

1 Summary

1.1 Purpose of the Proposal

The proposed action is the 10-year update of the City of Kirkland's GMA Comprehensive Plan in accordance with the requirements of the Growth Management Act (GMA). In addition, the proposal includes related Zoning Code amendments and map changes, and consideration of Private Amendment Requests in two areas of the City,

In general, the proposed update is intended to revise and refine 1995 GMA Comprehensive Plan policy direction, rather than significantly depart from the original Plan vision.

1.2 SEPA Procedures and Public Involvement

1.2.1 Purpose of the EIS

The purpose of this Environmental Impact Statement (EIS) is to assist the public and agency decision makers in considering future decisions on comprehensive plan goals, policies, and development regulations for the City of Kirkland as part of the 10-year Comprehensive Plan Update. These broad decisions will provide direction and support for more specific actions by the City, such as capital improvements and implementing regulations.

This analysis also provides specific review of the potential development envelope within the Totem Center Study Area based upon the land use goals and policies addressed in the Totem Lake Center Neighborhood Plan, as implemented through Totem Center zoning code amendments (in progress). This DEIS provides a more detailed analysis for the Totem Center Study Area in compliance with the provisions of RCW 43.21C.229. This provision allows for a categorical exemption of environmental review for new residential or mixed-use development if the development is within an urban growth area and the current density and intensity of use is called for in the goals and policies in the City's comprehensive plan, provided the plan was previously subjected to environmental analysis through an EIS. This analysis will provide the necessary environmental analysis to apply the categorical exemption under RCW 43.21C.229.

This EIS addresses three levels of analysis for the proposal. These are: (1) a broad Citywide analysis of potential impacts associated with proposed amendments to the Comprehensive Plan to incorporate the 2022 growth targets and other related amendments; (2) a more detailed analysis of the Totem Center Study Area for 2022; and (3) an analysis of potential

impacts associated with two private amendment study areas, including transportation impacts on the 2022 network system.

1.2.2 Programmatic Analysis

This Draft EIS provides qualitative and quantitative analysis of environmental impacts as appropriate to the general nature of the Comprehensive Plan amendment proposals. The adoption of comprehensive plans or other long-range planning activities is classified by SEPA as a non-project (i.e. programmatic) action. A non-project action is defined as an action that is broader than a single site-specific project, and involves decisions on policies, plans or programs. An EIS for a non-project proposal does not require site-specific analyses; instead the EIS 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).

1.2.3 Phased Review

SEPA encourages the use of phased environmental review to focus on issues that are ready for decision, and to exclude from consideration issues already decided or not yet ready for decision-making [WAC 197-11-060 (5)]. Phased review is appropriate where the sequence of a proposal is from a programmatic document, such as an EIS addressing a comprehensive plan, to other documents that are narrower in scope, such as for a site-specific, project-level analysis. The City of Kirkland is using phased review, as authorized by SEPA, in its environmental review of growth management planning actions. The analysis in this Draft EIS will be used to review the environmental impacts of the proposed Comprehensive Plan alternatives and other related actions, including subarea plans and implementing regulations.

1.2.4 EIS Scoping and Public Comment

Pursuant to SEPA Rules (WAC 197-11-408-410), a Determination of Significance was issued by the City of Kirkland on March 12, 2004. The Determination of Significance/Scoping Notice and supporting Environmental Checklist are included as Appendix A to this Draft EIS. Scoping is designed to narrow the focus of the EIS to significant environmental issues, to eliminate insignificant impacts from detailed study, and to identify alternatives to be analyzed in the EIS. The scoping process provides notice to the public and other agencies that an EIS is being prepared. Interested citizens, agencies, organizations, and affected tribes were invited to submit comments on the scope of the EIS. The scoping period closed on April 1, 2004. The City provided for public input during the scoping period by accepting written comments. The Determination of Significance/Scoping Notice was sent to the State, various agencies and jurisdictions, neighborhood and business associations, property owners in and within 300 feet of the two study areas, City commissions and boards, and other interested parties. The notice was also available on the City's web site and cable channel, the Kirkland Library and in the local newspaper.

Two comments were received on the private amendment study areas regarding the proposed zoning allowing for greater density of development. Traffic and building height were related issues of concern.

This Draft EIS addresses the key elements of the environment raised in the scoping notice and scoping comments and includes the following:

- **Natural Resources.** The Natural Resource analysis includes a review of potential impacts to earth (soils and natural hazards), water resources, and plants and animals associated with the alternatives.
- **Land Use Patterns.** The Land Use analysis includes a description of current land uses based on City land use inventories, the City's 2022 household and employment growth targets, the City's capacity analysis for 2022, and an assessment of the potential for induced or secondary growth impacts associated with the alternatives.
- **Relationship to Plans and Policies.** This analysis considers current and proposed draft Comprehensive Plan policies and regulatory framework as well as consistency with applicable external planning documents, including Growth Management Act goals, Shoreline Management Act goals, Countywide Planning Policies, adjacent jurisdiction plans, and Puget Sound Regional Council plans.
- **Population, Housing and Employment.** The population, employment and housing analysis consists of a programmatic analysis of population, housing and employment growth (and their indirect impacts) associated with the alternatives.
- **Aesthetics.** Potential impacts of the alternatives related to urban design, including building height, mass, form and design, and streetscape are reviewed.
- **Transportation.** The transportation analysis includes an analysis of transportation infrastructure, existing and projected future traffic link volumes and levels of service (LOS), collision data, projects in the City's Capital Improvement Plan (CIP) and Capital Facilities Plan (CFP) that will mitigate the transportation impacts, and the proposed network of non-motorized facilities identified in the Non-Motorized Transportation Plan (NMTP).

1.2.5 Future Public Comment

Additional public participation opportunities are provided with the publication of this Draft EIS. A 30-day comment period has been established for this Draft EIS. To obtain oral comments, the City has scheduled a courtesy hearing before the Houghton Community Council on July 19, 2004 and a public hearing before the Planning Commission on July 22, 2004. In addition, a public open house is scheduled for July 12, 2004. Please refer to the Fact Sheet for information on upcoming comment opportunities.

1.3 Proposed Action, Alternatives, and Objectives

1.3.1 No Action Alternative

For the purpose of this analysis, the No Action Alternative represents the continuation of the City's current Comprehensive Plan (adopted July 1995, with amendments through December 9, 2003) through the adopted 2012 planning horizon.

The No Action Alternative does not achieve the City's goal of extending the planning horizon to 2022 and is not a likely course of action for the City. However, this Alternative serves two key purposes in this EIS. First, the analysis of the 2012 horizon provides a snapshot of the impacts that could be expected at the mid-point of growth to 2022. This mid-point assessment may be useful for mid-term capital and resource planning and budgeting. Second, the No Action analysis provides a basis for comparison to assess the impacts that are likely to

be experienced with population and employment growth between 2012 and 2022. The comparison of conditions at the 2012 and 2022 planning horizons will allow the public and decision-makers the ability to make more informed decisions about future growth in the City.

1.3.2 Proposed Action

The proposed 10-year update includes:

1. Updated Growth Targets and Land Use Capacity

- Extension of the City's GMA planning horizon from 2012 to 2022;
- Adoption of new housing and employment targets to meet 2022 population and employment growth forecasts from the State of Washington as required by GMA and by Countywide Planning Policies from King County.

2. Policy and Text Amendments

- Revisions associated with court or Growth Management Hearing Board decisions or changes to GMA;
- Technical and editorial refinements to Comprehensive Plan goals and policies;
- Creation of a new Human Services Element;
- Rewrite of the Economic Development Element that generally maintains the same intent of the existing element, except for industrial areas;
- Revisions to the Land Use Element policies on "Regional and Community Facilities" to incorporate state law on essential public facilities and on industrial uses;
- Few minor new policies in other elements;
- Addition of new or updated information since adoption of the 1995 GMA Comprehensive Plan.

3. Zoning Code Amendments

- Zoning Code Amendments to Chapters 135, 140, 160 and minor changes to other chapters relating to the Comprehensive Plan Update items above.

4. Private Comprehensive Plan Amendment Requests

- Potential Comprehensive Plan and Zoning changes relating to two private amendment study areas.

5. Comprehensive Plan Land Use and Zoning Map Consistency Amendments

- Map changes to the City Wide Land Use Map, the Subarea Neighborhood Maps and the Zoning Map to correct a few mapping errors and to change the land use designations and zoning to Park/Open Space for several parcels of land obtained by the City for park use;
- Map changes to the City Wide Land Use Maps to re-designate RS5.0 parcels (8 to 9 dwelling units per acre) from medium to low density residential to make consistent the Land Use Map, and Zoning Map and development regulations. This change is proposed to implement the proposed revisions to the text in Comprehensive Plan Appendix H (text is revised and moved to the Land Use Element).
- Neighborhood map corrections to the Subarea Neighborhood Plan Land Use Maps and implementing Zoning Map corrections to make them consistent with the Comprehensive Plan's Land Use Map for all land use designations and residential density.
- Correction to Split Zone Parcels in Planned Area 6B

Each of these elements is briefly described below.

1.3.2.1 Updated Land Use Targets and Growth Capacity

The 10-Year Update of the City of Kirkland Comprehensive Plan is required by GMA to accommodate the forecasted population and employment in the City through 2022. The City's growth targets are the result of a multi-jurisdictional, regional process of that establishes how each City is able to accommodate its fair share of future regional growth. The population and employment targets for the City of Kirkland are a net household target of 5,480 and an employment target of 8,800 jobs for the years 2001 to 2022. These targets, added to Year 2000 populations would result in a 2022 residential population of 55,327, a dwelling unit total of 27,311, and an employment population of 41,184. In adopting its 10-Year Comprehensive Plan Update, the City must demonstrate that housing and employment targets can be achieved.

1.3.2.2 Policy Amendments

The proposed policy refinements consist primarily of editorial changes, text clarifications, and minor modifications for plan consistency. There are some substantive changes as well. In addition, some revisions have been made to achieve compliance with Growth Management Act updates and new State laws. Table 1-1 summarizes the proposed policy amendments.

Table 1 - 1 Summary of Comprehensive Plan Update

Comprehensive Plan Element	Nature of Revision
Introduction	1) Plan Consistency-data/dates updated in Community Profile to reflect 2022 planning horizon; 2) Text revisions editorial changes and supplemental text to refine Historical Perspective & How the Plan was Prepared.
Vision/Framework Goals	1) Plan Consistency Data/dates updated in A Vision of Kirkland to reflect planning horizon through 2022; 2) Text revisions editorial changes and supplemental text to refine A Vision of Kirkland and Framework Goals; addition of four (4) new Framework Goals concerning sense of community, low impact development and sustainable building practices, public safety, and regional coordination.
General	1) Text revisions-editorial changes and supplemental text to refine language within Plan Applicability and Consistency & Plan Amendment; 2) GMA compliance-text revisions regarding language for an emergency amendment within item D. Plan Amendment.
Community Character	1) Text revisions- editorial changes and minor supplemental text; 2) Appendix C- Historic Resources and Community Landmarks is placed within the body of the element and is updated; 3) New policy on mitigating light, glare, noise and odor impacts.

Comprehensive Plan Element	Nature of Revision
Natural Environment	Plan Consistency text revised and new goals and policies added to ensure consistency with the City’s Natural Resource Management Plan, adopted August 5, 2003 (see discussion below); 2) Add updated version of Kirkland’s Sensitive Areas Map, which serves as a guide to approximate locations of known critical areas and drainage basins, Topography Map, Landslide and Seismic Hazard Map, Impervious Surfaces Map, and Tree Canopy Map.
Land Use	1) Plan Consistency data/dates updated to reflect 2022 planning horizon; integrates Land Use from the Totem Lake Neighborhood Plan and the North Rose Hill Plan; 2) Text revisions-minor editorial changes and supplemental text; 3) A comparison of household units and employment for 2000 Existing, 2022 Growth Targets and Available Capacity are provided and discussed; 4) Appendix H-Residential Densities and Comparable Zones is placed within the body of the element and revised; 5) Revised policy on industrial areas; 6). Revised goal and policies on regional and community facilities to include the state law requirements for essential public facilities.
Housing	1) Plan Consistency-Data/dates updated to reflect 2022 planning horizon; 2) Text revisions-minor editorial changes and supplemental text; 3) Policy changes which reflect the Housing Strategy Plan.
Economic Development	1) Rewrite of the element using some of the existing goals and policies, but with some new goals and policies General intent the same, except change on industrial policy.
Transportation	1) Plan Consistency-Data/dates updated to reflect 2022 planning horizon; updated Table T-5: Transportation Project List; 2) Revisions to Figure T-1, Street Functional Classification and State Routes 3) Text revisions-minor editorial changes and supplemental text; 4) LOS revisions including Tables T-2 and T-3 LOS and Table T-4 Signalized Intersections Not System Intersections, see discussion below; 5) Proposed change from LOS 1.4 to LOS 1.3 for Individual System Intersections; 6) Policy refinement to reflect Non-Motorized Transportation Plan; 7) Section on State Transportation Plans and Policies in Appendix A is placed within the body of the element and is updated.
Parks, Recreation, & Open Space	1) Plan Consistency-Data/dates updated to reflect 2022 planning horizon; 2) Text revisions-minor editorial changes and supplemental text.
Utilities	1) GMA/State Law Compliance- revisions to existing policies ; 2) Plan Consistency-Data/dates updated in to reflect 2022 planning horizon; 3) Text revisions-minor editorial changes and supplemental text; 4) LOS revisions and refinements, see discussion below; 5) New goal and policies on telecommunications.
Public Services	1) Plan Consistency-data/dates updated in to reflect 2022 planning horizon; 2) Text revisions-minor editorial changes and supplemental text; 3) Solid waste section moved from Utilities to Public Services element; 4) LOS revisions and refinements, see discussion below.

Comprehensive Plan Element	Nature of Revision
Capital Facilities	1) Plan Consistency data/dates updated in to reflect 2022 planning horizon; 2) Text revisions-minor editorial changes and supplemental text; 3) LOS revisions and refinements including revisions to Tables CF-2 through CF-5 for LOS, see discussion below; 4) Update CF Tables to match capital improvement programs for year 2005-2009.
Human Services	New element to the Plan; see discussion below.
Implementation Strategies	Plan Consistency data/dates and implementation tasks revised to reflect Comprehensive Plan update and 2022 planning horizon.
Appendices	<ul style="list-style-type: none"> ▪ Appendix A - Plan Consistency is deleted with section on State Transportation Plans and Policies moved to the Transportation Element. ▪ Appendix B - Community Profile is deleted with some information placed within the Introduction Element. The City published a separate Community Profile document in 2003. Appendix C - Historic Resources and Community Landmarks is deleted, and text is placed in the Community Character Element and updated. ▪ Appendix D - Level of Service Methodology is revised and converts to Appendix A. ▪ Appendix E - The Public Process is deleted. ▪ Appendix F – Glossary is revised and converts to Appendix B. ▪ Appendix G – Has previously been repealed. ▪ Appendix H – Residential Densities and Comparable Zones is deleted, and text is placed in the Land Use Element and revised. ▪ Appendix I – Design Principles converts to Appendix C.

1.3.2.3 Zoning Code Amendments

Proposed revisions include procedural changes to Chapter 135 (Zoning Code Amendments), Chapter 140 (Amendments to the Comprehensive Plan), and Chapter 160 (Process IV). Also, the Natural Environment Element includes an updated version of Kirkland’s Sensitive Areas Map, which serves as a guide to approximate locations of known critical areas and drainage basins. Corresponding Chapter 90 Zoning Code amendments include minor modifications to definitions of primary and secondary basins for purposes of stream regulations.

1.3.2.4 Private Amendment Requests

The City has received two private amendment requests for changes to land use designations in the Future Land Use Map and rezone. The proposed amendments are:

- Amendment A – Lakeshore Clinic/PLA6B Study Area. Correct the land use designation from Medium Density Residential to Office/Multi-Family and change the allowable residential density from 10-12 dwelling units per acre (RM 3.6) to 19-24 dwellings per acre (RM 1.8) for the Planned Area 6B zone generally located north of 7thAve S, south of 2nd Ave S, east of 2nd St S, and west of 3rd Pl S.

- Amendment B – Sedorco Partnership/6th Street South Study Area. Change the land use designation from Industrial to Office/Multifamily and rezone from LIT (Light Industrial Technology) to PR3.6 (Office/Residential at 10-12 units per acre (-) for the area located east of the BNSF railroad tracks and west of 6th Street South). An alternative implementing zone could be a Planned Area (PLA) to establish area-specific standards.

For the purposes of this document, the City will study the impacts of residential density in Amendment B of up to 24 units per acre (RM 1.8) for all topics, except transportation. Transportation impacts for 12 dwelling units have been considered in the transportation model. If the City decides to consider residential density of up to 24 dwelling units per acre, then the City will need to rerun the transportation model to determine possible impacts on the 2022 transportation network.

1.3.2.5 Land Use and Zoning Map Revisions

The Comprehensive Plan's Land Use Map was changed with the 1995 GMA update of the Plan. However, the Neighborhood Subarea Land Use Maps were not changed in 1995. Since 1995, the North Rose Hill Neighborhood and Totem Lake Neighborhood Subarea Plan Land Use maps and implementing Zoning Map corrections have been updated to be consistent with the 1995 GMA Citywide Land Use Map for all land use classifications and residential density.

The neighborhood subarea plan land use maps need to be updated to be consistent with the 1995 GMA Citywide Land Use Map. These consistency amendments have a negligible effect on growth capacity. Since the overall Citywide Land Use Plan controls, the land use vision has been implemented consistently. These Neighborhood Map Amendments serve to provide full internal plan consistency with regard to future land use.

The land use designation and zoning for several city park/open space parcels need to be changed to reflect their use as park/open space. In addition, the Land Use Map has been revised to re-designate RS 5.0 parcels (8 to 9 dwelling units per acre) from medium to low density residential to make the Land Use Map and Zoning Map and development regulations consistent.

1.3.2.6 Split Zone Parcels

There are currently parcels split by two or more zone classifications within the PLA6B study area. Minor boundary adjustments to the Comprehensive Plan Land Use Map and Zoning Map are proposed for five of the six parcels and would have a negligible effect on capacity. All of these parcels have existing development bisected by the PLA 6B boundary. This housekeeping effort will address the nonconforming uses and inconsistent land use designations and zoning for these parcels. A map depicting the affected parcels (#1875000190, 4070700165, 2120200005, 0825059009, and 7654900165) proposed for housekeeping edits is included as Appendix C. The boundary line for the sixth parcel (#7786600000) will not be changed since its split boundary problem was resolved using a planned unit development (PUD) process.

1.4 Significant Impacts

The updated Comprehensive Plan would direct land use, services, and capital resources for the next 20-year period, but the Plan alone would not have direct impacts on the environment. The Comprehensive Plan would have indirect impacts by establishing the mix of land uses and overall land use patterns, levels of public services, and focus of future public capital improvements. Future development or public capital improvement projects allowed by the Comprehensive Plan could directly or indirectly affect the elements of the environment addressed in the EIS and in the supporting Environmental Checklist included as Appendix A to this EIS.

1.5 Proposed Mitigation Measures

At a programmatic, non-project level, future Comprehensive Plan policies and existing or proposed development regulations that implement the Comprehensive Plan may serve as mitigation measures. Programmatic mitigation measures described under each element of the environment in this EIS are summarized in Section 1.8. This summary does not include mitigating measures that are incorporated plan features or are applicable regulations or commitments. For a complete list of all mitigating measures, please refer to Chapter 3.

1.6 Significant Unavoidable Impacts

Conclusions as to whether an impact would be considered adverse, significant and unavoidable are found in the Summary Matrix located in Section 1.8.

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

Key environmental issues and options facing decision-makers include:

- Amount and distribution of growth;
- Changes in proposed policies, levels of service and Zoning Code procedural requirements relative to current plans and regulations.
- Consistency of the private amendment requests with the City's Comprehensive Plan.

1.8 Summary Matrix of Impacts and Mitigation Measures

The full text of the Affected Environment, Significant Impacts, and Mitigation Measures section of the Draft EIS is presented in Section 3. Summary statements presented in the

Summary Matrix (Table 1-2) on the following pages are abbreviated from the full discussion in Chapter 3. Summary statements of the project impacts also appear here in the absence of the context of existing environmental conditions (the Affected Environment discussion in Chapter 3). For these reasons, readers are encouraged to review the more comprehensive discussion of issues of interest in Chapter 3.

Table 1 - 2 Summary Matrix of Impacts and Mitigation Measures

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Natural Environment Page 3-1</p>	
<p>Earth. Removal or modification of vegetative cover, soil disturbance and erosion impacts would be expected as a result of future development. Soils in developed areas are subject to compaction, disruption, and contamination. In developed areas, impervious surfaces seal the soil surface, altering soil drainage and precluding other uses for the soil. Development could occur in areas that are at some risk of landslide and earthquake.</p> <p>Water Resources. Surface water resources could be indirectly impacted by removal of vegetation and creation of impervious surfaces. Impacts could include increases in peak flow and quantity of runoff, decreases in time required to deliver runoff to the receiving surface water body. Flooding in mapped flood hazard areas could be exacerbated to a small degree. Increased sedimentation to wetlands and lakes could result from development.</p> <p>Plants and Animals. Vegetation impacts could include physical removal and decreased viability due to increased peak flows and runoff volume. Ongoing development activities could reduce the amount of wildlife habitat in the City. Development of currently vacant or under-developed parcels could lead to fragmentation of wildlife habitat. Indirect impacts could include a reduction in wildlife habitat quality and function due to increased human disturbance. Introduction of non-native plant species could lead to a decrease in biodiversity and habitat. Future development would result in a reduction in the quality and quantity of aquatic habitat in the City over time. Development impacts could include higher water temperatures, sedimentation, increased peak flows, reduced low flows, reduced groundwater, erosion, scour, pollution, stream bank armoring, channelization, and reduced riparian and wetland areas.</p>	<p>No Action.</p> <ul style="list-style-type: none"> ▪ Earth – Densification within the City would result in expansion of impervious surfaces, modification of soil structure, and accidental or chronic contamination. Clearing and grading activities would increase erosion potential. Potential for soil erosion is greatest in neighborhoods with greatest development potential, including Totem Lake, North Rose Hill and South Juanita. Seismic hazards are primarily located in South Juanita, Totem Lake, North Rose Hill and Lakeview neighborhoods. ▪ Water Resources – Potential impacts are in proportion to the area of the drainage basin relative to impervious surface in the basin. Potential impacts include altered surface water flows, increased stormwater quantities, localized flooding impacts, and generation of non-point source pollution to local surface waters. Stream and lake water quality is expected to decline gradually with increasing development. South Juanita, Totem Lake and North Rose Hill have important surface water resources including Juanita Creek, Totem Lake and surrounding wetlands, Forbes Creek and Forbes Lake that would be subject to highest risk of adverse impacts. ▪ Plants and Animals – Increased population, employment, traffic, impervious surface and human activity could result in additional use of open space areas that are currently priority habitats. Increased surface water runoff could result in water pollution, erosion, and sedimentation that can significantly impact plant and animal species.

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
	<p>Proposed Action</p> <ul style="list-style-type: none"> ▪ Earth – On a Citywide basis, impacts would be similar to those described for the No Action Alternative. Continuation of development through 2022 would result in additional soil disturbances, especially in high growth neighborhoods. In the Totem Center Study Area, increased development would increase the risk of soil erosion. No significant impacts are anticipated in the Private Amendment Study areas. ▪ Water Resources -- On a Citywide basis, impacts would be similar to those described for the No Action Alternative. Continuation of development through 2022 would result in additional impervious surfaces and increased stormwater runoff from new construction, especially in high growth neighborhoods. In the Totem Center Study Area, increased development could result in adverse surface water quality and quantity impacts to the open stream segment between NE 132nd Street and NE 128th Street or the open stream segment bordering the study area to the west. Additional development could also impact the wetlands in the vicinity of Totem Lake. No significant impacts are anticipated in the Private Amendment Study Area A. In Private Amendment Study Area B, increased development may result in indirect surface water impacts to the piped stream border the study area to the east via the stormwater drainage collection system. ▪ Plants and Animals -- On a Citywide basis, impacts would be similar to those described for the No Action Alternative. Continuation of development through 2022 would result in additional habitat fragmentation and reduction of open space areas, especially in high growth neighborhoods. Because the Totem Center Study Area and Private Amendment Study areas are urbanized, no significant impacts are anticipated.

Mitigation Measures

Citywide

- The City of Kirkland is in the process of developing a revised Surface Water Management Plan. Additional mitigation measures to protect and/or restore surface water bodies, including streams, lakes, and wetlands, may be included in this document.
- The City also will be developing a revised Shoreline Master Program (SMP). Pursuant to Washington state requirements, Kirkland's SMP will be updated by December 1, 2009.

Totem Center Study Area

Due to local seismic and landslide hazards in the study area, it is recommended that a geotechnical consultant develop soil suitability studies done for each project specific review to ensure that proposed development in the area is feasible.

Private Amendment Study Areas

No proposed mitigation is recommended other than compliance with the City's critical areas regulations.

Significant Unavoidable Adverse Impacts

Earth

Both Alternatives would result in increased urbanization in the City. An unavoidable consequence will include a corresponding 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. A greater population could also be at risk from the adverse impacts of damage to buildings and infrastructure should an earthquake or landslides occur.

Water Resources

Direct impacts would be minimized with implementation of federal, state, and City regulations, including critical area regulations. Adverse impacts to water resources that may occur despite attempts to mitigate them include:

Decreases in vegetative cover, resulting in accelerated runoff and erosion processes, elevated water temperatures, and increased stress on aquatic organisms;

Increases in impervious surfaces, resulting in accelerated runoff, increased volumes of runoff, decreased water quality, and decreased groundwater recharge;

Erosion and sedimentation of streams, lakes, and wetlands due to increased flow rates and volumes, resulting in the decline of nutrient balances, substrate quality, and habitat availability;

Decline and eventual loss of some wetland functions for hydrology, water quality, and habitat; and

Increase in pollutants from stormwater runoff to streams, wetlands and Lake Washington.

The extent to which these indirect and/or cumulative impacts could be reduced or offset will depend on implementation and enforcement of adopted City plans and codes, and the effectiveness of pending City Surface Water Management Plan Update, the effectiveness of WRIA plans, as well as City restoration plans for fish and wildlife habitat that may be associated with its Shoreline Master Program update. The level of significance of impacts would be more precisely determined through project-specific environmental review.

Plant and Animal Resources

Potential indirect impacts include the loss and reduced function of vegetation communities as a result of population growth and development within the City under both Alternatives. A reduction in the amount of vegetation communities would reduce habitat for wildlife. Additional development under any Alternative would result in loss of larger tracts of native vegetation. Vegetation diversity (i.e., number of different native plant species and structure) would decline as the larger tracts of vegetation are developed.

Wildlife habitat could be lost and reduced in function and value as a result of population growth and development within the City under all Alternatives. The reduction in habitat values for some species of wildlife would result in an increase in populations of those species adapted to more urban habitats. Over time, some re-growth of native vegetation would occur within the City as residential areas mature. With this re-growth would be an incremental improvement in habitat values for some wildlife species, primarily songbirds and small mammals.

Fish habitat could be lost or reduced in function and value as a result of population growth and development within the City under all Alternatives. Over time, changes in land use and development patterns would likely result in increased risk of impacts on fish habitat and species. Overall, greater human activity, culvert replacements, increased storm runoff, modified hydrology, and lowered water quality from commercial and roadway traffic sources could result from these Alternatives, all of which would negatively impact fisheries and aquatic habitat.

The extent to which these indirect and/or cumulative impacts could be reduced or offset will depend on implementation and enforcement of adopted City plans and codes, and the effectiveness of pending City Surface Water Management Plan Update, the effectiveness of WRIA plans, as well as City restoration plans that may be associated with its Shoreline Master Program update. The level of significance of impacts would be more precisely determined through project-specific environmental review.

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Land Use Patterns Page 3-22</p>	
<p>Land Use Patterns and Activity Levels. Future land uses will maintain the predominance of residential uses in the City. Land use patterns will not be significantly altered. Existing land use patterns will be intensified relative to current conditions. Intensification will be greatest in areas with capacity for additional growth, including Totem Center Urban Center of the Totem Lake Neighborhood, Downtown Kirkland, and, to a lesser degree, the Rose Hill Business District along NE 85th Street and the North Rose Hill Business District.</p> <p>Land committed to housing and employment will increase. As new development is occupied, it will result in higher activity levels in the surrounding area. Increased activity levels may be incompatible with activity levels of adjacent residential or commercial neighborhoods.</p> <p>Areas that are currently vacant would be developed with urban uses over time. Neighborhoods with the greatest amount of vacant and partially vacant lands include Totem Lake, North Rose Hill and South Juanita.</p> <p>Over time, the Totem Center Study area would experience an increase in high-density housing, office and commercial uses. Existing residential development may be displaced as development occurs.</p> <p>In the Private Amendment Study areas, the mix of uses may change. However, both areas would continue to include office and employment opportunities. Expanded residential opportunities would occur in Study Area A, and a continued, but decreased, capacity for industrial development would occur in Study Area B as office or residential uses are added.</p> <p>Land Use Compatibility</p> <p>New development could result in compatibility impacts if adjacent development is of lower scale or less urban in character. Environmentally sensitive areas could experience direct and indirect consequences of development.</p> <p>In the area to the north of the Totem Center Study Area, compatibility impacts may be experienced by the existing low-density residential development north of NE 132nd Street. This area is zoned for residential</p>	<p>No Action Alternative</p> <ul style="list-style-type: none"> ▪ Land Use Patterns and Activity Levels – Potential impacts would be similar to those described under Impacts Common to All Alternatives. ▪ Land Use Compatibility – Potential impacts would be similar to those described under Impacts Common to All Alternatives. ▪ Capability of Land to Absorb Densities – Under the current Comprehensive Plan, the City has adequate capacity to absorb the planned density and intensity of land uses through 2012. <p>Proposed Action</p> <ul style="list-style-type: none"> ▪ Land Use Patterns and Activity Levels – Potential impacts would be similar to those described under Impacts Common to All Alternatives, but would be extended through the updated Comprehensive Plan horizon of 2022. ▪ Land Use Compatibility – Potential impacts would be similar to those described under Impacts Common to All Alternatives but would be extended through the updated Comprehensive Plan horizon of 2022. ▪ Capability of Land to Absorb Densities – Under the proposed Comprehensive Plan update, the City has adequate capacity to absorb the planned density and intensity of land uses through 2022. Within the smaller study areas of the Totem Center Study Area and Private Amendment Study areas, there would also be sufficient capacity to accommodate proposed land use designations.

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>development at 6 to 8 dwelling units per acre and is designated by the King County Comprehensive Plan as Urban Residential Medium (4 to 12 dwelling units per acre). Impacts could be associated with increased traffic, noise, glare, pedestrian activity, and shadowing.</p> <p>In the Private Amendment areas, changes to the mix of residential, office, and industrial uses could increase the potential for land use conflicts at the edges between less intensive and more intensive uses. The magnitude of these impacts will depend on the design compatibility of different uses relative to building height, bulk and scale.</p>	
<p>Mitigation Measure</p> <p>To achieve planned densities and use land efficiently, use this EIS review of the Totem Center Study Area. This advanced environmental review would allow for application of the categorical exemption for new residential and mixed-use development per RCW 43.21C.229.</p>	
<p>Significant Unavoidable Adverse Impacts</p> <p>Over time, implementation of either the No Action or Action Alternatives could irreversibly convert vacant, partially developed, and redeveloped properties to additional or new single-family, multifamily, office, commercial, and industrial uses. Due to densification and intensification of uses, the City will also continue to add to its urban character.</p>	

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Relationship to Plans and Policies Page 3-43</p>	
<p>As required by GMA, both Alternatives must demonstrate that the land use element, capital facilities element and financing plan are consistent.</p> <p>The alternatives do not differ in consistency with Shoreline Management Act requirements. The City is scheduled to update their Shoreline Master Program consistent with the state required timeline.</p> <p>Both alternatives are generally consistent with regional plans, including Vision 2020 and the King County Countywide Planning Policies.</p> <p>Both alternatives are generally consistent with the comprehensive plans for surrounding jurisdictions, including the cities of Bellevue and Redmond and King County.</p> <p>Proposed development in the Totem Center Study Area is consistent with and would implement adopted City policies for this area under either alternative.</p> <p>In the Totem Center Study Area, the adjacent King County Comprehensive Plan designation of Urban Residential Medium and zoning for 6 to 8 dwelling units per acre on the north side of NE 132nd Street could be inconsistent with the higher intensity uses planned for the Totem Center Study Area. However, adopted development standards may minimize this impact. Please refer to the Aesthetics section for additional discussion.</p>	<p>No Action Alternative</p> <p>The adopted Comprehensive Plan met the requirements of GMA in 1995, but does not include some of the changes to GMA that have occurred since 1995.</p> <p>Overall, the continued use of outdated information in the current Comprehensive Plan would likely result in internal inconsistencies within the Comprehensive Plan and with other plans used by the City.</p> <p>Proposed Action</p> <p>The Proposed Action is consistent with the broad requirements of GMA and changes to GMA since 1995. Proposed amendments are based, in part, on City review of GMA requirements in comparison to the City’s existing Comprehensive Plan (see Appendix F). This review helped establish the scope of work for this Comprehensive Plan Update project.</p> <p>Proposed amendments are consistent with existing City direction and are not expected to result in any consistency impacts to the City’s Comprehensive Plan.</p> <p>Proposed development in the Private Amendment Study Areas would be consistent with surrounding uses and overall City policy direction.</p>
<p>Mitigation Measures</p> <p>No mitigating measures beyond incorporated plan features and applicable regulations and commitment are proposed or required.</p>	
<p>Significant Unavoidable Adverse Impacts</p> <p>No significant unavoidable adverse impacts are anticipated.</p>	

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Population, Employment and Housing Page 3-71</p>	
<p>Population, employment and housing will increase under any of the Alternatives reviewed, to different degrees. Additional population growth will increase the demand for housing.</p> <p>Secondary, indirect impacts of growth would likely include potential encroachment near natural environmental resources, increases in demand for facilities, infrastructure, and other effects. These secondary impacts are described in other sections of this Draft EIS and the SEPA Checklist in Appendix A.</p>	<p>No Action</p> <p>In 2012, population and household levels would increase over current households. Plan capacity would accommodate 2012 targets particularly considering ranges. The City has already exceeded its Year 2012 target employment, although there is greater capacity for employment according to capacity estimates.</p> <p>The No Action would not meet the requirement to plan for a succeeding 20-year period, and at 2012 would not result in achievement of the year 2022 housing target assigned through the Countywide Planning Policies for King County. In addition, the No Action would not result in meeting the City's affordable housing targets.</p> <p>Proposed Action</p> <p>The Proposed Action Alternative accommodates growth to the year 2022. In 2022, population, household, and employment levels would increase over current households. There is sufficient capacity to accommodate growth targets.</p> <p>The Proposed Action would meet GMA requirements to plan for the next 20-year horizon to the year 2022. The Proposed Action would provide enough capacity to meet target levels of growth and the level of growth assumed in land use and capital planning would be consistent with the target level of growth established in the Countywide Planning Policies for King County. In addition, the Proposed Action includes additional policies and regulatory incentives to encourage affordable housing. However, the City may still not meet its affordable housing targets.</p>

Mitigation Measures

- Since the City's growth capacity exceeds the 2022 housing and employment target levels, the City could monitor growth levels and determine if adjustments to the Comprehensive Plan, capital facility and service plans, or other supporting plans or regulations are warranted to ensure that all Comprehensive Plan Elements and implementing plans and regulations are consistent and in balance. GMA and City regulations allow for annual review and amendment of City plans as appropriate.
- The City could take further action to meet its affordable housing targets by providing additional affordable housing incentives beyond what the City adopted in May 2004 and by supporting affordable housing programs through ARCH and/or other local and regional housing agencies.

Significant Unavoidable Adverse

Population, employment and housing will increase under any of the Alternatives reviewed, to different degrees. Additional population growth will increase the demand for housing. The need for affordable housing will increase as well. Additional population, housing, and employment growth will result in secondary impacts to the natural and built environment and to the demand for public services, and is addressed in the appropriate sections of this Draft EIS or SEPA Checklist in Appendix A.

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Aesthetics Page 3-86</p>	
<p>Impacts associated with either alternative include incompatibility of height, bulk and scale between existing and new development; increase in shade and shadows resulting from intensification; increased lighting levels and glare; reduced open space; and loss of vegetation.</p> <p>Most impacts would be concentrated in designated activity areas or commercial centers. Neighborhoods such as Totem Lake, North Rose Hill and South Juanita may experience the greatest change, since these neighborhoods have the greatest potential for future development.</p>	<p>No Action Alternative</p> <p>Impacts of the No Action Alternative would be as described under Impacts Common to All Alternatives.</p> <p>Shade impacts of development in the Totem Center Study Area would not be expected to reach the residential area north of NE 132nd Street. Shade and shadows from development could result in a continuous shadow along the NE 132nd Street frontage for longer periods of time during the day.</p> <p>Proposed Action</p> <p>At a Citywide level, potential impacts would be as described under Impacts Common to All Alternatives.</p> <p>In the Totem Center Study Area, increased high-density residential, office and commercial development could result in aesthetic impacts. Potential height, bulk and scale impacts could result primarily between new development in the Study Area and the existing low-density (6 to 8 dwelling units per acre) residential development immediately north of NE 132nd Street in unincorporated King County.</p> <p>Potential shade and shadow impacts could also be experienced in this area. A shade analysis conducted for this EIS indicates that most of the shade impacts would be internal to the Study Area. However, the residential area north of NE 132nd Street would likely experience temporary shading impacts, particularly during the winter months. The location and duration of the shadow on any particular lot will change throughout the day. In the morning, more shadows will be cast in a northwesterly direction and in the evenings shadows will be cast to the northeast.</p> <p>Aesthetic impacts associated with potential development in the Private Amendment Request study areas would be similar to those described under Impacts Common to All Alternatives. If a Planned Area designation is used in Amendment Study Area B, building heights may be increased and may not be compatible with building heights in the surrounding area.</p>

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
Mitigation Measures If a Planned Area designation is established for Private Amendment Area B, design standards should be included to ensure that the maximum allowable building height in the new designation is compatible with allowable building heights in the surrounding area.	
Significant Unavoidable Adverse Impacts Growth levels will increase between existing conditions and 2022, committing land to allowed uses and activities. The extent of visual impacts is subjective and will depend on the values and preferences of those viewing the change; the quality of architectural and urban design features incorporated into the development; and how well the image presented by the overall scale and form of the development incorporates features of the local setting.	

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Transportation Page 3-96</p>	
<p>Traffic is expected to increase under all alternatives.</p>	<p>No Action</p> <p>Four system intersections are projected to exceed the adopted single intersection V/C threshold of 1.40, and five additional intersections are expected to approach the threshold.</p> <p>Proposed Action</p> <p style="text-align: center;">Citywide</p> <p>No system intersections are projected to exceed a V/C of 1.30. All sub-area average V/Cs are expected to be lower than the averages under the No Action Alternative.</p> <p style="text-align: center;">Totem Lake</p> <p>V/C analysis indicates that with the recommended 2022 transportation improvements in place, densification of the Totem Center Study Area by 2022 will not cause LOS in the subarea to exceed LOS standards. However, while LOS standards are not expected to be violated, the table shows seven system intersections located near Totem Center (in the Northeast Subarea) are expected to experience congested conditions (V/C greater than 1.0) during the PM peak hour. Five additional intersections are expected to approach congested conditions (V/C between 0.9 and 1.0). In order to ensure adequate traffic flow in the area under future conditions, these potential choke points should be carefully considered when designing to accommodate the new development.</p> <p style="text-align: center;">Private Amendments</p> <p>V/C analysis indicates that with the recommended 2022 transportation improvements in place, potential development in the Private Amendment Study Areas will not cause LOS in the Subarea to exceed LOS standards. However, while LOS standards are not expected to be violated, the table shows three system intersections located near the Private Amendment Study Area (in the Southwest Subarea) are expected to experience congested conditions (V/C greater than 1.0) during the PM peak hour, and one additional intersection is expected to approach congested conditions (V/C of 0.95). In order to ensure adequate traffic flow in the area under future</p>

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
	<p>conditions, these potential choke points should be carefully considered when designing to accommodate the new development. When site-specific developments are proposed, they should be compared to the Comprehensive Plan/EIS land use and transportation analysis assumptions. Additional traffic analysis may be required.</p>
<p>Mitigation Measures</p> <p style="text-align: center;">Citywide</p> <ul style="list-style-type: none"> ▪ Construct the recommended transportation improvements for the 2012 No Action and 2022 Action Alternatives shown in Figures 3-22 and 3-23, respectively, to maintain the adopted LOS and to reduce traffic congestion that would occur without the improvements. In addition, construct the recommended transportation improvements needed to lower the V/C threshold for individual intersections from 1.40 to 1.30 if financially feasible. If construction of the recommended improvements is not feasible, a reduction of the V/C threshold from 1.30 to 1.40 should be evaluated ▪ Review annually the traffic model, LOS standards and needed transportation improvements to ensure that the City is meeting the adopted LOS.. ▪ Implement the Non-Motorized Transportation Plan to meet the new goal of 65% SOV and 35% HOV and help maintain the adopted LOS, This functional plan provides a detailed examination of the existing pedestrian, bicycle, and equestrian systems, criteria for prioritizing improvement, and suggested improvements as shown in the amended bicycle and pedestrian system in Figures 3-24 and 3-25, respectively. is ▪ Provide programs and improvements to meet the new goal of 65% SOV and 35% HOV. ▪ Implement the following programmatic mitigation: <ul style="list-style-type: none"> ○ Application of street design standards appropriate for neighborhoods ○ Emphasis of street connections in Citywide system. ○ Continuance of the Neighborhood Traffic Control Program to address safety, speed, and/or volume issues ○ Support of Transportation Demand Management (TDM) Strategies <p style="text-align: center;">Totem Lake</p> <p>When new site-specific development is proposed in the Totem Center Study Area, the following additional measures are required as part of development application: land use and trip generation information to ensure that it is consistent with the ranges used for the Comprehensive Plan analysis; parking plan; access and circulation plan; site specific Transportation Demand Management strategies; possible provision of dedication and right-of-way improvements for one or both of two new streets if the proposed development is adjacent to these future streets; impact analysis for nearby intersections that are expected to experience congestion within the six-year planning horizon.</p> <p style="text-align: center;">Private Amendments</p> <p>Any the proposed development within the Private Amendment study areas should provide the following additional information prior to development approval: land use and trip generation information to ensure that it is consistent with the ranges used for the Comprehensive Plan analysis; parking plan; access and circulation plan; site specific Transportation Demand Management strategies; impact analysis for nearby intersections that are expected to experience congestion within the six-year planning horizon.</p>	

Impacts Common to All Alternatives	Distinguishing Impacts of Alternatives
<p>Significant Unavoidable Adverse Impacts: Increases in future development will result in increased traffic volumes. Although congestion can be addressed through the mitigation measures presented in this document, the increase in traffic itself is considered a significant unavoidable impact.</p>	