 2; 20,421 in new population in rural areas, the same as under Alternative 2. To house the unincorporated UGA population, the amount of residential units would increase by 15,169, compared to an increase of 15,038 under Alternative 2. Similar to Alternative 2, approximately 65% of new residential units would be located within the UGAs and the majority of new dwellings would occur in the Port Orchard and ULID #6 UGAs, followed by the Silverdale and Central Kitsap UGAs.

As with Alternative 2, the Preferred Alternative would be slightly below the capacity (within 5%) to accommodate projected growth in the unincorporated county as a whole. Regarding UGAs with residential lands (i.e., all but SKIA), only the Port Orchard UGA would have the capacity to accommodate targeted growth (its capacity would be within two people of targeted growth). The Gorst, Kingston, and ULID #6 UGAs would be slightly under their targets (within 50 people). The remaining UGAs would be more than 100 people below their targets. The use of Urban Growth Area Management Agreements (UGAMAs) or similar interlocal agreements to resolve the “banked” population could address the differences in population targets and capacity. See Section 3.2.3, *Population, Housing, and Employment*, for further information.

Silverdale Sub-Area

Under the Preferred Alternative, similar to Alternative 2, the Silverdale sub-area would transition over time from a relatively low-density, auto-oriented development pattern to a more urban one. UGA boundaries in the sub-area would be the same as under Alternative 2, including the UGA boundary contraction adjacent to the Barker Creek corridor. The sub-area would include somewhat more area designated Mixed Use and Industrial and somewhat less area designated Urban Low Residential. As described above, the area on Dickey Road adjacent to Industrial designations in the western portion of the UGA would be designated Industrial, rather than Urban Low Residential; an area near Clear Creek would be changed to Urban Restricted from Urban Low Residential; and the area designated Neighborhood Commercial on Anderson Hill Road in downtown would be converted to Mixed Use. Activity levels would be lower in the properties changed to Urban Restricted. Activity levels associated with the property that would be changed to Industrial would be similar to adjacent properties and to expected activity levels under Alternative 1. These changes in land use designations and associated activity levels would reduce the potential for land use compatibility impacts. However, as with Alternative 2, there would be potential for localized compatibility impacts as more intensive uses are developed, particularly west of the old town where the new Mixed Use area would border an existing single-family residential area.

Similar to Alternative 2, the Preferred Alternative would apply design guidelines in downtown Silverdale; however, specific design districts would not be identified in the Comprehensive Plan; it is expected that design standards for Silverdale would be completed in the first part of 2007. As with Alternative 2, new infill and redevelopment to residential and mixed uses in the downtown area would be allowed to occur without further environmental review under the State Environmental Policy Act (SEPA), provided they meet certain land use and trip generation criteria.

Under the Preferred Alternative, the Silverdale sub-area would be sized to accommodate 6,877 in new population in 2025, slightly lower than the 6,973 under Alternative 2. Similar to Alternative 2, the majority of new dwellings in the sub-area would occur at densities of 4 du/ac or greater and in the downtown vicinity at 10–30 du/ac.

3.2.2. Relationship to Plans and Policies

Washington State Growth Management Act, Vision 2020/Destination 2030, and Kitsap Countywide Planning Policies

Similar to Alternative 2, the Preferred Alternative would support infill development in existing UGAs and create a more compact land use pattern than Alternatives 1 and 3, and is generally consistent with the Growth Management Act (GMA), Countywide Planning Policies for Kitsap County (CPPs), and the PSRC Vision 2020/Destination 2030. As with Alternative 2, a reduction in the minimum allowed density to 4 du/ac in the Urban Low and Urban Cluster designations would reduce some dwelling capacity, but still complies with GMA as it is an urban density; overall the density range is increased in Kitsap County UGAs to 4–30 du/ac with greater compact

forms in centers and along corridors. As with Alternative 2, the creation of the IMPRA designation in the SKIA includes measures to ensure that no urban growth occur until a master plan, capital facilities plans (CFPs), and other project-level environmental information are available. As with Alternative 2, creation of a TDR program would enhance compatibility of the Plan with GMA.

The Preferred Alternative differs from Alternative 2 in that it would include adoption of clarified policies for Rural Wooded lands (the RWIP analyzed under Alternative 3). Clarification of the County's policies towards Rural Wooded lands is a requirement of a Central Puget Sound Growth Management Hearings Board (CPSGMHB) decision, if those policies are to be retained. The Rural Wooded policies seek to promote ongoing use of lands for forestry purposes, while allowing for limited rural development in keeping with the lands rural character. This program helps to implement GMA, Vision 2020/Destination 2030, and the CPPs. However, as analyzed under Alternative 3, it is possible that the RWIP would continue the trend of an attractive rural area and make it more difficult to attract urban growth to the "centers" designated in the Vision 2020 plan. Use of the TDR program, the County's phased approach to RWIP, and reasonable measures within the UGAs are intended to focus growth upon UGAs.

The Preferred Alternative also differs from Alternative 2 in that the Rolling Hills Golf Course designation would be designated Urban Reserve (similar to present Alternative 1 implementing zoning), maintaining an island of rural-designated land within the Central Kitsap UGA. This rural classification would not be consistent with GMA or CPP, regarding the designation of urban areas, and would need to be resolved through the UGAMA process with the City of Bremerton when resolving the population capacity of the Central Kitsap UGA.

The Preferred Alternative would achieve greater internal consistency among the Plan elements than Alternative 2, and therefore greater consistency with GMA, particularly between the Land Use Element and the sub-area plans. Specifically, in the Port Orchard UGA, the Preferred Alternative would not designate land along Bethel Road SE and SE Mile Hill Drive as commercial, supporting policies calling for limiting strip commercial development. (The area along Bethel Road would be changed to Mixed Use and the UGA would not be expanded to include Neighborhood Commercial along Mile Hill Drive.)

The Preferred Alternative would accommodate 56,865 people, four fewer people than Alternative 2 and less than the CPP target of 59,628 people for 2005–2025. The UGAs would accommodate approximately 36,444 people (as compared to 36,448 people under Alternative 2) and would not meet the CPP target of 39,207 people. Under the Preferred Alternative, the Port Orchard UGA would be only two people below its target, and the Gorst UGA would be closer to meeting its target than under Alternative 2. However, the Poulsbo and Central Kitsap UGAs would be further from meeting their CPP growth targets than under Alternative 2. Silverdale would have a slightly greater gap between capacity and targets but would still be within 2% of the target. The use of UGAMAs with the City of Bremerton, interlocal agreements such as with the City of Poulsbo, and CPP amendments would be needed to address population reallocations to ensure that targets are met. In addition, reasonable measures would be promoted and expanded

under the Preferred Alternative, similar to Alternative 2. The Preferred Alternative further reinforces policies calling for adequate sewer service in UGAs by adding a regulation requiring urban level sewer service for all residential development in UGAs.

The Preferred Alternative would also support GMA, CPPs, and its own planning policies by further promoting a variety of housing choices. Approximately 75% of new housing units would be single-family units, with 25% multifamily, compared to 78% and 22%, respectively, under Alternative 2. At 25% multifamily, the Preferred Alternative would nearly double the percentage of new multifamily units under Alternatives 1 and 3, both at 13%.

In terms of transportation, the Preferred Alternative would exceed level of service (LOS) standards on roadway segments throughout the county. Projections show that deficient lane-miles of county roadway would be above the County's current systemwide LOS threshold of 15% of total lane-miles, but in the range of Alternatives 2 and 3. Mitigation measures to meet the LOS threshold are provided. See Section 3.2.6, *Transportation*, below.

Kitsap County GMA Comprehensive Plan and Kitsap County Planning Initiatives

Volume I of this integrated SEPA/GMA Comprehensive Plan/EIS includes the Comprehensive Plan policies. Under the Preferred Alternative, policies would be updated in nearly all Plan chapters (except Shorelines) to better implement refinement of the Vision Statement and achieve the goals of the Comprehensive Plan, similar to Alternative 2. Changes would be generally similar to Alternative 2, but would include Rural Wooded policies evaluated under Alternative 3. TDR policies would be changed to allow rural properties that have sold a development right to restore the right by purchasing one from another rural property or potentially at the time of a sub-area plan or areawide zoning review; however, the potential preservation of rural properties is still greater than under Alternative 1. The Preferred Alternative would implement the same list of reasonable measures as Alternative 2, but would reinforce sewer policies with a regulation requiring sewer service in UGAs.

Municipal Plans

In general, the land use pattern under the Preferred Alternative would be consistent with municipal plans in the county. However, as with Alternative 2, proposed land use classifications in the Central Kitsap, East Bremerton, West Bremerton, and SKIA UGAs are more intensive than those in the City of Bremerton plan. In addition, the City of Bremerton plans for areas not yet associated with the city. For example, the city plans focus all multifamily development around commercial areas. The Preferred Alternative allows for both residential within commercial areas, as well as multifamily development along major roadways in nodes where services are or can be made available. In general, these differences under the Preferred Alternative are less pronounced within the Central Kitsap UGA than they would be under Alternative 2. The Preferred Alternative does not include expansion of the Poulsbo UGA as was included under Alternative 2, and is, therefore, consistent with the City of Poulsbo Comprehensive Plan.

The County is striving for interjurisdictional consistency by ensuring compliance with the CPPs. In addition, the County is responsible for planning in unincorporated areas and for UGA expansions, until the area is annexed or until UGAMAs, such as in Poulsbo, are in place.

Bremerton National Airport - Airport Master Plan

As with Alternative 2, under the Preferred Alternative, the IMPRA designation within the SKIA UGA appears to lie outside of the runway protection zone to the southwest of the airport. Future IMPRA uses that would allow for intermittent or regular gatherings for recreation, or uses that would have tall structures, could be of concern; further coordination would be defined through a master plan, development agreement, and site-specific environmental review process as required for development in the IMPRA.

3.2.3. Population, Housing, and Employment

Population

The Preferred Alternative would accommodate 56,865 people in unincorporated Kitsap County, just under the CPP target of 59,628 people for 2005–2025 (Table 3.2-3). Unincorporated UGAs would accommodate approximately 36,444 people and would not meet the CPP target of 39,207 people in UGAs. For the planning area as a whole, this alternative would achieve a population level about 4.6% below the CPP target¹. For all nine UGAs that have a population growth target, the percentage below the individual UGA target is generally less than 5% for Kingston, Silverdale, Port Orchard and ULID#6 and would be considered consistent with the CPPs. Differences between capacity and target would be greater than 5% for Poulsbo, Central Kitsap, East Bremerton, West Bremerton, and Gorst UGAs. However, the Gorst UGA gap is improved under the Preferred Alternative compared to Alternative 2. Those UGAs with greater than 5% deficits would be considered in conflict with the CPP population target. To resolve population targets and capacities, the use of UGAMAs with the City of Bremerton, interlocal agreements with the City of Poulsbo, and CPP amendments would be needed. In addition, reasonable measures would be promoted and expanded under the Preferred Alternative, similar to Alternative 2.

¹ For the purposes of this analysis, 5% was used to allow for minor discrepancies in the planning-level estimating and forecasting process, given the numerous assumptions that must be made and since there is a density range in the land use classifications.

Table 3.2-3. Preferred Alternative Population Accommodation

UGA	CPP Growth Allocation (2005–2025) ¹	New Population ³	Difference with Target	Percent Difference with Target
Kingston	2,816	2,774	(42)	-1.5%
Poulsbo	2,378	2,152	(226)	-9.5%
Silverdale	6,988	6,877	(111)	-1.6%
Central Kitsap	7,526	5,882	(1,644)	-21.8%
East Bremerton	1,905	1,557	(348)	-18.3%
West Bremerton	1,756	1,436	(320)	-18.2%
Gorst	73	51	(22)	-30.1%
Port Orchard	8,212	8,210	(2)	0.0%
ULID #6 (McCormick Woods)	7,553	7,505	(48)	-0.6%
SKIA	0	0	0	0.0%
Rural area (non-UGA)	20,421	20,421	0	0.0%
Total	59,628	56,865	(2,763)	-4.6%

Source: Kitsap County GIS, 2006; Jones & Stokes, this analysis

Measures to increase the population capacity to achieve the CPP target could include applying incentives or requirements for a greater minimum density or allowing for limited UGA expansion, in the range of Alternative 3. Other measures to increase population capacity in a phased manner include conducting joint planning with affected adjacent jurisdictions to determine appropriate land use categories to attain the population target, or amending the CPPs to shift population between UGAs that have greater potential to be densified or expanded to accommodate population while retaining the overall unincorporated county population target.

Similar to Alternative 2, the Preferred Alternative includes measures to broaden the residential density range from 5–24 du/ac to 4–30 du/ac overall. Capacity for growth is based on minimum densities of each zone. Therefore, the results of the Preferred Alternative's ULCA reflect the new Urban Low Residential and Urban Cluster Residential minimum density of 4 du/ac instead of 5 du/ac. Similar to Alternative 2, which has a similar land use plan and minimum densities, this reduces the capacity of the single-family designated areas in the Preferred Alternative; however, the new minimum of 4 du/ac still meets urban densities as defined in CPSGMHB cases applicable to Kitsap County. The Preferred Alternative includes the greatest percent of multifamily dwellings, and promotes Mixed Use zoning similar to Alternative 2 with less Mixed Use in Central Kitsap and greater Mixed Use in Port Orchard. The Mixed Use and Multifamily zoning the Preferred Alternative partially offsets the reduction to 4 du/ac, similar to Alternative 2. In addition, the Preferred Alternative provides for additional reasonable measures beyond the Mixed Use and Multifamily zoning proposals. To promote efficient development in UGAs a list of additional reasonable measures proposed for application in the 10-Year Update are described in DEIS Appendix H and FEIS Appendix C.

Housing

As shown in Table 3.2-4, the Preferred Alternative would provide housing units (15,169) just above the minimum housing demand range of 15,081. Within individual UGAs, there would be some variation (Table 3.2-5). The UGAs that would supply housing within the demand range would include Kingston, Silverdale, Port Orchard, and ULID #6. Other UGAs, Poulsbo, Central Kitsap, East and West Bremerton and Gorst would have dwellings below the housing need range, based on minimum densities. These are the UGAs that are also more than 5% below population targets. UGAMAs and interlocal agreements would address reallocations of populations or alternative land use classifications to rectify population/housing capacity.

Table 3.2-4. Estimated Owner and Renter Housing in UGAs by Alternative

	Forecast	Alternative 1	Alternative 2	Alternative 3	Preferred Alternative
Housing Demand: 2.6 pph	15,081				
Housing Demand: 2.36 pph	16,614				
Mid-point—New Housing Units	15,848				
Units Supplied by Alternative		11,474	15,038	22,054	15,169
Projected Renter Households at Mid-Point (33%)	5,230				
Projected Renter Households in Need (55%)	1,726				
<i>Estimated Rental Units by Alternative</i>		3,786	4,961	7,278	5,006
Projected Owner Households at Mid-Point (67%)	10,618				
Projected Owner Households in Need (57%)	6,052				
<i>Estimated Owner Units by Alternative</i>		7,688	10,077	14,776	10,163

Note: Represents the ULCA without the sewer reduction factor for all alternatives.

Source: Kitsap County GIS 2006; Jones & Stokes, this analysis

pph = persons per household

Table 3.2-5. Preferred Alternative Housing Need and Demand Comparison

Unincorporated Location	2.6 pph (based on CPP Targets)	2.36 pph (based on CPP Targets)	Mid-Point	Preferred Alternative Housing
UGAs				
Kingston UGA	1,083	1,193	1,138	1,117
Poulsbo UGA	915	1,008	962	860
Silverdale UGA	2,688	2,961	2,825	2,901
Central Kitsap UGA	2,895	3,189	3,042	2,594
East Bremerton UGA	733	807	770	644
West Bremerton UGA	676	744	710	576
Gorst UGA	28	31	29.5	21
Port Orchard UGA	3,158	3,480	3,319	3,437
ULID #6	2,905	3,201	3,053	3,019
SKIA	0	0	0	0
Rural Area				
Rural (Non-UGA) Unincorporated Kitsap County	7,854	8,653	8,254	8,168

Source: Kitsap County GIS, 2006; Jones & Stokes, this analysis
pph = persons per household

In terms of rental and owner housing and affordability, the Preferred Alternative would be slightly below rental and owner housing forecasts at the mid-point, but well above the households “in-need” projection. Where upzones or other reasonable measures can be further accommodated to meet population targets, particularly in UGAs where UGAMAs or other interlocal agreements are to be pursued, this would also have a corresponding improvement on the Preferred Alternative’s ability to supply enough housing to meet future total and affordable needs.

The Preferred Alternative would provide a greater variety of new housing unit types than is currently allowed and more than any other alternative studied. In UGAs, new housing would consist primarily of single-family unit types (75%), but there would be a greater percentage of multifamily units than other alternatives (25%), and densities would be 4–30 du/ac. This compares to 13% multifamily for Alternatives 1 and 3 and 22% for Alternative 2. Similar to Alternative 2, the Preferred Alternative densities for new single-family residential development in low-density areas within the UGAs would range from 4–9 du/ac instead of 5–9 du/ac. Higher density Residential zones/Mixed Use zones would allow up to 30 du/ac in some locations rather than the current maximum of 24 du/ac. As part of reasonable measures, minimum densities would be established for residential development within all Urban zones and future countywide densities would be expected to meet CPSGMHB urban density requirements for Kitsap County.

Employment

As described under *Employment Forecasts* above, there is no specific employment target for Kitsap County or its jurisdictions. Based on observed employment trends and the County’s

policy commitment to increase its manufacturing job base similar to 1998 Comprehensive Plan projections, a countywide job forecast of 127,400 was estimated. The net increase in jobs over the 2005–2025 period would be 49,000–50,000. Reviews of city plans indicate that they would accommodate about one-third of the net increase in employment and unincorporated Kitsap County would then accommodate the roughly remaining two-thirds of the net increase in employment.

Based on the county's share of the net employment increase, it is estimated that there would be 32,664 jobs in unincorporated Kitsap County, 57% in the commercial sector (retail, finance/insurance/real estate, services, government) and 43% in industrial (manufacturing, warehousing/transportation/utilities, construction/resources). This accounts for both urban and rural shares of employment (rural jobs are about 10% of the total share).

Job forecasts were translated into employment acre land demand similar to the 1998 Comprehensive Plan (DEIS Appendix D), and showed a total need for the following total gross buildable acres in unincorporated UGAs:

- Employment: 3,495
- Industrial: 2,392
- Commercial: 1,103

The Preferred Alternative is approximately 4% below total employment acre demand projections (industrial 2,264 acres; commercial 1,074 acres), an improvement over Alternative 2, which is above acre forecasts for commercial (more than 200 acres) and Alternative 3, which is greatly above acre projections (Table 2.6-4 in Chapter 2, *Alternatives*).

In terms of job capacity, the Preferred Alternative is approximately 11% above forecast at 36,000 jobs; Alternative 2 forecasted 38,000 jobs. Alternative 3 was greatly above job forecasts. Within job sectors, the Preferred Alternative is slightly below the industrial job and acre forecasts; it is somewhat above the commercial job forecast and below the commercial acre forecast (Table 2.6-4 in Chapter 2, *Alternatives*). The differences between the Preferred Alternative employment acre results, which are below land demand, and the employment capacity results, which for commercial are moderately above forecasts, may be due to: the general methodology used to determine capacity (based on a less precise job sector breakout than the acre demand analysis) and/or land that is more developable than the average assumption used in the employment acre forecast.

Overall, however, the Preferred Alternative is generally more in balance with employment acre demand projections than the other alternatives. The Preferred Alternative would better meet employment needs than Alternative 1, which has a lower capacity for jobs than forecasts; Alternative 2, which exceeded commercial acres and employment capacity; and Alternative 3, which significantly exceeds both acre and job forecasts. Land use policies in Volume I, Chapter 2 recommend annual review of land capacity and would be useful in monitoring employment densities and land demand.

Similar to Alternative 2, the Preferred Alternative capacity estimates are based on the developable acres forecast through ULCA. The ULCA method is based on zoning rather than comprehensive plan designations.

In the portion of the SKIA where the IMPRA is proposed, the assumptions for the capacity analysis assume current (Alternative 1) zoning, which include Business Center, Industrial, and Rural Residential in part. If the IMPRA were instituted in the Comprehensive Plan, no development could occur until a master plan and development agreement are prepared and approved that will result in new implementing zones (a subsequent legislative action that would require additional public review). At the time of a master plan, the number of jobs forecast may be similar to or different than current assumptions (based on Business Center/Industrial zoning for the properties currently in the UGA). Since the IMPRA is proposed to accommodate a unique use(s) not accounted for in present employment forecasts or employment land demand, its employment, when determined, would be added to the countywide year 2025 job forecast (Tables 2.6-2 and 2.6-4 in Chapter 2). The employment land demand forecasting translates typical employment sector jobs into building area and ultimately land area. (See DEIS Appendix D for more information.) Unique uses, such as mineral operations, colleges, and recreational facilities (such as a speedway, golf course, etc.) are not included in the employment land demand forecasting, because they do not involve buildings in the traditional manner. Therefore, unique uses in the IMPRA would add to the employment land demand analysis and not subtract from it.

Silverdale

Under the Preferred Alternative, Silverdale's population would increase, but would be about 1.6% below the UGA target. Silverdale's housing capacity would increase and would be in the range of estimated housing demand. The estimated job increase would equal about 7,700.

3.2.4. Cultural Resources

Due to the geography of Kitsap County, much of the culturally significant historic and prehistoric sites are found near shorelines of Puget Sound, Hood Canal, and various inlets and islands associated with those water bodies. The Preferred Alternative generally has similar effects on cultural resources as Alternative 2, because its UGA boundaries near shorelines are similar to those identified under Alternative 2. Areas where the UGAs are contracted under the Preferred Alternative are inland in Central Kitsap, Poulsbo, and Port Orchard areas and may reduce the potential disturbance of presently unknown cultural resources. UGA expansions in Gorst and a small expansion in southwest Port Orchard occur inland, and thus the possibility of affecting cultural resources are less than if UGA expansion occurred along the shoreline. Known historic and prehistoric cultural resources are not affected to a greater degree by the Preferred Alternative than they are to Alternative 2.

3.2.5. Aesthetics

Similar to Alternative 2, the Preferred Alternative would increase allowed densities in specific portions of some UGAs, and would increase the amount of land available for mixed use and infill

development. However, the Preferred Alternative would include some areas of lower density in the Central Kitsap UGA and more upzoning in the Port Orchard UGA along the Bethel Corridor, except along Baby Doll Road and Mile Hill Drive where UGA boundaries would be reduced. UGA expansions under the Preferred Alternative would be smaller than under Alternative 2 in the Central Kitsap and Port Orchard UGAs, and larger in the Gorst UGA. Under the Preferred Alternative, more land would be designated Urban Restricted than under Alternative 2, particularly within the Central Kitsap UGA, but more land would be designated Mixed Use than under Alternative 2.

Visual Character

The Preferred Alternative focuses growth within existing UGAs with a 12.7-square-mile increase in UGA lands countywide, compared to a 13.4-square-mile increase under Alternative 2. Impacts on visual character would be similar to Alternative 2, including increased presence of built structures, greater building height and bulk, decreased open space, greater potential for light and glare, increased potential for shadowing, and conversion from a suburban character to a more urban character. However, compared with Alternative 2, there would be less potential for impacts along Perry Avenue in the Central Kitsap UGA where due to wetlands designations of Mixed Use designations are reduced and replaced with Urban Restricted, as well as less potential for impacts along Mile Hill Drive in the Port Orchard UGA where the UGA does not extend as far into the existing rural area. There would also be less potential for intensification along Sunset and Fir drives in the Central Kitsap UGA, and less potential for the Rolling Hills Golf Course property to change to a more intensive use, compared with all other alternatives.

In comparison with Alternative 2, somewhat greater intensification would occur under the Preferred Alternative along Anderson Hill Road in downtown Silverdale where Neighborhood Commercial is replaced with Mixed Use, along Bethel Road in the Port Orchard UGA that changes from Highway/Tourist Commercial to Mixed Use, the small UGA expansion along Bethel-Burley Road SE, and in the western portion of the Gorst UGA that expands by about 26 acres. Urban character would extend into less rural area than under Alternative 2, such as in west Poulsbo, north of Waaga Way in Central Kitsap, east Port Orchard along Mile Hill Drive, and northeast Port Orchard near Baby Doll Road. These UGA boundary reductions in Poulsbo, Central Kitsap, and Port Orchard UGAs exceed the relatively smaller UGA boundary expansions in Gorst and southwest Port Orchard. The RWIP may keep more wooded areas intact than under Alternative 2, thus preserving rural character in some areas.

Height, Bulk, and Scale Compatibility

Under the Preferred Alternative, height, bulk, and scale impacts overall would be similar to Alternative 2, but local impacts and the potential for compatibility impacts would be lower along Perry Avenue and Fir Drive, in the eastern portions of the Central Kitsap UGA and the western and northeastern portions of the Silverdale UGA, and along Mile Hill Drive in the Port Orchard UGA. Somewhat greater local impacts would occur along Anderson Hill Road in downtown Silverdale, along Bethel Road in the Port Orchard UGA, and in the western portion of the Gorst

UGA, than under Alternative 2. The Gorst UGA expansion would result in single-family uses at urban densities. The Mixed Use designation along Bethel Road could result in a more pedestrian-friendly environment than under Alternative 2. The Preferred Alternative includes a TDR program, similar to Alternative 2, which could transfer density from participating sites in rural areas to sites in urban areas, potentially resulting in localized compatibility issues. There would be fewer impacts on the rural area countywide than with Alternative 2. Unlike Alternative 2, impacts could result from increased density on rural properties participating in the reinstated RWIP. However, Rural Wooded development regulations would ensure visual buffers between clustered residential uses and adjacent areas.

Shade and Shadows

Shade and shadow impacts would be similar to Alternative 2, but fewer in areas that would be less intensive under the Preferred Alternative (primarily along Perry Avenue and Mile Hill Drive), and greater in areas of greater intensity (primarily along Bethel and Anderson Hill roads). As with Alternative 2, design guidelines in portions of the Silverdale sub-area could help reduce the potential for impacts.

Increased Lighting Levels and Glare

Light and glare impacts would affect less area than under Alternative 2, particularly less urban area north of the Central Kitsap UGA, along Mile Hill Drive, and northeast of the Port Orchard UGA. Lower light levels would also be expected in the eastern portion of the Central Kitsap UGA due to lower densities; slightly greater light and glare could occur where the Gorst UGA would expand to include more urban residential land.

Vegetation, Views, and Open Space

Similar to Alternative 2, vegetation, views, and open space would decrease within UGAs as infill development and development of vacant land occurs. This would be less pronounced under the Preferred Alternative than Alternative 2 in the areas of less intensification (primarily along Perry Avenue, Baby Doll Road, and Mile Hill Drive). Areas of increased intensification would occur in the western expansion of the Gorst UGA. Similar to Alternative 2, the Silverdale UGA boundary would contract at its joint boundary with the Central Kitsap UGA, allowing rural designations along the Barker Creek corridor. Changes to mountain and shoreline views would likely be similar to under Alternative 2. The Preferred Alternative would have somewhat less impact than Alternative 2 on natural vegetation, tree cover, and open space that contribute to Kitsap County's rural character, due to less UGA expansion.

Silverdale Sub-Area Impacts

Changes to visual character in the Silverdale sub-area would be similar to Alternative 2, although more area in downtown would transition from commercial to a mix of uses and a more pedestrian-oriented environment. The potential for height, bulk, and scale compatibility impacts would be lower than under Alternative 2 where certain Urban Low Residential parcels would be

changed to Industrial matching similar Industrial lands in the western portion of the sub-area. The change from Neighborhood Commercial to Mixed Use on Anderson Hill Road would result in greater building height, but due to adjacent Mixed Use designations, it would not result in greater compatibility impacts. Under the Preferred Alternative, design guidelines would apply to portions of the sub-area to help guide the overall visual character of development. (See DEIS Chapter 2, *Alternatives*, or the final Volume III for location.) Pending the completion of design standards for Silverdale, specific design districts would not be identified in the Comprehensive Plan. Silverdale UGA boundaries would be the same as under Alternative 2; and the potential for height, bulk, and scale incompatibilities at the UGA edge would be similar where adjacent properties are of lower scale. There would be greater potential for shade, shadow, light and glare, and view impacts in the Anderson Hill Road area of downtown, but less potential for light and glare impacts in the western portion of the UGA where Urban Low Residential land would no longer abut Industrial land. Outside of downtown, the potential for obstruction of shoreline views would be similar to that under Alternative 2.

3.2.6. Transportation

Impacts

The Preferred Alternative is expected to experience common types of impacts as the other alternatives. In general, the intensity of impacts under the Preferred Alternatives is projected to be slightly higher than under Alternative 2 and lower than under Alternative 3. This section provides a side-by-side summary of travel demand and roadway LOS impacts projected to result from the Preferred Alternative as compared to each of the three alternatives. Potential impacts on other modes of travel are also discussed.

System-Wide Travel Impacts

Table 3.2-6 summarizes a number of numerical measures that have been defined for the alternatives based upon countywide population and employment projections, the proposed land use plan for each alternative, planned infrastructure improvements, and travel demand modeling results. The table shows that expected travel demand under the Preferred Alternative is similar in magnitude to Alternative 2, with projected daily vehicle trips slightly lower and VMT slightly higher under the Preferred Alternative.

Level of Service Impacts

Operational impacts were assessed by calculating the LOS of roadways and intersections in 2025 under traffic conditions projected to result from build-out of the Preferred Alternative. More detailed results are provided in the technical memorandum *Travel Forecasts and Level of Service Results for County Comprehensive Plan Land Use Alternatives* (Kitsap County 2006b).

Roadway segments

Table 3.2-7 summarizes the lane-miles of deficient county roadway segments projected by 2025 under the Preferred Alternative. As noted earlier in this chapter, a county roadway is considered

deficient if the projected volume to capacity (V/C) ratio exceeds the County’s adopted standards (Table 3.2-97 of the DEIS). Table 3.2-7 shows that under the Preferred Alternative, 16.4% of total lane-miles of County roadway are projected to be deficient by 2025. This is between the totals projected under Alternatives 2 and 3. Like Alternative 3, the total percentage of deficient lane-miles under the Preferred Alternative by 2025 is expected to exceed the County’s 15% concurrency standard.

Locations of deficient segments under the Preferred Alternative are shown in Figure 3.2-3.

Table 3.2-6 Summary of Countywide Travel Statistics

Category	No Action Alternative 1	Alternative 2	Alternative 3	Preferred Alternative
Countywide Population				
Existing (2003)	242,129	242,129	242,129	242,129
2025	315,704	326,076	346,031	327,813
% Increase	30%	35%	43%	35%
Countywide Employment				
Existing	78,115	78,115	78,115	78,115
2025	113,100	133,700	142,500	131,592
% Increase	45%	71%	82%	68%
Lane-Miles of County Roadways¹				
Existing	2,246	2,246	2,246	2,246
2025	2,266	2,266	2,266	2,262
% Increase	0.9%	0.9%	0.9%	0.7%
Daily Vehicle Trips				
Existing	552,986	552,986	552,986	552,986
2025	749,756	834,942	884,790	828,633
% Increase	36%	51%	60%	50%
Daily Vehicle Miles of Travel				
Existing	4,935,100	4,935,100	4,935,100	4,935,100
2025	6,921,640	7,299,470	8,005,100	7,389,710
% Increase	40%	48%	62%	50%
Daily Rideshare Vehicle Trips				
Existing	12,499	12,499	12,499	12,499
2025	17,242	20,511	21,880	20,225
% Increase	38%	64%	75%	57%
Daily Transit Person Trips				
Existing	7,696	7,696	7,696	7,696
2025	12,271	12,169	12,267	12,099
% Increase	59%	58%	59%	57%

Category	No Action Alternative 1	Alternative 2	Alternative 3	Preferred Alternative
PM Peak Hour Vehicles				
Existing	51,171	51,171	51,171	51,171
2025	70,821	78,699	83,925	78,023
% Increase	38%	54%	64%	52%

¹Includes functionally classified arterial and collector roadways, and local access roadways

Source: Kitsap County 2006

Table 3.2-7. Projected Roadway Segment Deficiencies by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
North County	26.9 lane-miles	30.3 lane-miles	29.2 lane-miles	29.3 lane-miles
Central County	7.3 lane-miles	9.2 lane-miles	18.5 lane-miles	14.3 lane-miles
South County	41.4 lane-miles	51.8 lane-miles	72.9 lane-miles	62.5 lane-miles
Total Deficient Lane-Miles	75.6 lane-miles	91.3 lane-miles	120.6 lane-miles	106.1 lane-miles
Total 2025 County Roadway Lane-Miles ¹	647.4 lane-miles	648.0 lane-miles	647.7 lane-miles	647.7 lane-miles
Percent of Deficient Lane-miles	11.7%	14.1%	18.6%	16.4%
Exceeds Countywide Concurrency Standard of 15%	No	No	Yes	Yes

¹Includes functionally classified principal arterials, minor arterials, and collector roadways

Source: Kitsap County 2006

Intersections

Table 3.2-8 summarizes the number of deficient intersections projected under the Preferred Alternative. For purposes of analysis presented in this FEIS, impacts are identified if the following thresholds are met.

- Signalized intersections—operating at LOS E or LOS F.
- Stop-controlled intersections—one or more stop-controlled intersection legs operating at LOS F with average delay greater than 180 seconds per leg.

The table shows that under the Preferred Alternative, five signalized intersections and five stop-controlled intersections are projected to exceed these thresholds.

Table 3.2-8. Projected Intersection Deficiencies by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
Signalized intersections operating at LOS E or LOS F	4	5	6	5
Stop-controlled intersections with one or more stop controlled operating at LOS F with average delay >180 seconds per leg	5	6	10	5

Source: Kitsap County 2006

Silverdale Sub-Area

Roadway Segments

Table 3.2-9 summarizes the lane-miles of deficient county roadway segments projected by 2025 under the Preferred Alternative in the Silverdale area, based on the County’s adopted standards (Table 3.2-97 of the DEIS).

Table 3.2-9. Projected Silverdale Roadway Segment Deficiencies by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
Silverdale Sub-Area	6.0 lane-miles	7.7 lane-miles	10.3 lane-miles	9.5 lane-miles

Source: Kitsap County 2006

Intersections

Table 3.2-10 summarizes the number of deficient intersections projected under the Preferred Alternative in the Silverdale sub-area. As noted earlier in this chapter, for purposes of analysis presented in this FEIS, impacts are identified if the following thresholds are met.

- Signalized intersections—operating at LOS E or LOS F.
- Stop-controlled intersections—one or more stop-controlled intersection legs operating at LOS F with average delay greater than 180 seconds per leg.

The table shows that under the Preferred Alternative three signalized intersections and one stop-controlled intersection are projected to exceed these thresholds.

Table 3.2-10. Projected Silverdale Intersection Deficiencies by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
Signalized intersections operating at LOS E or LOS F	2	3	3	3
Stop-controlled intersections with one or more stop-controlled intersections operating at LOS F with average delay >180 seconds per leg	1	1	1	1

Source: Kitsap County 2006

Impacts on State Facilities

State Highways

Table 3.2-11 summarizes the miles of deficient state highway segments projected by 2025 under the Preferred Alternative. A state highway is considered deficient if its operations are projected to exceed adopted highway standards (Tables 3.2-98 and 3.2-99 in the DEIS).

Table 3.2-11 shows that 34.7% of miles of state highway are projected to be deficient under the Preferred Alternative. This is of the same general magnitude of the other alternatives, and is between Alternative 1, and Alternatives 2 and 3. Projected 2025 deficiencies on state highways under the Preferred Alternative are also shown in Figure 3.2-4.

The analysis summarized in this table assumes the completion of approximately 130 lane-miles of capacity improvement projects to state highways, as identified in the Washington Transportation Plan (WTP). If any of the improvements to state highways defined in the WTP are not constructed, this could result in additional deficiencies on state highways and additional traffic and increased deficiencies on county and city roadways. Future updates of the countywide long-range transportation plan can continue to take into account state projects in Kitsap County listed in future updates of the WTP.

Table 3.2-11. Projected State Highway Deficiencies by 2025

State Highway	Total Length (miles)	Alternative 1 (No-Action)		Alternative 2		Alternative 3		Preferred Alternative	
		Length of Deficient Segments (miles)	% of Total Length	Length of Deficient Segments (miles)	% of Total Length	Length of Deficient Segments (miles)	% of Total Length	Length of Deficient Segments (miles)	% of Total Length
SR 3	31.8	4.4	14.0%	8.1	25.4%	9.1	28.5%	5.5	17.2%
SR 16	11.1	10.9	97.9%	10.9	97.9%	11.1	100.0%	10.9	97.9%
SR 104	9.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
SR 160	7.3	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
SR 166	5.0	2.0	39.4%	2.0	39.4%	2.0	39.4%	2.0	39.4%
SR 303	9.3	4.3	46.5%	4.3	46.5%	4.6	48.9%	4.6	48.9%
SR 304	3.5	1.2	33.0%	0.8	23.6%	1.2	33.0%	0.8	23.6%
SR 305	13.5	7.8	57.5%	9.7	71.9%	7.8	57.5%	10.4	77.1%
SR 307	5.3	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
SR 308	3.0	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
SR 310	1.7	0.7	42.1%	1.0	57.9%	1.0	57.9%	0.7	42.1%
TOTAL	100.4	31.5	31.4%	36.8	36.7%	36.8	36.7%	34.9	34.7%

Source: Kitsap County 2006

Washington State Ferries

Long-range capacity and service needs for state ferry routes are identified by Washington State Ferries (WSF) in its Long-Range Strategic Plan (Washington State Ferries 2006). Forecasts are based on the regional population and employment projections that form the basis for the other projections presented in this FEIS; as well as financial analysis of projected future ferry fares. Projected PM peak ferry demand presented in the DEIS also applies to the Preferred Alternative.

Impacts on Other Modes of Travel

Non-Motorized

Increases in population and employment levels are expected to increase the demand for additional facilities. Thus, the Preferred Alternative would affect non-motorized facilities through increased demand for additional trails and bikeways. The increase in urbanized area would result in more trail and bicycle facility demands in those areas. These facilities may either be located along roadways as bike lanes/sidewalks or as separated facilities, and would provide opportunities for both recreational and commuter users.

Infrastructure needs for non-motorized transportation/commuter and mixed bicycle/pedestrian user groups are identified in the Kitsap County Bicycle Facilities Plan. Planning programs for trails are maintained in trail plans, such as the *Mosquito Fleet Trail Master Plan*. Regular review and update of these plans will help ensure that infrastructure and services needed to meet increased demand for non-motorized facilities are identified.

Transit

Transit operations and facilities will be affected by the increase in travel demand created by the Preferred Alternative. Analysis summarized in Table 3.2-6 projects that transit person trips would increase by approximately 58% under the Preferred Alternative. Similar to impacts projected under the other alternatives, these increases will require a substantial increase in hours of operations and some capital facilities such as park-and-ride lots. Expansion of the urban areas would result in new or extended bus routes in addition to more frequent service. Commuter routes would also see increased demand, affecting park-and-ride lots, transit centers, and flyer stops.

Rail and Airports

The Preferred Alternative would affect demand on rail and airports in Kitsap County. In general, as employment and population increase, requirement for these services increases.

Rail will be affected by an increase in commerce reflected in increased employment. Airports will see an increase in activity as recreational and employment activities increase.

Impacts of SEPA Exemptions

SEPA exemptions (described in DEIS Section 2.6.3, *Description of Alternatives*) proposed under Alternative 2 are also included under the Preferred Alternative. Potential transportation effects of: SEPA Categorical Exemption Thresholds for Minor New Construction and SEPA Mixed

Use/Infill Categorical Exemption in Silverdale are expected to be the same as those presented in the DEIS.

Mitigation Measures

This section serves to update the DEIS “Mitigation Measures,” particularly addressing the Preferred Alternative and the potential strategies to balance levels of service, financing and land use as reviewed by the Kitsap County Board of County Commissioners (BOCC).

Incorporated Plan Features

Project Improvements as Mitigation

Recommended Roadway Improvements

Table 3.2-12 summarizes the roadway locations that have been identified for improvement under the Preferred Alternative to meet adopted County roadway segment LOS standards.

Table 3.2-12. Locations of Recommended Roadway Improvements by 2025

Roadway	Location	Improvement Needed			
		Alt 1	Alt 2	Alt 3	Preferred
North County					
Clear Creek Road NW	SR 303 - Mountain View Road			X	
Finn Hill Road NW	SR 3 Overpass - 158 ft SE of Karkainen Lane NW		X	X	X
Gunderson Road NE	SR 307 – Port Gamble Road NE			X	
Gunderson Road NE	SR 307 – Miller Bay Road NE		X		X
Hansville Road NE	SR 104 - Old Hansville Road NE		X	X	X
Lincoln Road NE	Stottlemeyer Road NE - Noll Road NE	X			
Old Frontier Road	Anderson Hill to Trigger Ave	X	X	X	X
Ridgetop Boulevard NW	SR 303 On/Off Ramp - Silverdale Way	X	X	X	X
Silverdale Way NW	SR 303 WB Off Ramp - Mountain View Road			X	
Silverdale Way NW	Mountain View Road - SR 308	X	X	X	X
Suquamish Way NE	SR 305 – Division Avenue NE	X	X	X	X
Viking Way NW	SR 308 - Poulsbo City Limits	X	X	X	X
Westgate Road NW	Gustafson Road NW - Old Frontier Road NW			X	
Indianola Road NE	Miller Bay Road NE -Kingston Road NE		X		X
NE West Kingston Road ¹	Miller Bay Road NE - 317 ft. west of entrance to Junior High School				X
S Kingston Road NE ¹	Jefferson Point Road NE - 312 feet southeast of NE West Kingston Road				X
Total Number of Improvement Locations – North County		6	9	11	11
Central County					
Anderson Hill Road NW	Apex Road NW - Frontier PL NW	X	X	X	X
Bucklin Hill Road NW	Blaine Avenue NW - Tracyton Boulevard	X	X	X	X
Chico Way NW	Northlake Way NW - SR 3 Northbound Ramp	X	X	X	X
Chico Way NW	SR 3 Northbound Ramp - Newberry Hill Road NW		X	X	X

Built Environment: Land Use and Transportation

Roadway	Location	Improvement Needed			
		Alt 1	Alt 2	Alt 3	Preferred
Gold Creek Road NW	Forest Road - Tahuyeh Lake Road NW		X	X	X
John Carlson Road NE	SR 303 - Lazy S Lane NE			X	
Loxie Eagans Boulevard W	National Avenue W - Bremerton City Limits W			X	
National Avenue W	Loxie Eagans Blvd W - Arsenal Way W	X	X	X	X
National Avenue W	Arsenal Way W - 1 st St			X	
Newberry Hill Road NW	Hideaway LN NW - Provost Road NW		X	X	X
Newberry Hill Road NW	Provost Road NW - Silverdale Way NW	X	X	X	X
Perry Avenue NE	Sheridan NE - Sylvan Way NE			X	
Provost Road NW	Shelley Drive NW - Old Frontier Road NW	X	X	X	X
Riddell Road NE	SR 303 – Almira Drive NE	X		X	X
Seabeck Highway NW	Northlake Way NW - 153 ft SE of Northridge Lane NW			X	
Silverdale Way NW	Newberry Hill Road NW – Carlton Street NW	X	X	X	X
Sylvan Way NE	Trenton Avenue NE - Petersville Road NE			X	
Sylvan Way NE	Olympus Drive NE - Petersville Road NE	X			
Tahuyeh Lake Road NW	Gold Creek Road NW - Holly Road NW			X	X
Total Number of Improvement Locations – Central County		9	10	18	12
South County					
Anderson Hill Road SW	Old Clifton Road SW - SR 16		X	X	
Banner Road SE	Olalla Valley Road SE - Overaa Road SE	X		X	X
Banner Road SE	Overaa Road SE - Sedgewick Road SE	X	X	X	X
Berry Lake Road SW	Old Clifton Road SW - Sidney Road SW		X	X	X
Bethel Road SE	Lider Road SE - Bielmeier Road SE		X	X	X
Bethel Road SE	Bielmeier Road SE – Ives Mill Road SE	X	X	X	
Glenwood Road SW	Pine Road SW – Lake Helena Road SW		X	X	X
Glenwood Road SW	Lake Helena Road SW - Sedgwick Road SW	X	X	X	X
J M Dickenson Road SW	Lake Helena Road SW - Lake Flora Road SW		X	X	X
Jackson Avenue SE	111 ft S of Summer Place SE - Mile Hill Drive	X	X	X	X
Lake Flora Road SW	SR-3 - J M Dickenson Road SW	X	X	X	X
Lake Flora Road SW	0.16 mi SW of Glenwood Road - Glenwood Road	X		X	X
Lake Flora Road SW	J M Dickenson Road SW - 0.16 mi SW of Glenwood Road			X	
Lake Helena Road SW	J M Dickenson Road SW - Glenwood Road SW		X	X	X
Lake Helena Road SW	Wicks Road - Glenwood Road	X			
Long Lake Road SE	396 ft SW of Lakeview Drive SE - Woods Road SE			X	
Lund Avenue	Bethel Road SE - Port Orchard City Limits			X	
Mile Hill DR SE	California Avenue SE - Whittier Avenue SE	X	X	X	X
Mitchell Road SE	Bethel Road SE - Port Orchard City Limits	X	X	X	X
Mullenix Road SE	SR 16 SB Ramp - SR 16 NB Ramp	X			
Mullenix Road SE	SR 16 NB Ramp – Olalla Valley Road SE	X		X	X
Olalla Valley Road SE	Orchard Avenue SE - Banner Road SE	X		X	X
Old Clifton Road SW	Sunnyslope Road SW - 0.30 mi SW of McCormick Woods Drive SW	X	X	X	X
Old Clifton Road SW	McCormick Woods Drive SW – Berry Lake Road SW	X		X	X

Roadway	Location	Improvement Needed			
		Alt 1	Alt 2	Alt 3	Preferred
Pine Road SW	Glenwood Road SW - Sidney Road SW	X	X	X	X
Sidney Road SW	Blackjack Lane SW - 106 ft S of Lider Road SW			X	
Sidney Road SW ³	Lider to Sedgwick Rd SW		X	X	X
Sidney Road SW	Sedgwick Rd SW - Glenwood Rd SW			X	X
Sunnyslope Road SW	Lake Flora Road SW - SR 3	X	X	X	X
Belfair Valley Road W ²	Mason County line to Bremerton city limits				X
Lider Road SW ³	Glenwood Road SW – Sydney Road SW				X
Total Number of Improvement Locations – South County		17	17	27	23
Countywide Total Number of Improvement Locations		32	36	56	46

1. The need for these improvements is likely due to the removal of the proposed 2-lane Heritage Park Connector, between S Kingston Road and Miller Bay Road, from the Preferred Alternative model run. This roadway was assumed in place for the DEIS analysis, but was not included in the County's financially constrained TIP, so it was determined that for conservative analysis, it should not be included in the FEIS analysis. It is probable that if this connection had not been included in the DEIS alternative analysis, that these two additional improvements in the Kingston vicinity would also have been required under one or more of the DEIS alternatives. If, in the future, the Heritage Park Connector is programmed into the TIP and constructed, it is possible that the need for these two improvements could be lessened or removed.
2. The need for this improvement is likely due to differences in growth distribution under the Preferred Alternative as compared to DEIS Alternatives, particularly Alternative 3, resulting in a different distribution of traffic projected to access to SR 3 and SR 16 via Gorst.
3. The need for this improvement is likely due to differences in growth distribution under the Preferred Alternative as compared to the DEIS Alternatives.

Source: Kitsap County 2006

Recommended Roadway Improvements in the Silverdale Sub-Area

Table 3.2-13 summarizes the roadway locations that have been identified for improvement under the Preferred Alternative in the Silverdale sub-area, to meet current adopted County LOS standards.

Table 3.2-13. Locations of Recommended Roadway Improvements in Silverdale by 2025

Roadway	Location	Improvement Needed			
		Alt 1	Alt 2	Alt 3	Preferred
Clear Creek Road NW	SR 303—Mountain View Road			X	
Old Frontier Road	Anderson Hill to Trigger Avenue	X	X	X	X
Ridgetop Boulevard NW	SR 303 On/Off Ramp—Silverdale Way	X	X	X	X
Silverdale Way NW	SR 303 WB Off Ramp—Mountain View Road				
Westgate Road NW	Gustafson Road NW—Old Frontier Road NW			X	
Anderson Hill Road NW	Apex Road NW—Frontier PL NW	X	X	X	X
Bucklin Hill Road NW	Blaine Avenue NW—Tracyton Boulevard	X	X	X	X
Chico Way NW	SR 3 NB Ramp—Newberry Hill Road NW		X	X	X
Newberry Hill Road NW	Hideaway Lane NW—Provost Road NW		X	X	X
Newberry Hill Road NW	Provost Road NW—Silverdale Way NW	X	X	X	X
Provost Road NW	Shelley DR NW—Old Frontier Road NW	X	X	X	X
Silverdale Way NW	Newberry Hill Road NW—Carlton Street	X	X	X	X

Roadway	Location	Improvement Needed			
		Alt 1	Alt 2	Alt 3	Preferred
NW					
Total Number of Improvement Locations in Silverdale		7	9	12	9

NB = northbound
 Source: Kitsap County 2006

Cost of Roadway Improvements

Table 3.2-14 summarizes the total cost of the projects recommended countywide.

Table 3.2-14. Summary of Cost of Roadway Improvements Recommended by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
North County	\$35,011,000	\$79,428,000	\$97,667,000	\$89,711,000
Central County	\$51,099,000	\$88,071,000	\$104,139,000	\$96,551,000
South County	\$119,800,000 – \$129,074,000	\$133,862,000 – \$143,136,000	\$177,019,000	\$135,850,000
Total	\$205,910,000 – \$215,184,000	\$301,361,000 – 310,635,000	\$378,825,000	\$322,112,000

Note: Based upon 2006 dollars.
 Source: Kitsap County 2006

Cost of Roadway Improvements in Silverdale Sub-Area

Table 3.2-15 summarizes the total cost of the recommended projects that are located in the Silverdale sub-area.

Table 3.2-15. Summary of Cost of Roadway Improvements in Silverdale Sub-Area Recommended by 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
Silverdale	\$67,018,000	\$120,266,000	\$151,110,000	\$120,266,000

Note: Based upon 2006 dollars.
 Source: Kitsap County 2006

Revenue Projections

Table 3.2-16 summarizes the revenue projected by the County to fund future transportation improvements, based upon funding sources that are currently in place. The table shows \$79,040,132 projected total revenue through 2025. However, \$50,215,000 of that amount is already committed to fund projects that are in the CFP; thus leaving \$28,825,132 available to fund other future transportation improvements.

Table 3.2-16. Summary of Revenue Projected through 2025

Revenue Source	Total Revenue
Surface Transportation Program (STP)	\$20,158,841
Transportation Improvement Board (TIB)	\$1,395,982
SEPA	\$761,546
TIA/Bonds	\$20,731,040
Local/Real Estate Excise Tax (REET)	\$14,945,207
Impact Fees	\$17,739,976
Interest	\$3,307,541
Total	\$79,040,132
Revenue already committed to fund projects in the CFP	\$50,215,000
Total Available Revenue through 2025	\$28,825,132

Note: Based upon 2006 dollars. TIA = total impervious area.
 Source: Kitsap County 2006

Table 3.2-17 summarizes the projected revenue shortfall for each of the alternatives, based on the revenue projected from current funding sources. The table shows a projected revenue shortfall of \$293,286,868 through 2025, under the Preferred Alternative.

Table 3.2-17. Summary of Revenue Shortfall through 2025

	Alternative 1 (No-Action)	Alternative 2	Alternative 3	Preferred Alternative
Projected Revenue	\$28,825,132	\$28,825,132	\$28,825,132	\$28,825,132
Estimated Project Costs	\$215,184,000	\$310,635,000	\$378,825,000	\$322,112,000
Revenue Shortfall	(\$186,358,868)	(\$281,809,868)	(\$349,999,868)	(\$293,286,868)

Note: Based upon 2006 dollars.
 Source: Kitsap County 2006

Table 3.2-18 presents financing, policy-related, and/or programmatic strategies that the County has identified to balance transportation LOS, financing, and land use. At this time, the Six-Year Transportation Improvement Program (TIP) is balanced in terms of costs and revenues. These measures, on Table 3.2-18, are all under consideration for future years to address the projected revenue shortfall over the 20-year plan. Implementation of some strategies would raise additional revenue; others would affect LOS standards to recognize a higher level of “acceptable” roadway congestion. Strategies that affect land use could result in demand reduction at different locations, but in accommodating future population and employment targets could also result in higher demand at other locations.

Table 3.2-18. Potential Strategies to Achieve Balance among Transportation LOS, Financing, and Land Use

Potential Mitigation Measure	Effect of Mitigation Measure	Implementation	Maximum Funding Gain or Cost Savings
FINANCIAL MEASURES: Reallocation of Expenditures, Expenditure Reductions, and Other Measures			
Shift Resources from Other Transportation Capital Programs – This measure involves a shift of resources among different transportation capital improvement priorities.	Traditionally, a significant portion of Kitsap County’s capital expenditures for roads has gone to non-capacity projects including pavement preservation, bridge rehabilitation/restoration, intersection safety and signalization projects, and walkway projects. One option that may be considered is to reallocate some of these expenditures to the major capacity projects needed to maintain LOS. This shift could affect funding levels of non-capacity projects that would likely be spent by 2025. This could reduce pedestrian and other non-vehicular improvements in urban areas where demand would be greater due to population growth.	This measure would be implemented as part of the annual process through which the County adopts a motion that establishes its 6-year TIP, and an ordinance establishing the annual construction program (ACP).	\$57,000,000
Shift Resources from Maintenance and Operations to Capacity Improvements – This measure would involve shifting Public Works resources from maintenance and operations to capacity improvements.	Traditionally, the highest priorities for expenditure of funds by Public Works have been safety, maintenance and preservation. NOTE: Maintenance is more cost effective when provided on an ongoing basis.	This measure would be implemented as part of the annual process through which the County adopts an ordinance that establishes its budget, ACP, and 6-year TIP.	\$212,000,000
End Redirects to Sheriff and Development Engineering – Currently Public Works redirects funding to the Sheriff and to Community Development Engineering. This proposal ends that program.	County uses redirected funds for capacity projects. Sheriff’s Traffic Control would be negatively affected and site-specific review by development engineering would be negatively affected.		\$47,000,000

Potential Mitigation Measure	Effect of Mitigation Measure	Implementation	Maximum Funding Gain or Cost Savings
FINANCIAL MEASURES: Additional Revenue Generation			
<p>Property Tax Levy Override – The County may consider increasing the amount of property tax collected for the road fund beyond its current allowable 1% increase per year.</p>	<p>Under Initiative 747 (2001), a taxing district may not increase the total amount it collects in regular property taxes by more than 1% from one year to the next.</p> <p>It gives local officials three options to increase yearly property tax collections: 1) increase the amount collected by up to 1%; 2) increase the amount collected by more than 1% by drawing on unused taxing authority they banked in previous years; or 3) ask voters to approve a higher increase.</p>	<p>There are no statutory limits on tax increase proposals sent to the voters. Such proposals need only a simple majority to pass.</p>	<p>\$24,500,000 – \$223,000,000</p>
<p>Increased Impact Fees – Kitsap County may consider increasing the rates of transportation impact fees assessed to new development for impacts on the capacity of the road system.</p>	<p>Currently, the impact fee rates are set in a fee schedule adopted by ordinance. Increase in the fee schedule would result in increased revenue.</p>	<p>This measure would require adoption of an ordinance amending the “fee schedule.”</p>	<p>\$34,000,000 – \$281,000,000</p>
<p>Local Option Fuel Tax – This measure would have the County propose a countywide fuel tax to finance city and county transportation improvements (RCW 82.80). The County and cities would share in this revenue, with the County’s share being 1.5 times the unincorporated population.</p>	<p>This measure could substantially reduce the revenue deficits that are impacts related to each of the land use alternatives. Amounts of revenue for the County and cities would depend on the year this measure was implemented and the amount of unincorporated population growth occurring toward 2025.</p>	<p>This measure would require the County to collaborate with the cities to devise and concur on a program of projects as justification for this revenue measure. The County would then place this measure on an election ballot for approval by a majority of county voters.</p>	<p>\$57,600,000</p>
<p>Motor Vehicle License Fee – This measure would have the County reinstate a \$15 license fee on most vehicles registered within the county (RCW 82.80). The County and cities would share this revenue based on the proportional number of registered vehicles within incorporated and unincorporated population.</p>	<p>This measure could help reduce the revenue deficits that are impacts associated with each of the land use alternatives. The amounts of revenue generated would depend on the year this measure was implemented and the number of motor vehicles registered in the county over time.</p>	<p>Implementation of this measure would require the County, with cities’ concurrence, to place this measure on an election ballot for approval by a majority of County registered voters.</p>	<p>\$44,000,000</p>
<p>Local Transportation Improvement District (LTID) County Commissioners would work together with City Councils to develop a package of projects and funding under the LTID.</p>	<p>LTID funding options include increasing sales tax, imposing a vehicle license fee, increasing the motor vehicle excise tax (MVET), tolls on specific highways or bridges, and local option fuel tax.</p>	<p>Its recommended package of projects and funding would be subject to approval by the county voters and tax rates would be equally applied.</p>	<p>\$281,000,000</p>

Potential Mitigation Measure	Effect of Mitigation Measure	Implementation	Maximum Funding Gain or Cost Savings
LOS MEASURES: Changing LOS Standards and/or Measurement			
<p>Lower LOS Standards, General Consideration – Setting a lower LOS standard would result in a redefined and reduced need for major road widening projects. This, in turn, would reduce the expenditure forecast.</p>	<p>Reduced availability of capital resources for roads has been an important factor in evaluating the 2025 land use Alternatives. Kitsap County has fewer resources for major road projects than it did in 1993 when GMA planning was done for the 2012 horizon. The revenue/expenditure portion of the Transportation Element has to be balanced as accurately and as realistically as possible. To set an LOS standard that the County cannot afford may result in roads not being widened that would need to be widened to accommodate the growth anticipated in the Land Use plan. This, in turn, could lead to developments not being deemed concurrent, not just for a few years, but until sometime beyond the 2025 planning horizon. However, lower LOS standards would also mean increased levels of congestion compared to the present.</p>	<p>This measure would require adoption within the Transportation Element of the Comprehensive Plan, an implementing ordinance and changes to Administrative Rules.</p>	<p>\$69,900,000</p>
<p>Transfer of County Roads to WSDOT – This measure involves transferring certain County roads to the state so that the County is no longer directly responsible for capacity improvements or LOS impacts.</p>	<p>Deficient LOS on state highways is not considered when making concurrency determinations for County developments. Some County roads may more appropriately function as state highways than as County roads. Thus, transferring certain County roads to WSDOT jurisdiction could shorten the list of County projects needed to support the Land Use plan and maintain concurrency.</p>	<p>This measure would require legislative action by the State Legislature and the Kitsap County Council.</p>	<p>\$42,700,000</p>
<p>Set LOS on a Corridor-By-Corridor Basis – Some corridors may be selectively excluded from capacity expansion by ordinance to discourage excessive growth in rural areas.</p>	<p>Reduction of capacity projects in rural areas.</p>	<p>By County Code.</p>	<p>Cannot be calculated at this time.</p>

Potential Mitigation Measure	Effect of Mitigation Measure	Implementation	Maximum Funding Gain or Cost Savings
LAND USE MEASURES: Adopting or Amending County Land Use Policies			
<p>Intensification of Existing UGAs and Urban Centers – Focus urban development within existing UGAs and at designated urban centers by amending land use designations and zoning to accommodate and encourage more intensive uses.</p>	<p>Limits the need for UGA boundary expansions. It could have a similar effect as limits to urban boundary expansion by reducing expenditures for urban arterial capacity. Intensification of urban centers would require arterial improvements that would use some of the funding saved by not expanding UGAs.</p>	<p>At Commission's discretion to adopt and amend the Future Land Use Map, involving the initial adoption of the Comprehensive Plan and subsequent "annually docketed" plan amendments (RCW 36.70A.070 {1}).</p> <p>Public hearings would be held to consider consistency with Countywide Planning Policies (CPPs).</p> <p>Zoning code amendments would need to be prepared to accommodate and offer incentives (e.g., density bonuses) to more intensive development within and around urban centers.</p>	\$104,000,000
<p>Proactive City Annexation of Growth Areas – The County would enter into agreements that would expedite city annexation of growth areas, or County-controlled urban "islands," for which the city is providing services.</p>	<p>The County would relinquish responsibility for arterial road improvements that result from city growth and development or development within an area suitable for annexation by the city. Financial relief under this alternative is speculative at this time.</p>	<p>The County would need to negotiate and enter into interlocal annexation agreements with each city. The interlocal agreements would spell out the conditions that would trigger a city's annexation of an area the County's responsibility under the transition, and transfer of County debt for infrastructure improvements.</p>	\$49,900,000
<p>Incorporation of Silverdale</p>	<p>Reduce County costs for capacity improvements by \$120,256,000. Revenue would also decrease.</p>	<p>Articles of incorporation by citizens of future city. Note: this is not a mitigation measure that can be implemented by the County since it is the decision of the citizens of the Silverdale area. However, the effect of Silverdale incorporation on the County transportation cost and revenue projections is noteworthy.</p>	\$120,200,000

Potential Mitigation Measure	Effect of Mitigation Measure	Implementation	Maximum Funding Gain or Cost Savings
CONCURRENCY MANAGEMENT SYSTEM (CMS)			
<p>Revision to Concurrency Management System – The County may consider updates to the concurrency management system to implement changes in LOS standards and/or other aspects of development concurrency determinations.</p>	<p>This measure might not have any direct impact on LOS, but could affect the way the County makes concurrency determinations for developments. Potential changes to the County's CMS could include, but are not limited to:</p> <ul style="list-style-type: none"> ▪ Alternatives to the conventional A–F LOS standards ▪ Different LOS standards on different road types ▪ Different LOS standards in different geographic areas ▪ Use of inadequate road condition (IRC) criteria ▪ Limits on what roads LOS standards apply ▪ Use of alternative measurements (e.g., volume-to-capacity, density, congestion indices) 	<p>This measure would require adoption in an implementing ordinance and/or changes to Administrative Rules adopted by the Director of Public Works.</p>	<p>Cannot be calculated at this time, but project costs associated with revised concurrency standards would be evaluated as part of the analysis completed to develop a revised concurrency system.</p>
Total Funding Gain/ Cost Savings			\$1.1 billion–\$1.5 billion

TIP = Transportation Improvement Program
 Source: Kitsap County 2006

Potential Policy Measures as Mitigation

GMA requires Kitsap County to ensure that transportation facilities and services are adequate to serve planned land use consistent with adopted LOS standards and a strategy to finance needed improvements (RCW 36.70A.70 {6}). This requires a three-way balancing of the following elements.

- Land development reflected by the Land Use Map.
- Adopted LOS standards and policies.
- Financial policy/strategy that determines available revenues and levels of expenditure.

The County has a fair amount of discretion and a number of options under each of these policy categories. In order to maintain this three-way balance, increase/decrease in one category requires change in the other two categories.

In the event that revenue from one or more of the identified sources is not forthcoming in the amounts forecasted in this FEIS, the County has several options.

- Lower the LOS standard, reducing the need for additional infrastructure.

- Increase the amount of revenue from existing sources.
- Adopt new sources of revenue.
- Require developers to provide such facilities at their own expense.

The GMA concurrency requirements must be met regardless of funding shortfalls. Minimum roadway capacity improvements must still be achieved to meet this requirement. Under current state law, if concurrency is not met, a moratorium on development must be imposed on the County.

Programmatic Measures as Mitigation

Kitsap County employs a number of implementation measures that are not improvement projects or specific policy decisions, but represent programmatic actions that help implement the Comprehensive Plan. The following implementation measures could, over time, mitigate ongoing growth and transportation impacts.

- Commute trip reduction.
- Transit-compatible design.
- Access management.

Most of the beneficial traffic mitigation offered by these implemented measures is accounted for in the County's travel modeling and analysis. Under the Preferred Alternative, similar to the other alternatives, increased emphasis on these measures could result in further reduced vehicular trips, reduced travel-time delay, and higher transit usage.

Applicable Regulations and Commitments

County

A number of County transportation regulations and administrative programs could require amendment depending on the policy orientation and recommendations of the 10-Year Update. Regulations and programs listed below could be subject to amendment or change.

- **Concurrency Management System.** Amendment may be needed of administrative rules that guide LOS and concurrency threshold determinations, developer responsibilities, impact analysis and reporting, and required databases.
- **Impact Mitigation Fees.** The County has policies that support impact mitigation fees, but has not adopted any implementation measures. If impact fees were to be implemented, an ordinance would have to be adopted identifying the types of projects eligible for impact fee expenditure, and defining the rates or amounts collected and cost basis for the rates.
- **TIP and Annual Construction Program.** The TIP could be affected by changes in project priorities and availability of revenues to fund needed improvements.
- **Roadway Design Standards.** Alternatives to traditional design standards could be considered and, if adopted, would require amendment to County design standards.

State

The following state laws guide transportation planning and policy in Kitsap County.

- GMA, RCW 36.70A
- CTR Law, RCW 70.94.527
- LOS Bill, HB 1487

Other Potential Mitigation Measures

- Require new development under the SEPA Mixed Use/Infill Categorical Exemption in Silverdale to provide a traffic analysis that indicates how many trips the development would generate. Development will be allowed under this exemption up to the point that all the trips in the checkbook have been taken.
- Amend the Kitsap County Code (KCC) to give the County discretion to require that a traffic impact analysis study be completed for any development proposal countywide that the Director of Public Works determines could have potentially significant effects on traffic operations on county roadways, regardless of SEPA exemption or concurrency status.
- Amend the KCC to define the area of impact for proposed developments, so that the concurrency test may be applied on a sub-area basis.

3.2.7. Noise

Construction noise impacts would occur under the Preferred Alternative. Development would continue throughout the county, and construction noise associated with growth would be focused in population centers within UGAs. The Preferred Alternative is close in population to Alternative 2 and has a little less employment; therefore, the impacts of the Preferred Alternative are similar to Alternative 2 and in the range of impacts of Alternative 1 and Alternative 3.

Under the Preferred Alternative, the countywide population, vehicle travel, and new roadway construction would increase more than under Alternative 1 and Alternative 2 but less than under Alternative 3 (Section 3.2.6, *Transportation*). Therefore, the number of homes potentially exposed to traffic noise impacts would likely be greater under the Preferred Alternative than under Alternatives 1 or 2. However, the Preferred Alternative provides the most Mixed Use lands overall, although distributed a little differently than under Alternative 2. Mixed-use development could encourage future residents to live near their workplaces, thereby reducing vehicle trips and roadway noise compared to conditions ensuing from more dispersed growth patterns.

As under other alternatives, the KCC noise code would limit new commercial or industrial facilities from causing noise impacts at existing dwellings.

The Bremerton National Airport would be surrounded by planned industrial or employment/recreational (IMPRA) uses in the immediate area, and further out by rural residential uses. With implementation of the Airport Master Plan, noise impacts are not anticipated to be significant. Apex Airpark impacts are addressed in *Silverdale Sub-Area* below.

Silverdale Sub-Area

Under the Preferred Alternative, there would be twice as many new residents and homes as under Alternative 1. There would also be nearly twice the number of jobs as Alternative 1. In generally, however, growth under the Preferred Alternative is similar to that under Alternative 2. This growth would increase traffic and associated noise. The KCC noise code would limit new commercial and industrial facilities from causing noise impacts on adjoining residential uses.

Similar to Alternative 2, under the Preferred Alternative, the area surrounding Apex Airpark near Silverdale would remain outside the UGA, but the UGA would expand and be closer to the Airpark than under Alternative 1. There would be a greater potential for aircraft noise impacts near the airport than under Alternative 1, but less potential for impacts than under Alternative 3.

3.3. Built Environment: Public Services and Utilities

This FEIS analysis presents impacts based on population growth from 2005 to 2025. Volume I, Appendix A, Capital Facilities Plan (CPF), addresses population growth and capital facilities needs for a 6-year period, 2006–2012. The CPF will be updated no less frequently than every 6 years to then accommodate another 6-year period of growth, as required by GMA. Impacts that are identified in the DEIS and in this FEIS for the full 20-year planning period and associated deficits will be addressed by each succeeding update of the CPF.

3.3.1. Public Buildings

Under the Preferred Alternative, the new LOS standards for County administrative buildings, County maintenance facilities, and County community centers would vary slightly from those proposed under Alternative 2:

- 1,092 square feet per 1,000 population for County administrative buildings (compared to 1,097 under Alternative 2).
- 130 square feet per 1,000 population for County maintenance facilities (compared to 131 under Alternative 2).
- 239 square feet per 1,000 population for County community centers (compared to 240 under Alternative 2).

The Preferred Alternative would result in slightly different countywide population than Alternative 2, and would therefore result in a slight change to the LOS in 2025 for community centers compared to Alternative 2. There would be very slight changes in the estimated need for some facilities—reductions of a few square feet. Table 3.3-1 shows the estimated need for administrative offices, maintenance facilities, courtrooms, and community centers under the Preferred Alternative in 2025, according to both the adopted 1999 LOS standards and the proposed LOS standards, based on total countywide population. These calculations assume facilities identified in the CPF through 2012 will be constructed.

Table 3.3-1. Preferred Alternative—Government Facilities LOS Comparison

	1999 adopted LOS (per 1,000 population)	LOS in 2005 (per 1,000 population)	Proposed LOS Standard (per 1,000 population)	LOS in 2025* (per 1,000 population)	Deficit with 1999 standard*	Deficit with Proposed LOS standard*
Administrative Offices (square feet)	1,043	1,196	1,092	918	41,082	58,784
Maintenance Facilities (square feet)	163	147	130	110	17,506	7,015
District Courtrooms	0.016	0.016	0.022	0.02	Surplus of 0.76	1.21
Superior Courtrooms	0.031	0.033	0.029	0.02	2.16	1.51
Community Centers (square feet)	255	269	239	201	17,672	12,755

*LOS and need in 2025 are based on the existing inventory of buildings and improvements currently under construction, new facilities identified in the CFP for construction through 2012, and countywide population. The countywide population for the Preferred Alternative equals 327,813.

Source: Henderson Young and Company; AHBL, Inc.

Silverdale Sub-Area

The Silverdale sub-area would experience population growth of 6,877 under the Preferred Alternative, compared to 6,973 under Alternative 2. Similar to Alternative 2, demand for additional community center space in the Silverdale sub-area would occur. The need for community center space and other public buildings associated with growth in the Silverdale sub-area is accounted for in the countywide analysis (Table 3.3-1). See Section 3.3.2, *Law Enforcement*, for a discussion of impacts on Sheriff’s office facilities.

3.3.2. Fire Protection

Under the Preferred Alternative, the new LOS standards for fire protection in Central Kitsap Fire and Rescue (CKFR) and District No. 18/City of Poulsbo would vary slightly from those proposed under Alternative 2:

- CKFR: 0.41 unit per 1,000 population (compared to 0.42 under Alternative 2).
- District No. 18/City of Poulsbo: 0.54 unit per 1,000 population (compared to 0.55 under Alternative 2).

The Preferred Alternative would result in slightly different countywide population than Alternative 2, but would not result in changes to LOS in 2025 from that under Alternative 2.

In 2025, the CKFR would have a population of 105,250; the South Kitsap Fire and Rescue (SKFR) population would be 101,904; the North Kitsap Fire and Rescue (NKFR) population would be 30,389; and District No. 18’s would be 33,241; these compare to 104,436; 101,865; 30,510; and 33,206, respectively, under Alternative 2. Table 3.3-2 shows the estimated need for units (defined as the combination of vehicles and equipment that responds to a fire or EMS situation, such as engines, ladders, rescue units, and aid cars, but not including staff or

miscellaneous vehicles) under the Preferred Alternative in 2025, based on the LOS standards adopted in 1999 and the proposed LOS standards, and the existing number of units (assumes no new units are added in the interim). The estimated need for equipment in the CKFR would increase from 13 to 14 units based on the 1999 LOS standard compared to Alternative 2, but would decrease from 7 to 6 units with the proposed LOS standard in comparison to Alternative 2.

Table 3.3-2. Preferred Alternative Estimated Fire Unit LOS and Need

District	1999 adopted LOS standards (units per 1,000 population)	LOS in 2005 (units per 1,000 population)	Proposed LOS standards (units per 1,000 population)	2025 projected LOS (units per 1,000 population)	Deficit with 1999 standard (# of units)	Deficit with proposed standard (# of units)
Central Kitsap	0.48	0.45	0.41	0.35	14	6
South Kitsap	0.60	0.45	0.41	0.33	27	8
North Kitsap	0.84	0.65	0.59	0.49	11	3
District No.18- City of Poulsbo	0.63	0.61	0.54	0.45	6	3

Note: A unit is the combination of vehicles and equipment that responds to a fire or EMS situation, including engines, ladder trucks, water tenders, rescue units, aid cars and ambulances, and rehabilitation units but not staff or miscellaneous vehicles

Source: Henderson Young and Company; AHBL, Inc.

Under the Preferred Alternative, similar to Alternative 2, demand for fire protection will increase most in those districts with the highest population growth. The south county area, including the Port Orchard and ULID #6 UGAs, has the highest population growth, followed by the central county (Central Kitsap and Silverdale) UGAs. Therefore, SKFR would experience the greatest increase in demand, followed by CKFR. Based on the existing number of fire/emergency units and both the 1999 adopted LOS standards and the proposed LOS standards, SKFR would experience the largest LOS deficit of the four districts over the 20-year period.

Silverdale Sub-Area

Under the Preferred Alternative, similar to Alternative 2, the Silverdale sub-area would experience increased population and employment, and increased residential densities would allow for efficiency of fire protection service and could reduce response times compared to areas of lower-density patterns of development. The sub-area would experience a similar amount of growth as with Alternative 2 (6,877 in added population, compared to 6,973 under Alternative 2), resulting in a similar need for equipment in the CKFR.

3.3.3. Law Enforcement

Under the Preferred Alternative, a population increase of 56,865 in the unincorporated county would be slightly lower than that under Alternative 2, and demand for law enforcement would be similar. If staffing remains unchanged through 2025, the need for staffing would be the same as

under Alternative 2. There would be 0.56 commissioned deputy and 0.41 corrections officer per 1,000 population, assuming population growth that would occur under this alternative in the unincorporated county. Forty-three additional commissioned deputies and 31 corrections officers would be needed to maintain 2005 levels, the same as under Alternative 2. Similar to Alternative 2, increased densities in UGAs could result in increased efficiencies.

Under the Preferred Alternative, the new LOS standard for sheriff’s offices would vary slightly from Alternative 2: sheriff’s office—266 square feet per 1,000 population (as compared to 268 in Alternative 2).

The Preferred Alternative would result in slightly different countywide population than Alternative 2; however, LOS and need for facilities in 2025 would not change from that under Alternative 2, with the exception that the estimated square feet needed for sheriff’s offices would change by 1 square foot. Table 3.3-3 shows future need in 2025 for law enforcement facilities provided by the County under the Preferred Alternative, based on the adopted 1999 LOS standards and proposed LOS standards.

Table 3.3-3. Preferred Alternative Law Enforcement LOS Comparison

Facility Type	1999 Adopted LOS (per 1,000 population)	LOS in 2005 (per 1,000 population)	Proposed LOS Standard (per 1,000 population)	2025 Projected LOS (per 1,000 population)	Deficit with 1999 Standard	Deficit with Proposed Standard
Sheriff’s Office	152 square feet	152 square feet	266 square feet	224 square feet	Surplus of 16,383 square feet	9,810 square feet
Jail facility	1.8 beds	1.9 beds	1.7 beds	1.44 beds	118 beds	85 beds
Work release facility	0.19 bed	0.20 bed	0.17 bed	0.15 bed	14 beds	8 beds
Juvenile facility	0.39 bed	0.10 bed	0.084 bed	0.07 bed	105 beds	5 beds

Note: Sheriff’s office LOS and future deficit is based on unincorporated population estimated at 225,410 by 2025. Jail, work release, and juvenile facility LOS and future deficits are based on entire countywide population or 327,813. The estimated LOS and calculated need in 2025 assume construction of a new 25,000 square foot precinct facility, as identified in the CFP to occur by 2012.

Sources: Henderson Young and Company 2006; AHBL 2006

Under the Preferred Alternative, similar to Alternative 2, demand for law enforcement would increase most in those areas with the highest growth of population. The ULID #6 UGA has the highest population growth of unincorporated UGAs, with considerable growth also in the Silverdale, Central Kitsap, and Port Orchard UGAs. The sheriff’s facilities nearest these areas—the main office in Port Orchard and the central office in Silverdale—may require additional support staff or expansion of facilities.

Silverdale Sub-Area

Under the Preferred Alternative, the Silverdale sub-area would experience a population increase of 6,877 (compared to 6,973 under Alternative 2), and increased population density in downtown

Silverdale would allow for increased efficiency of providing law enforcement service. Impacts on the sheriff’s central office, which is located in Silverdale, would be similar to those under Alternative 2.

3.3.4. Parks and Recreation

Proposed LOS standards under the Preferred Alternative would be the same as those identified under Alternative 2. The Preferred Alternative would result in slightly different countywide population than Alternative 2, but would not result in changes to LOS in 2025 from those under Alternative 2. The need for regional parks, local/community parks, and open space in 2025 would each decrease by less than 1 acre from those under Alternative 2. The need for trails and shoreline access would remain the same as under Alternative 2. Table 3.3-4 summarizes LOS and facilities needs under the Preferred Alternative with both the adopted 1999 standards and the proposed standards.

Table 3.3-4. Level of Service and Facilities Needs for Parks, Open Space, and Trails under the Preferred Alternative

Facility Type (Existing County Facilities)	Adopted 1999 LOS Standard (per 1,000 population)	Proposed LOS Standard	LOS in 2005 (per 1,000 population)	Inventory through 2012 (based on 2006 Park Plan categories) ³	LOS in 2025 (per 1,000 population) ³	Facilities Needed by 2025 with 1999 Standard ³	Facilities Needed by 2025 with Proposed Standard ³
Regional Parks (749.26 acres)	6.0 acres	5.4 acres	3.1 acres	1502 acres	4.58 acres	Deficit of 464.87 acres	Deficit of 268.18 acres
Local/Community Parks (196.62 acres) ¹	1.2 acres	0.85 acre	0.8 acre	230.8 acres	0.70 acre	Deficit of 162.57 acres	Deficit of 44.56 acres
Open Space (1,298 acres)	5.9 acres	16.8 acres	4.1 acres	5284 acres	16.12 acres	Surplus of 3349.91 acres	Deficit of 1009.99 acres
Trails (34 miles)	0.065 mile	0.36 mile	0.14 mile	77.1 miles	0.24 mile	Surplus of 55.79 miles	Deficit of 14.69 miles
Shoreline Access (29,051 linear feet) ²	Not applicable	106 linear feet	119 linear feet	29,051 linear feet	89 linear feet	Not applicable	Deficit of 5697 linear feet

¹An LOS standard for local parks was adopted in 1999. However, local parks were accounted for in the community parks category in the 2006 Parks, Recreation and Open Space (POS) Plan. Therefore, the two categories were consolidated for this analysis.

²Category is included in the POS Plan

³Accounts for park and open space acquisitions anticipated to occur by 2012 and shown in the Capital Facilities Program finance plan. It should be noted that some acreage was reclassified in the POS Plan, upon which the CPF was based. The 2005 parks inventory shown in the DEIS was based on a different aggregation of parkland categories. As a result, the DEIS/FEIS and the CFP show different inventories within different parkland categories, as well as some differences in levels of service.

Source: Henderson Young Company; Kitsap County 2006 Parks, Recreation, and Open Space Plan (July 2006); AHBL, Inc.

Similar to Alternative 2, certain unincorporated areas of the county would experience greater growth than others. In particular, the ULID #6 and Port Orchard UGAs would experience the

highest growth, while the Central Kitsap and Silverdale UGAs would experience somewhat lesser growth. As with Alternative 2, increased demand for parks, trails, and recreational facilities would be greater in those areas than in other unincorporated portions of the county. As with Alternative 2, increased need for recreational facilities, operations, and maintenance staff would be commensurate with the increases in demand.

Silverdale Sub-Area

Under the Preferred Alternative, the Silverdale sub-area is targeted to accommodate 6,877 additional residents (compared to 6,972 under Alternative 2), with the same expansion of the UGA boundary as Alternative 2. There would be a proportionate increase in demand for parks and recreational facilities. The Clear Creek Park and open space land would meet some of the increased need if developed. As with Alternative 2, the 1,787 acres of existing County and non-County parks and open space in or near the Silverdale sub-area would experience increased use. As with Alternative 2, park and recreation facilities in portions of the sub-area that would experience the greatest densification, such as the Clear Creek Trail, Old Mill Park (the waterfront), Anna Smith Children's Park, Silverdale Rotary Gateway Park (skate park), and Island Lake Park, would be affected to a greater degree.

Similar to Alternative 2, the proposed new Mixed Use zone in portions of the downtown Silverdale sub-area would not have adequate open space unless provided as part of development or acquired by the County (or future city if incorporation occurs). The Mixed Use area would be somewhat larger under the Preferred Alternative than under Alternative 2. Similar to Alternative 2, Old Mill Park could experience a considerable increase in use.

3.3.5. Schools

On a countywide basis, growth under the Preferred Alternative would be similar to that under Alternative 2; however, the growth would be distributed somewhat differently. Table 3.3-5 summarizes projected capacity surpluses and deficits in 2025 based on current capacity and future enrollment under the Preferred Alternative in comparison to Alternative 2. The methodology for estimating future enrollment and capacity needs is the same as was used in the DEIS. Estimated enrollment in 2025 is district-wide, including both unincorporated and incorporated areas. The facility need, or surplus capacity where applicable, is calculated based on the existing capacity, and assumes no improvements that would increase capacity.

Table 3.3-5. Estimated Enrollment and Capacity in Affected School Districts — Preferred Alternative and Alternative 2

District	2005 Current Enrollment	Current Capacity ⁵	2025 Estimated Total Student Enrollment in District		2025 Estimated Total Capacity Deficit in District	
			Alternative 2	Preferred Alternative	Alternative 2	Preferred Alternative
North Kitsap ¹						
Elementary	NA	3,077	7,165	7,143	4,088	4,066
Secondary	NA	3,870	4,299	4,286	429	416
Total	6,834⁷	6,947	11,464	11,428	4,517	4,481
South Kitsap ²						
Elementary	NA	5,639	9,148	9,190	3,509	3,551
Secondary	NA	5,103	9,148	9,190	4,045	4,087
Total	10,688⁷	10,742	18,297	18,380	7,555	7,638
Central Kitsap ³						
Elementary	5,873	6,341	7,808	7,906	1,467	1,567
Secondary	6,274	5,491	7,991	8,092	2,500	2,601
Total	12,147⁸	11,832	15,799	15,999	3,967	4,167
Bremerton ⁴						
Elementary	2,546	3,857	2,932	2,927	Surplus of 925	Surplus of 930
Secondary	2,523	3,455	3,665	3,659	210	204
Total	5,069	7,312	6,596	6,586	Surplus of 716	Surplus of 726
County Total		34,549	52,156	52,392	15,323	15,559

¹Calculations are based on student generation rates of 0.5 for elementary schools and 0.3 for secondary schools (junior and senior high schools combined) for each housing unit (including both single-family and multifamily units).

²Calculations are based on student generation rates of 0.5 for single-family units (divided evenly among elementary and secondary schools) and 0.3 for multifamily units (divided evenly among elementary and secondary schools); the resulting rates are 0.4 per housing unit for elementary schools and 0.4 per housing unit for secondary schools, irrespective of housing type.

³Calculated enrollment increases are based on the percentage of total district population enrolled in district schools in 2003. School enrollment was equal to 17% of population, consisting of 8.5% in elementary schools and 8.7% in secondary schools, irrespective of housing type.

⁴Calculated enrollment increases are based on the percentage of total district population enrolled in district schools in 2003. School enrollment was equal to 9% of population, consisting of 4% in elementary schools, and 5% in secondary schools, irrespective of housing type.

⁵Capacity includes both permanent and interim (portable classroom) facilities.

⁶The capacity surplus or deficit in 2025 is a comparison of projected total enrollment in 2025 to current capacity. This assumes that no new capacity is added before 2025.

⁷2005 head count, not full time equivalent; data was not available for elementary and secondary enrollment.

⁸2004 total enrollment.

Source: Henderson Young and Company; and AHBL, Inc.

Based on student generation rates and the projected number of single-family and multifamily housing units for North Kitsap School District (NKSD) and South Kitsap School District (SKSD) and calculated enrollment ratios along with projected population for Bremerton School District (BSD) and Central Kitsap School District (CKSD), the total 2025 estimated capacity need for the unincorporated county would be 15,559 students, slightly higher than the capacity need for 15,323 students under Alternative 2. While countywide population growth under the Preferred

Alternative is only slightly lower than that under Alternative 2 (lower by four persons), the distribution of population and the varying student generation and enrollment rates among the districts result in higher total enrollment and higher total capacity deficits than under Alternative 2, but still less than the growth considered under Alternative 3. Under the Preferred Alternative, all school districts within Kitsap County will need to add capacity by 2025 to accommodate increased enrollment, similar to under Alternative 2. In the individual districts, enrollment and associated capacity deficits are somewhat lower in NKSD and BSD, and somewhat higher in the SKSD and CKSD, compared to Alternative 2, and in all cases less than the growth of Alternative 3. As with Alternative 2, BSD would need to add capacity for secondary but not elementary schools.

Similar to Alternative 2, under the Preferred Alternative a significant portion of population growth would occur in areas within CKSD and SKSD. However, as with Alternative 2, based on the student generation rates and the proportion of enrollment to population for the districts that did not supply generation rates, the highest level of added enrollment would occur in SKSD, followed by NKSD. In 2025, these school districts would have to accommodate 7,638 and 4,481 students, respectively, above current capacity, compared to capacity deficits of 7,555 and 4,571 under Alternative 2. Assuming that school enrollment growth is proportionate to population growth, the increase would be about 35% from cities, about 42% from unincorporated UGAs, and about 23% from rural areas, the same as under Alternative 2.

Silverdale Sub-Area

The Preferred Alternative would result in slightly lower enrollment in the Silverdale sub-area than Alternative 2. As with Alternative 2, increased capacity is not needed within the sub-area under the Preferred Alternative. Table 3.3-6 summarizes capacity, estimated total enrollment, and estimated capacity surpluses and deficits for elementary, junior high, and high schools serving Silverdale under the Preferred Alternative in 2025, and under Alternative 2 for comparison. The methodology for estimating is the same as was used in the DEIS. Enrollment in the Silverdale sub-area would be approximately 14 fewer students than under Alternative 2.

Table 3.3-6. Estimated Enrollment and Capacity in the Silverdale Sub-Area — Preferred Alternative and Alternative 2

Silverdale Sub-Area	2005 Capacity ¹	2025 Estimated Student Enrollment in Sub-Area ²		2025 Estimated Capacity Deficit Resulting from Growth in Sub-Area ³	
		Alternative 2	Preferred Alternative	Alternative 2	Preferred Alternative
Elementary	2,737	1,983	1,976	Surplus of 754	Surplus of 761
Secondary	3,559	2,029	2,022	Surplus of 1,530	Surplus of 1,537
Total	6,296	4,012	3,998	Surplus of 2,284	Surplus of 2,298

¹Capacity reflects schools that serve the Silverdale sub-area and does not account for interim facilities at these schools.

²Calculated estimated enrollment totals are based on the percentage of total population within the sub-area that was enrolled in Central Kitsap schools in 2004. Population within the sub-area was multiplied by student generation rates derived for the entire district—8.5% for elementary schools and 8.7% for secondary schools (combined junior and senior schools).

³The capacity surplus or deficit in 2025 is a comparison of projected total enrollment in 2025 to current capacity. This assumes that no new capacity is added before 2025.

Source: Henderson Young Company; and AHBL, Inc.

3.3.6. Solid Waste

Under the Preferred Alternative, the expected population increase of 56,865 in unincorporated Kitsap County would vary only slightly from that under Alternative 2. The amount of solid waste generated in 2025 would be similar to that with Alternative 2. Generation of solid waste countywide is estimated at 1,507,935 pounds (754 tons) per day of solid waste production by 2025 accounting for residential waste only, approximately 19 pounds per day less than with Alternative 2. Accounting for residential, commercial, and industrial waste, this alternative would result in a countywide total of 2,097,997 pounds (1,049 tons) per day of solid waste production by 2025, 25 pounds per day less than with Alternative 2.

If the current recycling rate were maintained, by 2025 it would result in 327,812 recycled pounds (164 tons) per day, a few pounds per day less than with Alternative 2.

Silverdale Sub-Area

Population and densities in the sub-area would be similar to that with Alternative 2. As with Alternative 2, these densities would allow for greater efficiency in solid waste collection. The population growth in the Silverdale sub-area, 6,877, would result in an increase of 31,634 pounds (16.0 tons) per day of solid waste accounting for residential waste only, or 44,013 pounds (22 tons) per day accounting for residential, commercial, and industrial waste, and 6,877 recycled pounds (3.4 tons) per day. This would be approximately 450 to 600 pounds less per day of solid waste and approximately 100 pounds less per day of recycling than under Alternative 2.

3.3.7. Wastewater/Sewer

Under the Preferred Alternative, the population capacity countywide would be similar to Alternative 2, and the employment capacity would be lower (36,000 as compared to 38,000).

Overall, demand for sanitary sewer service under the Preferred Alternative would be similar to that under Alternative 2. Similar to Alternative 2, the Preferred Alternative would focus forecasted 2025 population growth inside existing UGA boundaries. UGA boundaries would be expanded by 12.7 square miles, compared to 13.4 square miles under Alternative 2 and 19.2 square miles under Alternative 3, leading to lesser extensions of wastewater conveyance systems than Alternatives 2 and 3, but greater than Alternative 1.

Similar to Alternative 2, most growth in sanitary sewer service demand would occur in the central and southern parts of the county and within the Silverdale, Central Kitsap, Port Orchard, and ULID #6 UGAs. Under the Preferred Alternative, all new development in the UGAs would be expected to connect to existing sanitary sewers serving these areas, or to approved regional alternative wastewater technologies, with the exception of areas zoned Urban Restricted and the area designated Urban Reserve within the Central Kitsap UGA. Similar to Alternative 2, total wastewater flows for the unincorporated UGAs would increase by approximately 3.6–6.4 million gallons per day (mgd) between 2005 and 2025 (lower end represents unincorporated UGA population and upper end unincorporated UGAs plus cities; these population figures are 36,444 for unincorporated UGAs and 64,385 for cities and UGAs combined); the total increase in wastewater flows would be similar to that under Alternative 2.

Similar to Alternative 2, growth of industrial and business uses within the SKIA UGA would not add population, but could contribute additional growth in demand for wastewater service that may not be accounted for in the per capita estimate. The size of the SKIA UGA and the expected number of jobs would be the same as under Alternative 2, and as with Alternative 2, new jobs in the SKIA UGA could generate up to 1.94 mgd of additional wastewater (based on a ratio of 2,170 gpd per net acre as used in the SKIA Sub-Area Plan [2003]). While expansion of the Gorst UGA would be somewhat greater than under Alternative 2, the additional area would be designated for residential use, and the expected number of jobs within the Gorst UGA would be the same as under Alternative 2. As with Alternative 2, new employment uses within Gorst could generate up to 0.02 mgd of additional wastewater. Similar to Alternative 2, new high-demand industry, if located in the unincorporated county, could potentially result in the need to further expand treatment capacity.

Under the Preferred Alternative, similar to Alternative 2, densification could enable more efficient sewer provision. Similar to Alternative 2, taken countywide, no additional capacity above currently planned improvements would be needed to meet the wastewater treatment demand of projected population growth. Based on the current estimate of surplus equivalent residential units (ERUs) and planned improvements, the capacities of the individual wastewater systems are estimated to be adequate to accommodate the wastewater treatment demand of the projected population growth under the Preferred Alternative. However, as with Alternative 2, estimated flows from SKIA will result in significant impacts on the Karcher Creek Sewer District's treatment capacity under existing and planned improvements, and local monitoring should occur to ensure that capacity improvements are implemented ahead of demand.

Alternate methods for managing wastewater flows may be implemented as encouraged by proposed policies in the Comprehensive Plan (Chapter 2, *Land Use*) and proposed regulations, and would not use sewer district capacity, similar to under Alternative 2.

Increased demand for sewer service in rural areas would be the same as under Alternative 2 and would be served by single-user “package plant” systems or septic tanks.

Silverdale Sub-Area

Similar to Alternative 2, the Preferred Alternative would result in medium population and employment capacity within the Silverdale sub-area. Like Alternative 2, the Preferred Alternative would focus forecasted 2025 population growth inside the existing Silverdale UGA boundary and would also moderately expand the boundary, necessitating some expansion of wastewater conveyance systems. As with Alternative 2, most growth in population and employment, and corresponding sanitary sewer service demand, would occur in the southwestern and eastern parts of the sub-area. However, new, high-demand commercial or industrial uses, if located in the sub-area, could potentially result in the need to further expand treatment capacity.

As with Alternative 2, total wastewater flows would increase by approximately 0.7 mgd within the Silverdale UGA by 2025, based on an average 100 gallons per person per day. The expected increase in Central Kitsap’s wastewater treatment capacity of 4.6 mgd (which will serve not only Silverdale but also the Central Kitsap UGA that contributes 0.59 mgd) would be sufficient to meet the demand of projected population growth within the Silverdale sub-area.

As with Alternative 2, alternate methods for managing wastewater flows could be implemented within the Silverdale sub-area in areas where other sewer provision is not financially feasible. These alternate methods would not use sewer district capacity.

3.3.8. Stormwater

The Preferred Alternative would result in a moderate increase in development, impervious surface area, and associated stormwater runoff in the range of the other alternatives, dependent on basin location. Increases in impervious surface area and associated increases in stormwater runoff under the Preferred Alternative are addressed in Section 3.1.3, *Water Resources*. Similar to Alternative 2, the Preferred Alternative could potentially create a greater need for upgrades to existing drainage systems within UGA boundaries. As with Alternative 2, the greatest amount of urbanization and corresponding need for stormwater drainage facilities would occur in the central and southern parts of the county, especially within the Silverdale, Central Kitsap, Port Orchard, ULID #6, and SKIA UGAs. However, somewhat less urbanization and associated increases in stormwater runoff would occur in the Central Kitsap and Port Orchard UGAs, due to less UGA expansion, and somewhat more would occur in the Gorst UGA due to greater UGA expansion. As with all of the alternatives, new development would be required to comply with the minimum requirements of the Kitsap County *Stormwater Management Ordinance and Design Manual*.

Silverdale Sub-Area

Similar to Alternative 2, the Preferred Alternative would result in a moderate increase in developed area within the Silverdale sub-area with similar impervious surface area and stormwater drainage facility capacity needs. Similar to Alternative 2, the increased need would be largely concentrated in downtown Silverdale and could require upgrades to existing drainage systems. As with Alternative 2, commercial properties without existing stormwater controls that are redeveloped would be required to meet stormwater management standards, potentially decreasing flow rates to County drainage systems.

3.3.9. Water Supply

Similar to Alternative 2, the Preferred Alternative would accommodate a medium range of population and employment growth in UGAs. The Preferred Alternative could require a similar extension of water distribution systems within UGAs compared to Alternative 2 given a 33% increase in unincorporated UGAs versus 35% under Alternative 2.

Based on the County's Coordinated Water System Plan (CWSP) analysis of Group A water systems that serve more than 50 connections, the estimated total water rights to serve existing and future demand (about 50.3 mgd) is sufficient to meet the projected demand associated with the 2030 population growth forecast of 339,904 in the CWSP. The population forecast of 327,813 under the Preferred Alternative differs only slightly from that under Alternative 2. Similar to Alternative 2, it is less than the CWSP 2030 forecast, and the 2025 demand for water could be accommodated by existing water rights.

Similar to Alternative 2, growth of industrial and business uses within the SKIA UGA would not add population, but could contribute additional growth in demand for water service that may not be accounted for in the per capita estimate. Employment and associated demand within the SKIA UGA would be the same as under Alternative 2, and could generate up to 1.51 mgd of additional water supply demand in the SKIA UGA (based on a ratio of 100 gpd per employee as used in the SKIA Sub-Area Plan [2003]). Expansion of the Gorst UGA would be greater than under Alternative 2, but this expansion would include residential land use designations. Therefore, increased employment within the Gorst UGA would be the same as under Alternative 2 (approximately 740 employees), and, as under Alternative 2, could generate up to 0.074 mgd of additional water supply demand. Similar to Alternative 2, source capacity improvements and construction of an integrated water delivery system would be necessary to fully utilize existing water rights, as noted in the CWSP.

Silverdale Sub-Area

The Preferred Alternative would add less residential growth and greater employment growth within the Silverdale sub-area than Alternative 2. Overall, demand on the water supply in the sub-area would likely be similar to Alternative 2. Expansion of the Silverdale UGA boundary would be the same as under Alternative 2. This could lead to a need for extension of water distribution systems similar to under Alternative 2. In addition, similar to Alternative 2, most growth in

population and employment, and corresponding water service demand, would occur in the central part of the sub-area and additional population growth, and corresponding extensions of the distribution system, would occur in the southwestern and northern parts of the sub-area.

Under the Preferred Alternative, demand would be similar to that under Alternative 2. Total maximum day demand in the Silverdale UGA would increase by approximately 1 mgd by 2025, for a total demand of 3.2–3.3 mgd, as identified for Alternative 2, based on an estimated 329 gallons per household per day (gphpd). As with Alternative 2, this demand would not exceed the Silverdale Water District's water rights capacity of 4.2 mgd. It should be noted that the estimate for the sub-area assumes that the current ratio of residential to nonresidential demand remains constant, and that demand could be slightly higher because the UGA would have somewhat more jobs than under Alternative 2. Additionally, if water demand from commercial and industrial uses increases relative to residential demand, the overall demand could be higher. However, the demand estimate does not account for reductions that would occur from conservation, which may offset proportional increases in commercial and industrial demand.

3.3.10. Energy and Telecommunications

Under the Preferred Alternative, demand for natural gas, electricity, and telecommunication utilities would be similar to under Alternative 2. Under this alternative, 23,338 additional housing units and 36,000 additional jobs are anticipated in the unincorporated urban and rural areas of the county by 2025. These represent somewhat more housing units and somewhat fewer jobs than Alternative 2. Similar to Alternative 2, new growth would be concentrated within minimally expanded UGA boundaries. Growth in rural areas would be the same as under Alternative 2. Similar to Alternative 2, increased densities and mixed use areas could allow for greater efficiency in service in the unincorporated UGAs, for example in mixed use and higher density nodes in the Silverdale, Central Kitsap, and East and West Bremerton UGAs as well as Port Orchard UGA. However, the Central Kitsap UGA would experience densification to a lesser extent than under Alternative 2.

The areas would require cable coverage based on Kitsap County's master ordinance and would be somewhat smaller than under Alternative 2, due to somewhat less UGA expansion.

Under the Preferred Alternative, the Comprehensive Plan would include a policy to encourage broadband infrastructure to be installed in all new residential subdivisions, economic development projects, and state highway improvements.

Silverdale Sub-Area

Under the Preferred Alternative, the Silverdale sub-area would expect an additional 2,901 housing units and 7,700 jobs. This represents approximately 30 fewer housing and approximately 100 more jobs than under Alternative 2. Similar to Alternative 2, the growth would intensify demand for natural gas, electricity, and telecommunications. Puget Sound Energy's (PSE's) planned extension of the Silverdale transmission line to its Valley Junction facility could be needed sooner than under Alternative 1.

3.3.11. Libraries

The Preferred Alternative would be similar to Alternative 2 in terms of overall population growth in the unincorporated County. Similar to Alternative 2, the most pronounced population growth would occur within the Kingston, Silverdale, Central Kitsap, Port Orchard, and ULID #6 UGAs; accordingly, libraries serving those areas would experience the greatest increases in use and associated effects on LOS. Specifically, the Kitsap regional libraries in Kingston, Silverdale, and Port Orchard would be subject to these impacts. However, with less UGA expansion along Mile Hill Drive in the Port Orchard UGA, the Manchester library may be less affected than under Alternative 2. Impacts in rural areas would be the same as under Alternative 2.

As with Alternative 2, circulation per capita, which is used to gauge LOS for libraries, since there are no adopted standards, would remain considerably higher than the state level. With nearly the same countywide population as Alternative 2, per capita circulation in 2025 would be 7.71, the same as under Alternative 2.² This compares to the Washington State average of 3.18. For comparison, library systems within the state serving a similar population size have per capita circulation rates ranging from 3.08 (Yakima Valley Regional Library) to 12.28 (Whatcom County Library System).

Silverdale Sub-Area

Similar to Alternative 2, under the Preferred Alternative, the Kitsap Regional Library in Silverdale would experience increased use and somewhat decreased service levels; this increase would be slightly less than under Alternative 2 due to slightly lower population growth in Silverdale (6,877 in new population through 2025, compared to 6,973 under Alternative 2). The Silverdale Library is one of the smaller facilities in the Kitsap Regional Library System and would therefore likely require expansion; alternatively, another facility may need to be added to better serve the Silverdale community. Under the Preferred Alternative, service levels would still be considerably above the state average.

² Per capita circulation is based on a total countywide population in 2025 of 327,813 under the Preferred Alternative and 2005 circulation from Kitsap Regional Library (2,527,865). Circulation includes books, audio, video, and periodical subscriptions that are available to the public for borrowing. Does not include electronic materials such as databases, ebooks, etc.; circulation per capita is a measure of total materials in circulation divided by the population of the service area

3.4. Mitigation Measures

Three types of mitigation measures were considered in the DEIS: incorporated plan features (“self mitigating” features of the alternatives, for example, mixed use development), applicable regulations and commitments, and other potential mitigation measures.

The Preferred Alternative incorporates the “Incorporated Plan Features” described for Alternative 2 in the DEIS, for example, mixed use development, reasonable measures more compact development, and relatively smaller UGA expansions.

Under any alternative, including the Preferred Alternative, applicable regulations and commitments will apply, such as current County Code provisions. The DEIS should be referenced for a list of these measures, except see FEIS Section 3.2.6, *Transportation*, for updated mitigation measures for this topic.

Sections 1.7–1.9 of Chapter 1, *Summary*, illustrate how the Preferred Alternative compares with the other alternatives. Further, the chapter updates some of the DEIS “Other Potential Mitigation Measures” and describes how the Preferred Alternative incorporates several of these.