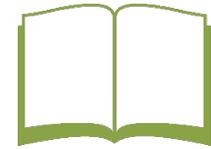


Chapter 1. Summary



This Chapter summarizes elements of the Kitsap County 2016 Comprehensive Plan Update, including the purpose of the proposal and alternatives, compares and contrasts the impacts of the alternatives, and summarizes proposed mitigation measures to reduce impacts.

This Chapter is the first of a series of chapters contained in the Final Supplemental Environmental Impact Statement (Final SEIS) that are intended to provide a summary environmental review of the proposal and alternatives:

- **Chapter 1 Summary:** Summary of proposal, impacts, and mitigation measures contained in Chapters 2 and 3.
- **Chapter 2 Alternatives:** Comprehensive description of the proposal and alternatives including highlights of the proposed growth, policy, and code changes associated with the Alternatives.
- **Chapter 3 Preferred Alternative Evaluation:** Evaluates, at a programmatic level, the potential impacts of development that may occur under the Preferred Alternative. Addresses general or cumulative impacts on natural or constructed resources related to potential increased growth that could result from the Preferred Alternative.
- **Chapter 4 Reclassification Requests Resolution:** A programmatic review of the reclassification requests to change land use and zoning designations.
- **Chapter 5 Clarifications and Corrections:** A summary of the clarifications and corrections to the Draft SEIS based on responses to comments.
- **Chapter 6 Responses to Comments:** Responses to comments on the Draft SEIS with tables of responses and marked comment letters.
- **Chapter 7 Acronyms, Abbreviations, and References:** A list of documents and personal communication cited in the Final SEIS.
- **Appendices:** Technical information supporting the Final SEIS.

Detailed analysis of the proposal and range of alternatives is in the Draft SEIS. This Final SEIS provides responses to comments on the Draft SEIS and analyzes a Preferred Alternative in the range of the Draft SEIS Alternatives. This Final SEIS completes the Draft SEIS and both documents should be considered together.

1.1. Purpose of Proposed Action

The County is updating its Comprehensive Plan consistent with the Growth Management Act (GMA) (RCW 36.70A), as part of the required 8-year review and evaluation. The Comprehensive

Plan addresses a 20-year planning period and must demonstrate an ability to accommodate future growth targets adopted in the Countywide Planning Policies (CPPs). Based on the Kitsap County CPPs, the County is planning for growth targets of 77,071 new people and 46,647 new jobs countywide between 2012 and 2036.

Through the Comprehensive Plan Update, the County is: reestablishing its vision; addressing growth through 2036; updating its inventory of natural and built environment conditions; streamlining and setting goals and policies; updating its land use plan; amending zoning, critical area, and other development regulations; and aligning its Capital Facilities Plan to address Kitsap County's future. The Comprehensive Plan will in turn guide land use permitting, capital investment programs, and budget and operational resources.

The Comprehensive Plan Update 2016 proposal and above objectives are tested with four alternatives:

- **Alternative 1 No Action:** Pre-update Comprehensive Plan as of September 2015.
- **Alternative 2 Whole Community:** reflects Guiding Principles and GMA Directives.
- **Alternative 3 All Inclusive:** most changes to the land use plan; all reclassification requests; reflects GMA requirements.
- **Preferred Alternative:** reflects Guiding Principles, GMA directives, some reclassification requests, and responses to public input.

These alternatives are summarized below and further detailed in Chapter 2.

1.2. State Environmental Policy Act Process

SEPA requires government officials to consider the environmental consequences of actions they are about to take and to consider better or less damaging ways to accomplish those proposed actions. They must consider whether the proposed action will have a probable significant adverse environmental impact on elements of the natural and built environment.

This SEIS provides a programmatic analysis of the Comprehensive Plan Update 2016. The adoption of comprehensive plans or other long-range planning activities is classified by SEPA as a non-project action (i.e., actions which are different or broader than a single site-specific project, such as plans, policies, and programs (WAC 197-11-774)). An EIS or SEIS for a non-project proposal does not require site-specific analyses; instead, the SEIS discusses impacts and alternatives appropriate to the scope of the non-project proposal and to the level of planning for the proposal (WAC 197-11-442).

1.3. Public Involvement

Kitsap County developed an extensive public participation plan; "Let's Hear Kitsap" which was adopted by Resolution in August 2014. The plan developed an early and extensive holistic approach to outreach including traditional face-to-face efforts, traditional media, and social media elements.

One part of this public participation plan included development of the Comprehensive Plan Update website with public engagement opportunities and information, located at:

<http://compplan.kitsapgov.com/Pages/home.aspx>. Open House information, public meetings,

educational outreach efforts as well as documented comment summaries and additional public participation information reports are available on the site. Public engagement opportunities have included:

- **Draft SEIS Public Comments.** A 30-day comment period was established with the issuance of the Draft SEIS.
- **Draft Plan meetings.** Early Open Houses September 2014 kicked off the public outreach efforts. After this dozens of smaller meetings were held between staff and citizen groups, interest groups and other civic and educational groups. In November 2015 were designed to share the Draft 2016 Comprehensive Plan Update and Draft SEIS and hear feedback from the public. In April 2016, staff hosted an additional Open House allow residents an informal setting to ask questions on Comprehensive Plan Update documents.
- **Public hearings.** As part of the adoption process for the updated Plan, the Kitsap County Planning Commission and Board of County Commissioners (BOCC) have conducted public hearings on the Preferred Alternative and Land Use Reclassification Requests as well as the overall Comprehensive Plan. Please see section 1.1.1. Public Review Opportunities for more information

1.4. Proposed Action, Alternatives, and Objectives

The County is updating its Comprehensive Plan consistent with the Growth Management Act (GMA) (RCW 36.70A), as part of the required 8-year review and evaluation. The County's 2016 Comprehensive Plan Update is also intended to achieve consistency with the Puget Sound Regional Council's (PSRC) VISION 2040, countywide planning policies (CPPs), and local community needs.

Through the Comprehensive Plan Update, the County is reestablishing its vision; addressing growth targets of 77,071 new people and 46,647 new jobs countywide between 2012 and 2036; updating its inventory of natural and built environment conditions; streamlining and setting goals and policies; updating its land use plan; amending zoning, critical areas and other development regulations; and aligning its Capital Facilities Plan to address Kitsap County's future.

1.4.1. Objectives

SEPA requires a statement of objectives against which the alternatives can be tested. The Board of County Commissioners (BOCC) has developed the following Guiding Principles for the Comprehensive Plan Update (Kitsap County, 2014), and these are considered objectives of this Supplemental Environmental Impact Statement (SEIS).

1. Create a usable, results-oriented plan.
2. Utilize an integrated, interdisciplinary team approach.
3. Avoid urban growth area (UGA) expansion to the extent feasible.
4. Respond to new population trends in innovative ways.
5. Support vibrant waterfront communities, with emphasis on Silverdale, Kingston, and Manchester.

6. Illustrate likely outcomes of proposed goals and projects.
7. Communication: include new groups in outreach and provide information in a graphically pleasing, simple, informative method.

Additional objectives of this SEIS include:

8. Respond to GMA goals and requirements:
 - o Changes made by the State Legislature
 - o Relevant court cases
 - o PSRC's Vision 2040 Policies
 - o Countywide Planning Policies including growth targets
9. Evaluate and refine the Comprehensive Plan vision to reflect the aspirations of Kitsap County communities to the year 2036.
10. Amend Comprehensive Plan Land Use Map designations that direct zoning regulations to accommodate growth targets and to meet community objectives for management of growth.
11. Revise the Comprehensive Plan to extend its planning horizon from 2025 to 2036.
12. Refine and streamline policies on population and employment growth, land use, housing, capital facilities, utilities, transportation, economic development, parks, natural environment, and rural and resource land use for the unincorporated areas of Kitsap County.
13. Review and evaluate subarea and community plan goals and policies, integrating public input and making consistency edits with the Comprehensive Plan as appropriate.
 - o UGA Plans: Silverdale, Kingston*
 - o Limited Area of More Intensive Rural Development (LAMIRD) Plans: Suquamish, Keyport, Manchester
 - o Community Plan: Illahee

*The Gorst Subarea Plan is not updated as it was recently prepared in 2013. The Poulsbo UGA Plan is anticipated to be updated in 2017 as part of a collaborative update between the County and the City.
14. Review and revise as necessary the County's Critical Areas Ordinance considering best available science.
15. Ensure efficient provision of and adequately available public services and capital facilities that serve existing and new development in urban areas.

1.4.2. Proposed Action and Alternatives

The Comprehensive Plan Update 2016 proposal and above objectives are tested with four alternatives:

Alternative 1 No Action: Alternative 1 would maintain the pre-update Comprehensive Plan with no land use plan, policy, or development regulation changes; it is a required alternative under the State Environmental Policy Act (SEPA).

Alternative 2 Whole Community: Alternative 2 directs the 20-year growth targets into compact UGA boundaries emphasizing mixed uses and higher densities in centers and corridors. Alternative 2 makes UGA adjustments in the Bremerton UGA – expansions in West Bremerton and reductions in East Bremerton, for more efficient public services delivery. The Port Orchard UGA is also reduced. A small (<1%) expansion of Silverdale UGA is included in Alternative 2. Some private reclassification requests related to employment are included. All together Alternative 2 results in a 4% net reduction of UGA lands. Alternative 2 also updates the Comprehensive Plan and regulations based on GMA requirements and BOCC Guiding Principles described in Sections 1.4.1 and 2.2.2.

Alternative 3 All Inclusive: Alternative 3 considers adjustments to the land use plan and several UGAs to address 20-year growth targets. All private reclassification requests would be included. Areas of UGA expansion are considered in Kingston and Silverdale UGAs. Boundary reductions are considered in the Port Orchard UGA. Central Kitsap and Bremerton UGA boundaries would be expanded in some locations and reduced in others for a net increase. The net result of Alternative 3 is a 4% increase in UGA lands. Last, the Comprehensive Plan and development regulations would be updated under Alternative 3, based on GMA requirements.

The **Preferred Alternative** is similar to Alternative 2 and accommodates 20-year growth targets into smaller UGA boundaries emphasizing mixed uses and higher densities in centers and corridors. The Silverdale and Port Orchard UGAs are reduced. A small (7%) expansion of the Kingston UGA is included in the Preferred Alternative (75 acres of 1,145 acres) though less in area than Alternative 3 (total 1,212 acres). Some private reclassification requests are included. All together the Preferred Alternative results in a 1% net reduction of UGA lands. The Preferred Alternative also updates the Comprehensive Plan and regulations based on GMA requirements and BOCC Guiding Principles.

The Alternatives have similar growth levels, though the pattern would be different as described above. The County is studying a growth range of 75,000 to 79,000 additional residents between 2012 and 2036, as well as 50,000 to 55,000 new jobs. Under all alternatives, nearly 80% of the new population would locate in cities and UGAs and over 90% of new jobs would likewise locate in cities and UGAs.

These alternatives are detailed in Final SEIS Chapter 2.

1.5. Major Issues, Significant Areas of Controversy and Uncertainty, and Issues to be Resolved

The key environmental issues and options facing decision makers are:

- the location of growth;
- sizing and composition of UGAs, given growth expected over the 2012-2036 period; and
- the level of capital improvements needed to support land use and growth levels.

All alternatives would allow increases in population and employment. Long-term local impacts resulting from any alternative include conversion of vacant land and redevelopment of developed property to new uses; cumulative impacts on earth, water resources, and habitat through increased

impervious areas; increased transportation congestion; and increased demand for infrastructure and facilities.

With the final plan adoption, the following issues are being resolved with the legislative process:

- refinement of a Preferred Alternative following public comment;
- preparation of associated land use plan and development regulations;
- selection and refinement of capital facility projects supporting land use, including transportation; and
- refinement of goals, objectives, and policies as well as implementing regulations.

1.6. Summary of Impacts and Mitigation Measures

1.6.1. Summary of Impacts and Mitigation Measures

This section contains an abbreviated version of the Draft SEIS and Final SEIS Chapter 3, which contains the full text of the Affected Environment, Significant Impacts, and Mitigation Measures sections. Accordingly, readers are encouraged to review the more comprehensive discussion of issues in the Draft SEIS and Final SEIS Chapter 3 to formulate the most accurate impression of impacts associated with the alternatives.

1.6.2. Natural Environment

1.6.2.1. Earth

How did we analyze Earth?

Impacts on soil disturbance and geologic hazard areas were analyzed under each alternative by evaluating available studies and maps of soils and geologic hazards in relation to each alternative's growth and land use pattern.

What impacts did we identify?

Soil: Densification in pre-update UGA boundaries would result in loss of soil productivity through the expansion of impervious surfaces, modification of soil structure, and accidental or chronic contamination.

Geologic hazard areas: All alternatives would permit development that is at risk of some degree of catastrophic geologic hazards, including landslides, earthquakes, and tsunamis.

- All pre-update UGA boundaries contain areas of high and moderate geologic hazard.
- All existing UGAs contain areas of hydric soils that could be subject to liquefaction during seismic events.
- Mapped fault lines occur within existing unincorporated UGA boundaries trending from Bainbridge Island through Central Kitsap and along the southwest border of Silverdale.

What does it mean? What is different between the alternatives?

Soil disturbance: Nearly all development removes or modifies plant cover, particularly tree and forest cover, except in some cases of redevelopment. All alternatives would result in reduced plant cover and increased impervious surfaces (roof and pavements, primarily) in concert with the construction of approved development projects. Erosion risk increases with the loss of soil organic matter.

- Alternative 1 contemplates total UGA boundaries that are intermediate in acreage to Alternatives 2 and 3.
- Alternative 2 has slightly smaller UGA boundaries and encourages vertical construction, resulting in a slightly reduced level of soil disturbance and impervious surface area impacts.
- Alternative 3 has slightly larger UGA boundaries than Alternative 1, resulting in a slightly increased level of soil disturbance and impervious surface area impacts.
- Impacts of the Preferred Alternative would be generally similar to those of the other alternatives, with slightly smaller UGA boundaries than Alternatives 1 and 3, though greater than Alternative 2.

Geologic hazard areas: All alternatives would permit development that is at risk of some degree of catastrophic geologic hazards. Provisions in the County CAO apply avoidance and minimization measures to individual developments where pre-update mapping is incomplete, and require site-specific analysis by a licensed engineer or geologist.

- Alternative 1 contemplates total UGA boundaries that are intermediate in acreage to Alternatives 2 and 3. All UGAs would be subject to geologic hazards.
- All UGAs under Alternative 2 contain areas of high geologic hazard, areas of moderate geologic hazard, and areas of hydric soils that could be subject to liquefaction during seismic events and mapped fault lines. Bremerton (West) UGA expansion would include additional mapped moderate hazard and hydric soils susceptible to geologic hazards. Central Kitsap and East Bremerton UGAs would be reduced slightly where some steep slopes are present. The Port Orchard UGA reduction would reduce areas mapped with high and moderate hazards and hydric soils. In Silverdale, where about one-sixth of the UGA is in a mapped geologic hazard area, further densification could expose additional population to earthquake risks arising from soil liquefaction.
- Impacts would be generally similar to those of Alternative 1 and 2. All the UGAs under Alternative 3 contain areas of high geologic hazard, areas of moderate geologic hazard, and areas of hydric soils that could be subject to liquefaction during seismic events and mapped fault lines. Unlike Alternatives 1 and 2, the Kingston UGA would include an expansion into an area with slope instability and a zoning change to Urban Restricted. The Central Kitsap area would be increased along Barker Creek which has moderate hazards and hydric soils, but the areas in Tracyton would be reduced in areas of moderate hazard. In Silverdale, UGA expansion would include additional mapped and un-mapped geologic hazard areas in the Chico area. In Silverdale, where about one-sixth of the UGA is in a mapped geologic hazard area, further densification could expose additional population to earthquake risks arising from soil liquefaction. The Port Orchard UGA reduction would be less in extent than Alternative 2, but would also reduce areas mapped with high and moderate hazards and hydric soils.
- All the UGAs under the Preferred Alternative contain areas of high geologic hazard, areas of moderate geologic hazard, and areas of hydric soils that could be subject to liquefaction during

seismic events and mapped fault lines. The Kingston UGA would include an expansion into an areas with moderate hazards and wetlands to the west with a zoning change to Urban Restricted; along the NE 3rd Street and Union Avenue NE an area with moderate geologic hazard would be changed from Urban Medium to Urban Restricted zoning similar to Alternatives 2 and 3. The Preferred Alternative would implement a smaller Silverdale UGA than Draft SEIS alternatives. In the Silverdale, UGA areas of expansion would include additional mapped and unmapped geologic hazard areas; likewise areas of UGA retraction would include some moderate hazard areas. In Silverdale, further densification could expose additional population to earthquake risks arising from soil liquefaction. The Preferred Alternative favors vertical development in the Silverdale UGA, including significantly more multi-family dwelling construction than the other alternatives. Vertical construction would tend to reduce the impervious surface construction compared with low-rise development of similar capacity under the No Action alternative. From that standpoint, vertical construction would be a stormwater runoff mitigation strategy in densified areas. Similar to Alternatives 2 and 3, the Port Orchard UGA reduction would reduce areas mapped with high and moderate hazards and hydric soils.

What are some solutions or mitigation for the impacts?

Plan policies, applicable regulations, and adopted codes such as Critical Areas Regulations, International Building Code, and others will be used to mitigate Earth impacts.

Reducing UGA expansions in Moderate and High Geologic Hazard areas would reduce the potential number of additional people exposed to risk of damage due to geologic hazards.

With mitigation, what is the ultimate outcome?

All alternatives would result in increased urbanization in the county, with a corresponding increase in impervious surfaces and changes in hydrology. One potential such consequence would be an increase in erosion and sedimentation. Sediment reaching lakes, wetlands, and streams could have adverse impacts on the nutrient balances and other water quality indicators in these receiving waters and on the anadromous fish and other aquatic organisms living there. A greater population could also be at risk from the adverse impacts of damage to buildings and infrastructure during and following an earthquake, landslide, or tsunami.

1.6.2.2. Air Quality

How did we analyze Air Quality?

In Kitsap County, typical air pollution sources include construction, commercial and retail businesses, light industry, residential wood-burning, and vehicular traffic. Pollutants analyzed in this evaluation include criteria and toxic air pollutants and greenhouse gases (GHGs).

The analysis focused on a review of existing air pollution sources in Kitsap County and an evaluation of potential air quality impacts that would result from the three Draft SEIS alternatives. Population, employment, and land-use estimates were developed for each alternative and GHG emissions were estimated using Washington Department of Ecology's "SEPA GHG Calculation Tool." Based on growth levels, the Preferred Alternative is similar to the range of alternatives studied in the Draft SEIS and is estimated to have similar results.

Vehicle miles traveled (VMT) estimates for each alternative were also used to compare differences in vehicular air emissions between the three alternatives. VMT estimates took into consideration an emphasis on creating denser communities that are more conducive to alternative modes of transportation.

What impacts did we identify?

Kitsap County is expected to experience commercial and residential growth. All growth will require construction, leading to temporary increases in dust, air pollution emissions from heavy equipment and odors in the vicinity of the construction activities.

Commercial growth is expected to lead to increases in emissions from stationary and mechanical equipment. Large stationary pollutant-emitting equipment must be registered and permitted with the Puget Sound Clean Air Agency (PSCAA); therefore, it is unlikely that new commercial operations would cause significant air quality issues.

Residential growth is expected to increase air emissions generated by natural gas, fuel oil and propane combustion used for heating, as well as particulate matter produced by wood burning. Increasing use of energy efficient furnaces and EPA certified woodstoves will reduce these impacts.

Every alternative is expected to increase VMT; however, the increase in VMT is expected to be offset by increasing fuel efficiency and decreasing tailpipe emissions, so vehicular air emissions are expected to decrease even as VMT increase.

What does it mean? What is different between the alternatives?

All studied alternatives are expected to result in very similar changes in GHG and criteria and toxic air pollutant emissions. Excluding vehicular air emissions, Alternative 1 is forecast to have the lowest GHG emissions of the three alternatives and Alternative 3 is forecast to have the highest GHG emissions. However, VMT is expected to have the greatest impact on emissions in the County. Due to the forecast decrease in emissions from vehicular travel resulting from improved fuel efficiency, total GHG emissions are expected to decrease in Kitsap County in all studied alternative scenarios. All studied alternatives would result in similar changes in air emissions associated with new construction, residential and commercial growth. Compared with total gross GHG emissions for Washington State, the impacts of the three alternatives are not considered to be significant.

Residential growth under the Preferred Alternative is similar to growth associated with Alternative 1, and, like Alternative 1, has a larger proportion of multifamily residential units than Alternative 2 and 3. GHG emissions associated with residential growth would be similar to Alternative 1. Employment growth under the Preferred Alternative is similar to Alternative 3, resulting in GHG emissions associated with employment uses similar to forecast GHG emissions under Alternative 3. Overall population growth in Kitsap County would be slightly less than under Alternative 3, resulting in forecast GHG emissions slightly lower than those forecast for Alternative 3.

Alternatives would each generate vehicle miles traveled with Alternative 1 the least and Alternative 2 the most with Alternative 3 in the range. Vehicle miles traveled for the Preferred Alternative are less than Alternative 2 and greater than Alternative 3. The Preferred Alternative results are in the range of the Draft SEIS alternatives.

What are some solutions or mitigation for the impacts?

The Kitsap County Comprehensive plan includes many goals and policies that would reduce air pollutant emissions. These policies include:

- Planning development to encourage transit and high-occupancy vehicle travel
- Promoting pedestrian paths and greenbelt links
- Designing pedestrian- and bicycle-safe transportation systems to maximize opportunities for safe non-motorized travel

The County can also mitigate the impacts of stationary-source air pollution emissions by continuing to enforce construction-related dust control requirements, and encouraging use of energy-efficient furnaces and certified woodstoves.

Draft SEIS Appendix D lists a variety of mitigation measures that could reduce GHG emissions caused by transportation facilities, building construction, space heating, and electricity usage (Washington State Department of Ecology, 2008). The table lists potential GHG reduction measures and indicates where the emission reductions might occur. Kitsap County could require development applicants to consider the reduction measures shown in Appendices for their projects. Kitsap County could incorporate potential GHG reduction measures through goals, policies, or regulations.

With mitigation, what is the ultimate outcome?

No significant unavoidable adverse impacts on regional or local air quality are anticipated. Temporary, localized dust and odor impacts could occur during construction activities. The regulations and mitigation measures described in Draft SEIS Section 3.1.2.3 are adequate to mitigate any adverse impacts anticipated to occur as a result of Kitsap County growth.

1.6.2.3. *Water Resources (Surface and Ground)*

How did we analyze Water Resources?

The SEIS analysis considers the current conditions and land use-related stresses associated with surface and groundwater resources in Kitsap County. The SEIS evaluates anticipated impacts from each alternative based on known relationships between urban development and both surface and groundwater conditions. Results from an analysis of impervious surface coverage under each of the alternatives informed where changes in development intensity would occur among alternatives.



Carpenter Lake 2010, Kitsap County DCD

What impacts did we identify?

Reduced vegetation coverage and increased impervious surface coverage impacts both surface and groundwater resources. The impacts associated with these changes include changes to stream channel form, reduction in floodplain connectivity, altered wetland hydrographs, and reduced groundwater recharge.

Impacts to water quality result from a variety of land uses. In general, higher intensity land uses have more potential to deliver nutrients, sediment, and contaminants to surface and groundwater resources. However, where existing developed lands are redeveloped, water quality may be improved through the implementation of improved stormwater treatment approaches.

The majority of the population within Kitsap County relies on groundwater resources for potable water. As the population increases, the demand on groundwater resources will increase. Potential reductions in groundwater recharge, compounded by increased demand for groundwater resources could reduce natural groundwater discharge, which would affect streamflows. Reductions in the groundwater table could increase the potential for salinity intrusion.

What does it mean? What is different between the alternatives?

The primary differences among alternatives stem from how and where population growth and development will occur within the county.

Alternative 2 concentrates growth within existing developed areas more than the other studied alternatives. The Preferred Alternative also concentrates growth and reduces UGA boundaries though less than Alternative 2. This approach in Alternative 2 and the Preferred Alternative is expected to result in the lowest overall impervious surface coverage compared to Alternative 3 and a similar level of impervious area as Alternative 1 though in a smaller footprint, and it would maintain more areas of existing undeveloped or low-intensity lands at lower densities. By focusing development, Alternative 2 and the Preferred Alternative would also be expected to support more redevelopment of existing uses compared to the other alternatives, and therefore, stormwater management and water quality could be expected to generally improve. Increased development density in West Bremerton near Kitsap Lake under Alternatives 2 and 3 may contribute to continued water quality degradation there. Alternative 1 and the Preferred Alternative do not extend the West Bremerton UGA into undeveloped lands along Kitsap Lake.

Alternative 3 expands the total area within UGA boundaries compared to the other alternatives. Alternative 3 also results in the greatest impervious surface coverage throughout the county.

Alternatives 2 and 3 and the Preferred Alternative encourage use of alternative transportation methods through the Silverdale Subarea Plan, which in turn would be expected to improve water quality.

Water resources will inevitably be affected by continued population growth in Kitsap County. Alternative 2 followed by the Preferred Alternative, combined with mitigation through county, state, and federal policies and regulations, will generally concentrate growth in less sensitive areas and support redevelopment of existing developed areas. This approach will generally help to maintain the integrity of surface and groundwater resources throughout the county.

What are some solutions or mitigation for the impacts?

In addition to comprehensive plan policies that emphasize conservation of water resources, federal, state, and local regulations address aquatic resources and associated buffer areas. County critical areas regulations protect lands associated with streams, wetlands, frequently flooded areas, and critical aquifer recharge areas. County shoreline regulations also apply to land uses within shoreline jurisdiction.

Stormwater impacts are mitigated by county stormwater drainage regulations, as well as by the county's National Pollutant Discharge Elimination System Phase II permit standards.

State and federal standards apply to any in-water work.

With mitigation, what is the ultimate outcome?

Each alternative will support a population increase of nearly 25% compared to 2012 population levels, which will create an increased draw on groundwater resources in Kitsap County.

Impervious surface area would increase to a similar extent under all alternatives. Alternative 2 would have the least impacts of the three alternatives as it would reduce UGA boundaries collectively by 4%, including in areas with surface water resources. The Preferred Alternative would reduce UGA boundaries by 1%. Alternative 3 would increase impacts in the Silverdale/Central Kitsap UGA boundaries along Barker Creek and reduce them in the Port Orchard UGA area for a total net increase in UGA boundaries of 4%.

The County's stormwater management requirements will minimize the impacts from new impervious surfaces; however, some unavoidable impacts to both surface and ground water resources, such as increasing peak flows, channel incision, and reduced groundwater recharge, are unavoidable as new impervious surfaces are created and vegetation is cleared for new development.

1.6.2.4. *Plants and Animals*

How did we analyze Plants and Animals?

The SEIS reviewed current conditions using aerial maps, Kitsap County environmental maps, Washington Department of Fish and Wildlife Priority Habitats and Species data, Washington State Department of Ecology Puget Sound Watershed Characterization Project maps, and prior reports including the 2012 Kitsap County UGA Sizing and Composition Remand SEIS. The SEIS referenced these sources to analyze potential impacts to plants and animals in light of general trends within an urbanized landscape, such as vegetation loss and habitat patch fragmentation. Available information and maps were reviewed to analyze the potential impact of each alternative on the existing plant and animal habitat functions within the county.

What impacts did we identify?

Population growth within Kitsap County will increase the developed area and development density. Impacts associated with these changes include habitat loss, habitat degradation, reduction in native vegetation patch sizes, and a reduction of habitat corridor connections.

Additionally, pollutant loads typically increase within an urban environment, which can adversely impact native species.

What does it mean? What is different between the alternatives?

Habitat loss, degradation, and fragmentation would occur under all studied alternatives. Alternative 1 maintains pre-update zoning and UGA boundaries. The Preferred Alternative reduces UGA lands by 1%, which would protect existing open space areas relative to Alternatives 1 and 3. Under Alternative 2, a net 4% UGA reduction would minimize impacts plants and animals by protecting existing open space areas, relative to Alternatives 1 and 3 and the Preferred Alternative. Alternatives 2 and 3 would each reduce the Port Orchard UGA by 904 and 741 acres, respectively. The Preferred Alternative would reduce the Port Orchard UGA by 734 acres similar to Alternative 2; it would also

reduce the Silverdale UGA by 61 acres with reduced impacts on mapped streams and hydric soils whereas Alternatives 2 and 3 studied alternatives assumed 25 to 705 acre increases respectively. Although Alternative 3 includes areas of UGA reduction, Alternative 3 would result in a net 4% increase in UGA boundaries across the county. Areas of UGA expansion under Alternative 3 would allow for urban development in existing undeveloped corridors.

Plant and animal resources will be impacted by population growth in Kitsap County, but reducing development pressure on largely intact natural systems will minimize impacts to the extent feasible. Both plant and animal species diversity is expected to decline, particularly on the fringes within the adopted UGA boundaries.

What are some solutions or mitigation for the impacts?

Local, state, and federal regulations help to maintain the functions and values of highly productive ecosystems, including streams, riparian areas, wetlands, and associated buffers. Protections are also required for state and federally listed plant and animal species. Mitigation measures to reduce impacts to these habitats and species may include revegetation plans, introduction of special habitat features such as snags and large woody debris, and limited work windows for construction.

With mitigation, what is the ultimate outcome?

The projected population increase for Kitsap County and associated changes to the landscape will generate unavoidable adverse impacts to native plant communities and wildlife. Focusing high density development in urban cores or UGAs that exclude high functioning habitat patches minimizes impacts to plant and animal resources, but it does not prevent landscape-scale impacts. In particular, increased impervious surface area within a basin alters stream hydrology and water quality, negatively impacting aquatic species, including listed salmonids. Wildlife is consequently displaced as native vegetation corridors are degraded by selective clearing, colonized by invasive plant species, reduced in size, and fragmented by development.

1.6.3. Built Environment: Land Use and Transportation

1.6.3.1. Land and Shoreline Use

How did we analyze Land and Shoreline Use?

The EIS reviewed existing land use and zoning patterns in unincorporated Kitsap County, including differences in uses and land use character in different areas of the county. Each alternative was evaluated based on potential changes to the existing land use pattern, the potential to cause conversion of existing uses to uses of a different character, the potential to cause a change in activity levels, and the potential to introduce new uses that would not be compatible with existing development. The EIS also evaluated potential changes to land uses in shoreline areas.

What impacts did we identify?

All studied alternatives would result in increased population and employment, which would result in new development. Areas experiencing new development or redevelopment would see an increase in local activity. General impacts associated with additional population and employment growth would include conversion of undeveloped land for new residential, commercial, and/or industrial uses; increased land use intensity in currently developed areas that receive additional growth; and possible compatibility issues between newer, more intense development, and existing, lower-intensity development. Land use compatibility issues would be most likely to arise on the fringes of urban areas and also potentially in infill areas.



Kingstons Downtown, Kitsap County 2014

What does it mean? What is different between the alternatives?

Alternative 2 would reduce the extent of UGAs overall (-4%) and result in the most compact development pattern of the studied alternatives. The Preferred Alternative would result in a net reduction of UGAs (-1%) compared to Alternative 1 No Action, and would have the next most compact development pattern compared to Alternative 2. Alternative 3 would result in a net increase in UGA acreage (+4%) and would result in a less compact development pattern than all studied alternatives. Alternative 2 and the Preferred Alternative would result in greater increases in activity level in the urban areas targeted for growth with intensification in the Silverdale RGC and commercial corridors in several UGAs such as Central Kitsap, but Alternative 3 would result in more conversion of rural land to urban uses due to UGA expansions. Alternative 1 would not alter existing UGAs or make significant changes to the existing land use pattern, but it would provide the least UGA land capacity to accommodate projected UGA targets.

What are some solutions or mitigation for the impacts?

Alternative 2 and the Preferred Alternative includes mitigation in the form of reduced UGA footprints, which creates a more compact development pattern and limits conversion of rural uses to urban uses. Land use compatibility impacts are mitigated by existing Kitsap County development regulations, critical areas regulations, and the County's Shoreline Master Program. The EIS also recommends that the updated Silverdale Regional Center Plan include design standards to address land use incompatibilities resulting from infill development.

With mitigation, what is the ultimate outcome?

Under all the alternatives, future growth will result in development of vacant land and redevelopment of some existing uses, leading to an increase in urbanization over time.

1.6.3.2. Relationship to Plans and Policies

How did we analyze Plans and Policies?

The SEIS identified pertinent plans, policies, and regulations that guide development in Kitsap County. These include GMA, SEPA, Puget Sound Regional Council's VISION 2040, the Kitsap County Countywide Planning Policies, the Kitsap County Shoreline Master Program, and others. The SEIS evaluates the alternatives for consistency with each of these laws or plans.

What impacts did we identify?

The alternatives are generally consistent with adopted plans and policies, though some alternatives are more aligned with the goals of particular plans and laws than others.

What does it mean? What is different between the alternatives?

Alternative 1 would maintain UGA sizes, with some below targets and some above.

Alternative 2 is most closely aligned with the goals of GMA because it appropriately sizes UGAs and fosters a more compact development pattern to reduce sprawl.

Alternatives 2 and 3 and the Preferred Alternative most closely balance UGA land supply with adopted growth targets and include plan amendments that are necessary under GMA requirements.

Alternatives 2 and 3 include adjustments to UGA boundaries to remove areas where provision of urban services would be problematic. Following a review of sewer costs, the Preferred Alternative retains the UGAs in East Bremerton and Central Kitsap UGAs but reduces densities in the Enetai area with Urban Restricted zoning. This is in alignment with the goals of GMA, which require adequate provision of public services in urban areas.

What are some solutions or mitigation for the impacts?

- To provide additional population capacity under Alternative 2, the preferred alternative could either reduce the acreage removed from UGAs or increase zoning density to provide additional capacity.
- Alternative 3 provides the greatest amount of population and employment growth capacity, but it has the largest UGAs. To create a more compact development pattern, targeted UGA reductions could be made and zoning density increased in the most urbanized UGAs, such as Silverdale.
- The Preferred Alternative would size UGAs in consideration of city capacities, and increase zoning densities in Silverdale, Central Kitsap, and Port Orchard.
- The County will confirm the adequacy of public urban services in UGA expansion areas with its Capital Facilities Plan before formally amending UGA boundaries.

With mitigation, what is the ultimate outcome?

With implementation of mitigation measures, no significant unavoidable adverse impacts are anticipated regarding future plan consistency under any of the alternatives.

1.6.3.3. Population, Housing and Employment

How did we analyze Population, Housing, and Employment?

The SEIS reviews available data and studies to identify current conditions of population, housing, employment, and demographics from the US Census, State Office of Financial Management, and Employment Security Department as well as other regional and county sources. The land capacity of each alternative is compared to the growth targets of the Countywide Planning Policies.

What impacts did we identify?

All three alternatives assume an increase in population and employment over the planning period, but differ in their assumed intensity and location of development. Impacts of population and employment growth within the county from the present through 2036 likely include an increase in demand for infrastructure and public services, as well as the loss of open space within the UGAs as areas convert from semi-developed to developed. All alternatives would add about 23% to the county's population. About 79% of the new population would occur in cities and UGAs, while about 21% would occur in rural areas. Alternatives 2 and 3 would generally meet the growth target, but Alternative 1 would be below the target. Over 90% of employment growth would occur in UGAs under all alternatives.

What does it mean? What is different between the alternatives?

Under Alternative 1, countywide population growth would be 2% below CPP growth targets and countywide employment growth would be 8% above CPP growth targets. The population to employment ratio would be 2.54, lower than the CPP goal of 2.65. Under Alternative 1, the unincorporated UGAs would be below CPP population targets by 8% and above CPP employment targets by 12%. Generally the County has planned for growth within 5% above or below the target, as the 20-year projections and capacities are not precise. Thus, Alternative 1 would be generally in balance with CPP targets for population and high for employment.

Countywide population growth under Alternative 2 would be within 1% of CPP growth targets, while countywide employment growth would be 18% above CPP growth targets, but would occur primarily within smaller UGA boundaries, with a denser pattern. The population to employment ratio would be 2.47, the lowest of the three alternatives and below the CPP goal of 2.65. Under Alternative 2, the unincorporated UGAs would be below population targets by 7% and above employment targets by about 17%. However, because Silverdale's employment growth is essentially occurring in present UGA boundaries (with a less than 1% UGA change for industrial lands), growth would largely occur in the existing urban footprint of the Silverdale RGC. If the Silverdale employment growth is excluded, the percentage above employment targets across the County would drop to 3%.

Under Alternative 3, countywide population growth would generally be within 2% of CPP growth targets. Countywide employment growth would be 12% above CPP growth targets. The population to employment ratio would be 2.52, lower than the CPP goal of 2.65. Under Alternative 3, the unincorporated UGAs would be below target on population by 3% and at target on employment.

Countywide population growth under the Preferred Alternative would be within 2% of CPP growth targets, while countywide employment growth would be 12% above CPP growth targets, but would occur primarily within smaller UGA boundaries, with a denser pattern. The population to employment ratio would be 2.52 compared with the CPP goal of 2.65.

Under the Preferred Alternative, the unincorporated UGAs would be below population targets by 5% and at employment targets.

What are some solutions or mitigation for the impacts?

Alternative 2 and the Preferred Alternative reduce the acreage of the unincorporated UGAs countywide, allowing a greater density on buildable lands. This would reduce the consumption of land for urban development and provide a more efficient development pattern for urban services.

Alternatives 2 and 3 and the Preferred Alternative update the Land Use, Housing, and Economic Development Elements to better guide population, housing, and employment growth over the new 2016-2036 planning period.

The zoning code provides zones with allowable housing and employment uses and requirements for adequate facilities and appropriate site design.

The following measures are recommended for UGAs that are oversized under any alternative:

- For UGAs that show capacities greater than the population or employment targets, UGA boundaries should be decreased, where possible. Areas should be removed that are more costly to provide public services or that have significant concentrations of critical areas.
- Alternatively or in combination with UGA reductions, a different mix of densities or land uses may assist the achievement of population and employment allocations, provided the densities are still urban and can be served with public services.
- The County could work with KRCC and cities to reallocate population from undersized UGAs to oversized ones. This would shift population to UGAs that have existing potential to accommodate population. Until such time as the CPPs are amended, the population could be “banked.”

The following measures are recommended for undersized UGAs under any alternative:

- The County could consider measures to increase development capacity through increasing density, such as applying incentives (e.g., density bonuses) and/or upzones (e.g., greater densities).
- Where the County has already applied reasonable measures (e.g. upzones or other incentives), the County could consider limited UGA expansions.
- The County could work with KRCC and cities to reallocate population from undersized UGAs to oversized ones. This would shift population to UGAs that have potential to accommodate population. Until such time as the CPPs are amended, the population could be “banked.”

With mitigation, what is the ultimate outcome?

Population, employment, and housing will increase under any of the alternatives reviewed, to similar degrees. This population, housing, and employment growth will cause indirect impacts on the natural and built environment and the demand for public services. Each of these topics is addressed in the appropriate sections of this SEIS. Alternative 2, followed by the Preferred Alternative, is projected to have less impacts from growth on the natural environment and public services since it focus growth in smaller more compact UGAs compared to Alternatives 1 or 3.

1.6.3.4. Transportation

How did we analyze Transportation?

We developed a travel demand forecasting model that estimated the automobile and transit trips generated by 2036 buildout of each of the future land use alternatives, and evaluated how well the roadway system can accommodate that demand by comparing the projected future traffic volumes to the capacities of the highways, arterials, and collector streets that carry the traffic. For each street, the capacity is based upon its multimodal characteristics, including the number of lanes, traffic control, and whether or not it has transit, pedestrian, and bicycle facilities. The County has adopted roadway volume-to-capacity (V/C) thresholds of 0.79 to 0.89 (depending on rural versus urban respectively) that indicate the highest level of traffic that a roadway can carry before it is considered deficient. If at least 85% of the county roadway system operates at or better than those thresholds, it meets the County's transportation concurrency standard, meaning the transportation infrastructure and services are considered adequate to accommodate future planned land use. Infrastructure needs for non-motorized bicycle and pedestrian travel are identified in the *Kitsap County Non-Motorized Facilities Plan*. The County's road capacity calculation approach provides credit to roadways with non-motorized facilities that separate pedestrian and bicycle travel from vehicle traffic. Therefore, implementation of non-motorized improvements can potentially benefit multiple travel modes under the County's long-range transportation analysis procedures.

What impacts did we identify?

- With buildout of the land use alternatives, the level of deficiency by 2036 is projected to be 5.0% of county roadway lane-miles under Alternative 1 (No Action), 6.6% of county roadway lane-miles under Alternative 2, 5.9% of county roadway lane-miles under Alternative 3, and 5.6% of county roadway lane-miles under the Preferred Alternative. None of the alternatives are expected to result in a percentage of deficient lane-miles of roadway that exceeds the County concurrency standard of 15%.
- With buildout of the land use alternatives by 2036, the percentages of state highways projected to exceed standards are 54% under Alternative 1 (No Action), 59% under Alternatives 2 and 3, and 61% under the Preferred Alternative. The County has ongoing coordination with the Washington State Department of Transportation (WSDOT) and cities to identify and fund improvements to state highways.
- Population and employment growth are also expected to increase ferry, transit, walking, biking, rail, and airport demand under the three future land use alternatives. In addition to the County Comprehensive Plan, infrastructure and services needed to address long-range transportation needs are identified in Kitsap Transit's *Transit Development Plan*, the Port of Bremerton's *Airport Master Plan*, and the County's *Non-Motorized Facility Plan*.

What does it mean? What is different between the alternatives?

Alternative 1 (No Action) reflects the lowest level of projected growth, and as such, is expected to result in the lowest growth in vehicle trips and roadway deficiencies. Alternative 2 reflects the highest level of employment growth, and a population growth between Alternatives 1 and 3. It has the highest level of projected vehicle trips (about 4% higher than Alternative 3) and the highest projected vehicle-miles-traveled (about 9% higher than Alternative 3). In turn, there are slight differences in projected future county roadway and state highway deficiencies that are lowest under Alternative 1 and highest under Alternative 2. Vehicle trips and vehicle miles traveled for the

Preferred Alternative are expected to be slightly lower than Alternative 2 and slightly higher than Alternatives 1 and 3. Daily transit trips for the Preferred Alternative are projected to be lower than Alternative 1, and higher than Alternatives 2 and 3. All alternatives have higher projected increases in transit and rideshare trips, relative to lower increases in vehicle-miles-traveled, reflecting a more efficient use of the transportation system. Vehicle trips are expected to be shorter on average with all alternatives. Increased demand for other modes, including ferry and non-motorized modes, are expected to be similar between alternatives.

What are some solutions or mitigation for the impacts?

- Roadway improvements have been identified for 16 roadway segments under Alternative 1 (No Action), 19 segments under Alternative 2, 18 segments under Alternative 3, and 17 segments under the Preferred Alternative.
- Additional strategies to maintain balance between transportation level of service, available financing and land use include reallocation of revenues and expenditures, measures to generate additional revenue, changes to roadway operational standards or the concurrency measurement system, or policies to intensify or redirect growth.
- Programmatic measures include commute trip reduction strategies, transit compatible design, and access management.

With mitigation, what is the ultimate outcome?

Implementation of any of the growth alternatives would result in increased traffic within the county, with the lowest increase occurring under Alternative 1 (No Action), and the greatest increase occurring under Alternative 2, and Alternative 3 and the Preferred Alternative in-between. Although the effects of additional vehicles on traffic congestion can be improved to varying degrees through the recommended transportation improvements, the actual increase in traffic is considered a significant unavoidable adverse impact.

1.6.4. Built Environment: Public Services and Capital Facilities

1.6.4.1. Public Buildings

How did we analyze Public Buildings?

Kitsap County's public buildings include administrative offices, courtrooms, juvenile justice, maintenance facilities, and community centers. The amount of facility space per capita, today and under the three alternatives, was analyzed for each facility type based on the Draft Capital Facilities Plan Update.



County Administration Building, 2015

What impacts did we identify?

Under all alternatives, growth in population and employment could result in increased demand for government facilities. This would require adaptive management of current spaces or expansions and improvements to current or new facilities. Alternatively, the County may adjust its Level of Service (LOS) standards. Under all alternatives, if annexation or incorporation of portions of the

unincorporated UGAs occurs, some functions and responsibilities of the County could be assumed by cities.

What does it mean? What is different between the alternatives?

All alternatives increase population to similar levels, though Alternative 3 and the Preferred Alternative would increase population to a greater degree than Alternatives 1 or 2. Under Alternatives 2, 3, and the Preferred Alternative, the level of demand for services at administrative buildings, courthouse, maintenance facilities, and community centers would spatially differ, with increased intensity planned in central county such as in Silverdale and less in south county with the reduction of the Port Orchard UGA.

What are some solutions or mitigation for the impacts?

Policies in Chapter 11 of the Comprehensive Plan establish LOS standards for community centers, County buildings, and courts, and require the County to apply these standards to its annual budget and Capital Improvement Program. Alternatives 2 and 3 and the Preferred Alternative update the Capital Facilities Plan for the 20-year planning period, 2016-2036. The County may consider altering its LOS standards, applying lean administration, conducting needs assessments, and constructing capital facilities.

With mitigation, what is the ultimate outcome?

Demand for public services will increase under all studied alternatives. With advanced planning, no significant unavoidable adverse impacts on public buildings would be anticipated within the range of alternatives reviewed.

1.6.4.2. Fire Protection

How did we analyze Fire Protection?

Kitsap County is served by Central Kitsap Fire and Rescue (CKFR), Fire District 18/Poulsbo Fire Department, North Kitsap Fire and Rescue (NKFR), and South Kitsap Fire and Rescue (SKFR).

Future growth estimates for each alternative are based on a land capacity analysis for the period 2016-2036 as described in Chapter 2 and the Kitsap County Buildable Lands Report. Existing and alternative LOS measures were considered in relation to planned growth.

What impacts did we identify?

New development and population growth will result in an increased demand for fire protection.

What does it mean? What is different between the alternatives?

The density of population would increase across all alternatives particularly in central Kitsap County, and calls for service would increase. Alternative 2 and the Preferred Alternative would have the greatest increase in intensity of population and jobs in Silverdale in particular. Alternatives 2, 3, and the Preferred Alternative would see a slight lessening of population density with UGA changes in the Port Orchard UGA.

What are some solutions or mitigation for the impacts?

- Alternatives 2, 3, and the Preferred Alternative update the CFP for the new planning period and establish updated LOS standards in consultation with fire districts. Planned investments in fire suppression and emergency medical facilities and equipment are included in the CFP.
- Alternative 2 and the Preferred Alternative focus growth and concentrate densities, allowing for improved efficiency of service, such as potentially lower response times.
- Other measures could include fire impact mitigation fees and levies to ensure services and facilities can address demands of growth.

With mitigation, what is the ultimate outcome?

Future population growth and development will continue to increase the need for fire protection/EMS services under any studied alternative. With mitigation, significant, unavoidable adverse impacts would not be anticipated.

1.6.4.3. Law Enforcement

How did we analyze Law Enforcement?

The Kitsap County Sheriff Department serves the population of unincorporated Kitsap County. Law enforcement facilities include sheriff administration and operations offices, sheriff's office storage space, and sheriff's office corrections jail facility. The County's existing and proposed LOS standards, designed to serve the current and future population, were examined

What impacts did we identify?

New development and population growth would result in an increased demand for law enforcement and correctional facilities under all alternatives at similar levels given similar population estimates. Increased densities would allow for greater efficiency of service in urban areas. A more compact development pattern allows for smaller patrol areas and faster response times. A greater tax base would also allow for increased funding. If urban areas of the county are annexed into adjoining cities or incorporated as new cities, patrol-related functions may be assumed by the cities while joint use of some facilities (e.g., jails) could be retained at the county level.

What does it mean? What is different between the alternatives?

The level of growth is similar across all alternatives. Greater growth is anticipated in central county and less in south county under Alternatives 2, 3, and the Preferred Alternative. The Silverdale Regional Growth Center (RGC) would be a focus of growth in Alternative 2 and the Preferred Alternative in particular. Generally a more compact footprint of UGA territory under Alternative 2 would allow for more efficient services, though access and congestion could be a concern in selected areas. Under Alternatives 2 and 3 and the Preferred Alternative, the Port Orchard UGA would be decreased. Other UGA changes proposed under Alternative 3 are more incremental such as in Kingston, Bremerton, and Central Kitsap. The Preferred Alternative would decrease the Silverdale UGA in addition to reducing the Port Orchard UGA. Small UGA additions would be made to Kingston and Central Kitsap UGAs. Moderate additions to the West Bremerton UGA are also made, though that would be primarily for city watershed annexation purposes.

What are some solutions or mitigation for the impacts?

- The Comprehensive Plan Capital Facilities Chapter defines LOS standards for Sheriff's Office and correctional facilities. Future needs and costs can be determined based on these standards.
- Alternatives 2, 3, and the Preferred Alternative update the Capital Facilities Plan and associated LOS standards to reflect more recent trends.
- The Comprehensive Plan focuses growth and concentrates densities, allowing for improved efficiency of service. Creating a more compact development pattern allows for smaller patrol areas and faster response times.
- The Sheriff's Office and facilities are maintained primarily through the County's general fund, which is funded through sales and property tax revenues. The increased tax base associated with increased population and development would increase tax revenues and bonding potential, providing additional funding for law enforcement services and facilities.
- The County may adjust its LOS standards, conduct needs assessments, and construct facilities, as appropriate.

With mitigation, what is the ultimate outcome?

Future population growth and development will continue to increase the need for law enforcement services and facilities under all alternatives. With mitigation, significant, unavoidable adverse impacts would not be anticipated.

1.6.4.4. Parks and Recreation

How did we analyze Parks and Recreation?

A variety of public agencies and private organizations provide parks and recreation facilities within Kitsap County, including Kitsap County, Washington State Parks, Washington Department of Natural Resources (DNR), National Park Service designated Kitsap Peninsula Water Trail, schools, and cities.

The Level of Service (LOS) analysis for parks is based on the 2012 Kitsap County Parks, Recreation & Open Space (PROS) Plan that was adopted in March of 2012. The County has LOS standards for six types of facilities: natural resource areas, regional parks, heritage parks, community parks, shoreline access, and trails. LOS standards are generally in acres or miles of facility per capita.

What impacts did we identify?

All alternatives would result in an increased demand for park and recreation facilities or enhancement of existing facilities. As population growth occurs in cities, Tribal areas, and unincorporated county lands, demand for parks, open space, and recreational facilities will increase.

What does it mean? What is different between the alternatives?

The level of demand for park acreage and facilities is similar countywide across alternatives. However, the pattern of growth shows increased densification in the Silverdale RGC in Alternatives 2, 3, and the Preferred Alternative compared to Alternative 1. There would be lesser growth in the Port Orchard UGA and less demand in that location in both Alternatives 2 and 3 than Alternative 1.

Under Alternative 2 and the Preferred Alternative, the level of growth is nearly the same as Alternatives 1 and 3 but contained in a smaller urban footprint (-4% for Alternative 2 and -1% for the Preferred Alternative); thus parks and open space amenities for recreation and respite may be more important to attracting growth to UGAs and meeting the needs of the community.

On the other hand, there would be a net increase in UGAs in Kingston, Silverdale, Central Kitsap, and Bremerton (West) UGAs in Alternative 3 where more distributed park resources would be needed.

What are some solutions or mitigation for the impacts?

- The 2012 PROS Plan sets forth strategies, goals, and objectives for development and management of parks, open space, and recreational facilities for a 5-year planning period.
- Alternatives 2, 3, and the Preferred Alternative update the CFP and include additional LOS objectives and guiding principles for facilities, acquisition, and healthy communities.
- Impact fees are applied to all new housing developments. Fees could be reassessed to reflect increased costs of land for park acquisition, or increased impacts within areas of significant intensification such as the Silverdale UGA.
- The County could reassess its LOS standards as detailed in the CFP Update.
- Partnerships, entrepreneurial activities, user fees, and a regularly updated capital investment strategy could help balance demand and services for parks and recreation.

With mitigation, what is the ultimate outcome?

With the increase in population and urbanization of the County under any of the alternatives, there would be greater demand for parks, recreational facilities, and programs. To avoid impacts, the County could work with other agencies and regularly monitor population growth, service levels, and demand to bring supply and demand into balance; this can be accomplished with regular CFP updates as appropriate. Neighborhoods surrounding existing, new, or expanded parks would experience more activity in the form of vehicles and pedestrians. Costs for acquiring parks will rise with the increased demand for urban land.

1.6.4.5. Schools

How did we analyze Schools?

This section evaluates the four school districts that serve unincorporated Kitsap County: North Kitsap (NKSD), Central Kitsap (CKSD), South Kitsap (SKSD), and Bremerton (BSD). The student population ratios of districts were applied to the projected population under each alternative.

What impacts did we identify?

The alternatives will affect school districts by increasing residential development, and consequently the number of students enrolled within the four school districts serving the unincorporated county. Based on where population growth would occur and the demographic of the population within the unincorporated county, each school district will be affected differently. Impacts will generally be higher at schools serving the more urbanized area located within UGAs.

What does it mean? What is different between the alternatives?

Typically Alternative 3 would produce greater growth in most districts with the exception of Central Kitsap where Alternative 1 has slightly more growth. There would be an intensification of population in existing UGA boundaries under Alternative 2 and the Preferred Alternative, which may result in particular capacity needs at existing schools, such as in the central county. There may be less but still substantial growth in south county with the reduction of the Port Orchard UGA under Alternatives 2 and 3. Generally, the number of projected households under the Preferred Alternative would be in the range of Alternatives 1 and 3, and closer to Alternative 3.

What are some solutions or mitigation for the impacts?

- Alternatives 2 and 3 and the Preferred Alternative amend the CFP to address the new 2016-2036 planning period.
- The County's regular review of the CFP in coordination with the school districts should allow for ongoing long-range planning for educational services.
- School districts are required to plan for growth over time by regularly updating their six-year capital improvement program.
- Adopted school impact mitigation fees would be collected for new residential development.

With mitigation, what is the ultimate outcome?

The demand for school services and facilities will increase as new development occurs and the number of families with school-aged children increases. Land developed or set aside for school facilities would be generally unavailable for other uses. With mitigation, significant, unavoidable adverse impacts would not be anticipated.

1.6.4.6. *Solid Waste*

How did we analyze Solid Waste?

The SEIS considers adopted solid waste plans and refuse and recycling rates in relation to the expected population.

What impacts did we identify?

The additional population capacity accommodated by the alternatives would increase demand for additional solid waste capacity. The degree of need would vary among the alternatives based on population and the capacity of existing solid waste facilities. The County, through contracts with private haulers, will continue to be able to provide solid waste management for an increased population regardless of the alternative ultimately chosen. The capital facilities planning conducted within this Comprehensive Plan Update will allow the County to better anticipate funding needs and sources for future solid waste disposal facilities.

The County would have adequate time to plan for landfill capacity for solid waste generation under all alternatives, and the County's current contracted landfill location is expected to have sufficient capacity through 2036.

What does it mean? What is different between the alternatives?

The existing level of service for solid waste is calculated based on estimated countywide population and the average per capita generation rates for solid waste and recycling. The rates used in this table were taken from Kitsap County's Solid Waste and Hazardous Waste Management Plan. If the generation rates from this plan are carried forward in 2021 and 2036, the tons of solid waste and recycling generated per year would be lowest with Alternative 1 and highest with Alternative 3. The Preferred Alternative has levels similar to Alternative 3.

What are some solutions or mitigation for the impacts?

- Focusing growth in existing UGAs and cities where solid waste services already exist would reduce impacts related to providing curbside pickup for added population and promote more curbside customers. There would also be less need for additional solid waste handling facilities. Alternative 2 and the Preferred Alternative would have the most compact UGAs of the alternatives.
- Coordination and monitoring at transfer facilities and other facilities would be ongoing to ensure adequate solid waste capacity. Service levels for curbside collection as outlined in the CFP would continue or improve to encourage recycling.
- The County would continue to coordinate solid waste planning across the county.

With mitigation, what is the ultimate outcome?

Future population growth and development would continue to increase the amount of solid waste generated in the county under any alternative. With Solid Waste Management Plans, regularly updated as appropriate, no significant unavoidable adverse impacts are anticipated.

1.6.4.7. Wastewater

How did we analyze Wastewater?

The SEIS considers population growth and demand for services in relation to the functional plans of sewer service providers who predominantly serve UGAs.

What impacts did we identify?

Under any of the UGA alternatives, additional sanitary sewer service would be necessary to serve increased demand. Existing treatment plants would handle increased wastewater volumes generated by residential growth, transitioning septic systems and increased pollutant loads generated by new commercial and industrial development. Conveyance system extensions would be necessary to provide sanitary sewer service to developing areas within UGAs. Several capacity improvements to existing pump stations and sewer mains would also be needed to ensure the existing system could handle additional flows from development within the UGAs.

What does it mean? What is different between the alternatives?

Cost estimates for Kitsap County Sewer Utility capital sewer projects were compared under each alternative, and updated in April 2016 for the County's updated project cost estimates in several UGAs as well as based on the Preferred Alternative UGA boundaries. Costs for Draft SEIS Alternatives would be highest under Alternative 3 (\$354.0 million), lower under Alternative 1

(\$338.4 million), and lowest under Alternative 2 (\$333.0 million). The Preferred Alternative has costs similar to and slightly higher than Alternative 1 (\$341.3 million).

What are some solutions or mitigation for the impacts?

- The CFP Update proposes improvements associated with studied alternatives.
- The Comprehensive Plan Capital Facilities Element (CFE) and CFP establish LOS for County-owned and non-County-owned sanitary sewer systems and require agencies to “determine what capital improvements are needed in order to achieve and maintain the standards for existing and future populations.” This element is updated with Alternatives 2 and 3 and the Preferred Alternative.
- Encouraging development within existing urban centers and reduced unincorporated UGAs, as promoted under Alternative 2 and the Preferred Alternative, will minimize impacts on service providers to extend their services to cover larger areas. Alternative 3 provides for lesser expansions in some locations and greater expansions in others which may increase the demand for service locationally and reduce it in others.
- Pursuant to Chapter 58.17.110 RCW, local governments must review plat applications to ensure that adequate provisions are made for a variety of public facilities, including “sanitary wastes.”
- Pursuant to Chapter 16.12 KCC, the County engineer and County health officer provide their respective recommendations as to the adequacy of proposed sewage disposal systems. The hearing examiner then determines whether a proposal includes appropriate provisions for “sanitary wastes” and other public and private facilities and improvements.
- Capital Plans of wastewater service providers are required to proactively plan for future systems to meet growth projections.

With mitigation, what is the ultimate outcome?

With advance planning, implementation and update of capital facility plans no less than every six years, as well as review of development permits in terms of system impacts, no significant unavoidable adverse wastewater impacts would be anticipated within the range of alternatives reviewed.

1.6.4.8. Stormwater

How did we analyze Stormwater?

The pattern of growth and potential to increase impervious surfaces was considered.

What impacts did we identify?

Under all alternatives, additional stormwater drainage systems would be needed to handle increased stormwater runoff resulting from new development and added impervious surfaces such as roads and driveways. Improved water quality and water management may occur in redevelopment areas.

What does it mean? What is different between the alternatives?

Alternative 1 would likely result in increased levels of urbanization, adding impervious surfaces, and the need for stormwater drainage and treatment facilities. Alternative 2 would result in slightly higher levels of urbanization than in Alternative 1 but within smaller UGA boundaries. The amount of development and impervious surface would be similar to Alternative 1. Alternative would result in an increase in UGA boundaries and associated development, impervious surface area, and associated stormwater runoff, and could potentially create a greater need for upgrades to existing drainage systems within UGA boundaries compared to Alternatives 1 and 2.

The Preferred Alternative reduces countywide UGA acres overall by 1% over Alternative 1. This would result in a lower level of urbanization, less impervious surface area, and less associated stormwater runoff than under Alternative 1.

What are some solutions or mitigation for the impacts?

Measures to reduce impacts of these alternatives to natural systems and public/private property will be achieved through planning policies, goals, and permit conditions.

- The Land Use and Environment elements of the Comprehensive Plan include goals for mitigating erosion, sedimentation, and stormwater runoff problems related to land clearing, grading, and development.
- Alternatives 2 and 3 and the Preferred Alternative update the County's Capital Facility Plan, incorporating a 6-year CIP for stormwater projects. This planning process helps to ensure that the County maintains compliance with the stormwater LOS.
- The County has adopted regulations to protect against stormwater impacts of new development requiring all new development to meet specific performance standards before receiving approval.
- The 2013-2018 NPDES Phase II Permit implements actions required by Pollution Control Hearings Board, including low impact development (LID) implementation. The County is required to meet the requirements of the final Phase II municipal separate stormwater system NPDES permit, revised by Ecology in 2016.
- Kitsap County Stormwater Management Program manages stormwater in accordance with its stormwater design standards (KCC 12.04.020) and applicable NPDES permits.

With mitigation, what is the ultimate outcome?

With advanced planning, review of development applications, and implementation of mitigation measures, there should not be unavoidable adverse impacts from any of the studied alternatives. The level of unavoidable adverse impacts depends on the degree that potential mitigation measures are implemented. Even if one or more of the mitigation measures is implemented, there could still be some changes to existing stormwater runoff patterns. This could alter flow conditions downstream of the planning areas and could potentially aggravate existing downstream flooding and erosion problems.

1.6.4.9. Water

How did we analyze Water?

The analyses considered the growth in population by major water district and considered functional plans referenced in the CFP Update.

What impacts did we identify?

Demand for water service would increase under any of the alternatives. See Draft SEIS Exhibit 3.3-58 and Final SEIS Exhibit 3.3-36. Water demand associated with residential, commercial, and industrial land uses would be concentrated within UGAs under all alternatives.

What does it mean? What is different between the alternatives?

Alternative 1 would create new demand for water across service provider districts, and would require additional water distribution infrastructure.

Alternative 2 would concentrate growth within the smallest UGA boundaries, thereby limiting the amount of growth that could occur in 2036 in several districts. In other areas the population would increase based on the approximate distribution of growth targets in the Countywide Planning Policies and the capacity of the Alternative in UGAs. Alternative 2 would require water distribution infrastructure to serve this development.

Compared to the other alternatives, Alternative 3 would have a net addition to UGAs in several locations, and reductions elsewhere. Alternative 3 would place greater growth in the Silverdale district than other alternatives. Other effects are similar to but greater in magnitude than Alternative 2.

Demand for water service would increase under the Preferred Alternative. Water demand associated with residential, commercial, and industrial land uses would be concentrated within UGAs, but would have the second smallest UGA footprint, and would likewise focus growth in centers and corridors including the Silverdale RGC. Capital projects to serve the Preferred Alternative are noted in the CFP under separate cover.

What are some solutions or mitigation for the impacts?

- Greater concentrations of population and employment growth within the UGAs, particularly in Alternative 2 and the Preferred Alternative, would minimize impacts on service providers by lessening the need for expansion of distribution systems.
- Capital Facilities policies promote coordination with non-County facility providers, such as cities and special purpose districts, to support and be consistent with the future land use patterns identified in the County's Comprehensive Plan.
- Pursuant to RCW 58.17.110, local authorities must review plat applications to see that adequate provisions are made for a variety of public facilities, including potable water. Pursuant to KCC Chapter 16.12, the County engineer and County health officer provide their respective recommendations as to the adequacy of the proposed water supply systems.
- Water supply facilities for new development and public water system expansions must be designed to meet, at a minimum, the fire flow levels specified in WAC 246-293-640, the Uniform

Fire Code, and KCC Title 14. In addition, utilities must develop their capital improvement program for meeting these fire flow objectives in consultation with the appropriate local fire authorities.

- In accordance with state and local regulations, the Kitsap Health District performs assessments of proposed and existing water supplies for adequacy and potability.
- Pursuant to Chapter 70.116 RCW and Chapter 246-293 WAC, the KPUD coordinates with local water purveyors to evaluate and determine critical water supply service areas and undertake orderly and efficient public water system planning. Continued conservation and leak detection programs of the WATERPAK would help to reduce demand. The Coordinated Water System Plan for Kitsap County promotes regional water supply and transmission improvements.

With mitigation, what is the ultimate outcome?

All alternatives would increase demand for water services. However, with coordination of capital and land use planning, significant unavoidable adverse impacts are not anticipated.

1.6.4.10. Energy and Telecommunications

How did we analyze Energy and Telecommunications?

Population and employment growth under each alternative was analyzed to determine likely increases in demand for natural gas, electricity, and telecommunications in 2036.

What impacts did we identify?

For each private utility (gas, electricity, and telecommunications), increases in population and employment under all alternatives will create increases in demand. Funding for the facilities and services to serve this increased demand would come through user fees.

What does it mean? What is different between the alternatives?

Alternative 1 has the lowest countywide population growth and would thus result in slightly lower demand for energy and telecommunications services. Alternative 3 has the highest level of countywide population growth and thus results in higher demand for energy and telecommunications. Alternative 2 has slightly more population growth than Alternative 1 and less than Alternative 3, and thus has impacts on demand slightly higher than Alternative 1 and lower than Alternative 3.

The Preferred Alternative has slightly more countywide population growth than Alternatives 1 and 2, and slightly less than Alternative 3; demand for energy and telecommunications services would thus be slightly higher than under Alternatives 1 and 2 and lower than under Alternative 3.

What are some solutions or mitigation for the impacts?

All alternatives concentrate growth, which allows for improved efficiency for natural gas, electricity, and telecommunications facilities.

With mitigation, what is the ultimate outcome?

Population and employment growth under all alternatives will increase demands for energy and telecommunications, which will require additional facilities.

1.6.4.11. *Library*

How did we analyze Libraries?

The SEIS considered the library facility space per capita under each of the alternatives.

What impacts did we identify?

Under all studied Alternatives, population growth would lead to less library facility space per capita than today, unless new facilities are built. Facility space in 2036 assuming the new Kingston Library, but not the unfunded Silverdale library, would be 0.28 square feet per capita, compared to 0.35 square feet per capita in 2015.

What does it mean? What is different between the alternatives?

There are no significant differences between alternatives at a countywide scale. There would be greater growth in Silverdale UGA and less in Port Orchard UGA under Alternatives 2 and 3 and the Preferred Alternative which may alter the pattern of demand for facilities.

What are some solutions or mitigation for the impacts?

The Kitsap Regional Library is currently raising funds to replace the Silverdale library with a larger facility.

With mitigation, what is the ultimate outcome?

Population increases are likely to increase demand for library services, particularly in areas with the highest growth, but significant, unavoidable, adverse impacts are not anticipated.