



185th Street Station Subarea Planned Action

DRAFT ENVIRONMENTAL IMPACT STATEMENT

JUNE 2014



185th Street Station Subarea Plan

Planned Action Draft Environmental Impact Statement

Prepared for:



Prepared by:



June 2014

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Planning & Community Development

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June 3, 2014

Subject: 185th Street Station Subarea Plan- Planned Action, Draft Environmental Impact Statement

Dear Interested Residents, Partners, and Stakeholders,

The City of Shoreline invites you to comment on the 185th Street Station Subarea Plan Planned Action Draft Environmental Impact Statement (DEIS). The DEIS analyzes environmental impacts and recommends mitigation related to redevelopment alternatives in the subarea surrounding the future light rail station located at NE 185th Street and Interstate 5. The DEIS focuses on land use patterns/plans and policies; population, housing, and employment; multi-modal transportation (roads, sidewalks, bike lanes and transit); public services (schools, parks, recreation and open space, police, fire and emergency services, and solid waste disposal); and utilities (water, wastewater, surface water, electricity, and communications).

The City and its residents have been working on the 185th Street Station Subarea Plan since spring 2013 to create a land use, transportation, and infrastructure framework for a livable, equitable, and sustainable transit-oriented community in Shoreline. In addition to supporting the regional investment in high-capacity transit, the subarea plan implements Shoreline's 2012 Comprehensive Plan goals and policies and the City's Vision 2029. The subarea plan should expand community choices related to land use and transportation through regulations to promote a variety of styles and increased levels of affordability; enhanced pedestrian, bicycle, transit, and motor vehicle connectivity, mobility, and safety; neighborhood-serving employment opportunities and businesses; and other desired amenities.

State law requires that the likely environmental impacts of land use actions be identified via environmental impact statements, and this DEIS provides analysis consistent with requirements for Planned Actions (see below). Three alternatives are analyzed in the DEIS, and all assume the development of a high-capacity transit network including the light rail station and park-and-ride structure at the 185th/Interstate 5 location. The alternatives are:

- Alternative 1—No Action, which would retain existing zoning and regulatory provisions in the station subarea; no Planned Action provisions would be adopted, and as such a project-by-project environmental review process would remain.
- Alternative 2—Some Growth, which would adopt a new framework for land use and supporting improvements in the station subarea, with changes in zoning focused along the 185th Street, 10th Avenue NE, and NE 180th Street connecting corridor between Shoreline's Town Center (Aurora Avenue N) and North City; Planned Action provisions would be adopted.

- Alternative 3—Most Growth would adopt a new framework for land use and supporting improvements, with more extensive changes in zoning (proposing higher densities and affecting a larger area than under Alternative 2) surrounding the proposed light rail station, but still focused along the 185th Street, 10th Avenue NE, and NE 180th Street connecting corridor; Planned Action provisions would be adopted.

Regarding the Planned Action adoption process, upon completion of this DEIS the City Council will select a Preferred Alternative based on the results of the environmental analysis, public and agency comments, and potential additional analysis that may be needed as part of finalizing the EIS. The Preferred Alternative may include combined features of the alternatives analyzed in this DEIS, or new features, as long as these are analyzed to the extent required by the State Environmental Policy Act (SEPA) for Planned Actions.

The Preferred Alternative will be identified as the Planned Action in the Final Environmental Impact Statement (FEIS). Additional analysis may be required to identify impacts specific to the Preferred Alternative. With completion of the FEIS, the City would finalize and adopt the 185th Street Station Subarea Plan, including zoning and supporting regulations as the Planned Action. The City also would amend its current Comprehensive Plan, other applicable plans, and the Shoreline Development Code to implement the subarea plan. Future development applications that are consistent with the 185th Street Station Subarea Plan/Planned Action would not be subject to further environmental review under SEPA.

Public and agency comment is invited regarding the DEIS. The City will accept written comments from issuance on June 3, 2014 until July 10, 2014 (see FACT SHEET). Please provide written comments to the responsible official as follows:

Rachael Markle, AICP, Director,
Department of Planning & Community Development
City of Shoreline
17500 Midvale Avenue N.
Shoreline, WA 98133

Emailed comments are welcome and should be sent to: mredinger@shorelinewa.gov or sszafran@shorelinewa.gov.

In addition, the City will accept public comments on the DEIS at a Planning Commission Public Hearing scheduled for July 10, 2014, 7:00 to 9:00 pm in the Council Chambers, located at 17500 Midvale Avenue N. Shoreline, WA 98133. The City of Shoreline appreciates your interest in the 185th Street Station Subarea Plan and looks forward to hearing from you.

Sincerely,



Rachael Markle, AICP
Director, Planning & Community Development

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FACT SHEET

Project Title

185th Street Station Subarea Plan

Proposed Action and Alternatives

Three alternatives are qualitatively compared and analyzed in this draft environmental impact statement (DEIS):

- Alternative 1—No Action, which would retain existing planning and zoning provisions in the station subarea
- Alternative 2—Some Growth, which would adopt a new framework for land use and supporting improvements in the station subarea, with changes in zoning focused along the 185th Street, 10th Avenue NE, and NE 180th Street connecting corridor between Shoreline’s Town Center (Aurora Avenue N) and North City
- Alternative 3—Most Growth which would adopt a new framework for land use and supporting improvements, with more extensive changes in zoning (proposing higher densities and affecting a larger area than under Alternative 2) surrounding the proposed light rail station, but still focused along the 185th Street, 10th Avenue NE, and NE 180th Street connecting corridor

The City and its citizens have been working on the *185th Street Station Subarea Plan* since spring 2013 with the intent of creating a land use, transportation, and infrastructure framework to support implementation of a livable, workable, equitable, and sustainable transit-oriented community in Shoreline. In addition

to supporting the regional investment in high-capacity transit, the subarea plan would support Shoreline Comprehensive Plan goals and policies and implement the City’s Vision 2029.

The two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth, have been developed to support the community’s vision for a livable, workable, equitable, and sustainable transit-oriented community.

The No Action Alternative would retain the current provisions of the Comprehensive Plan and other existing plans, as well as development regulations applicable to the subarea. This DEIS assumes that the light rail station would be implemented with or without zoning changes in the subarea. Although individual properties could be developed to the maximum allowable density under current zoning in the No Action Alternative, this is not consistent with the vision for vibrant, transit-oriented communities throughout the region and in Shoreline.

Upon completion of this DEIS, the City of Shoreline will select a Preferred Alternative based on the results of the environmental analysis, public and agency comments, and potential additional analysis that may be needed as part of finalizing the EIS. The Preferred Alternative may include combined features of the alternatives analyzed in this DEIS, or new features, as long as these are analyzed to the extent required by the State Environmental Policy Act (SEPA) for Planned Actions.

With the completion of the Final Environmental Impact Statement (FEIS), the City of Shoreline would finalize and adopt the *185th Street Station Subarea Plan* and a supporting Planned Action Ordinance. The City also would amend its current Comprehensive Plan and other applicable plans as well as the Shoreline Development Code, as may be required to support the plan and ordinance.

With adoption of the Planned Action Ordinance for the Preferred Alternative, future development applications that are consistent with the Planned Action would not be subject to further environmental review under SEPA, which would help to streamline the approvals process for projects within the subarea. Under the No Action Alternative, SEPA review and compliance would not be streamlined via a Planned Action process and standard environmental review would be required on a per-project basis. While the No Action Alternative would occur under the current adopted Comprehensive Plan and Development Code, it would be inconsistent in meeting the City's stated objectives in the Comprehensive Plan for implementing transit-oriented communities around the proposed light rail stations.

Location

Through a separate public process for the Lynnwood Link Extension, which also included development of a DEIS, Sound Transit identified NE 185th Street on the east side of Interstate 5 (I-5), north of the overpass, as the preferred location for one of the two light rail stations to potentially be built in Shoreline. A park-and-ride structure, also constructed by Sound Transit, would be potentially located on the west side of I-5, also north of the 185th Street overpass. The City of Shoreline supports the station location included in Sound Transit's preferred alternative for the Lynnwood Link Extension, and identifies the location in the City's Comprehensive Plan Land Use Map.

For the purposes of developing the *185th Street Station Subarea Plan* and completing environmental analysis for this DEIS, the City of Shoreline Planning Commission determined study area boundaries through consideration of factors such as topography, ability to walk and bike to and from the station, policy direction, existing conditions, and other influences. The Planning Commission recommended using two sets of boundary lines

applicable to these conditions, and for this DEIS, the subarea is defined by two boundaries, one that delineates the study area for land use and another that delineates the study area for mobility (multi-modal transportation). These boundaries were then reviewed and adopted by City Council.

Refer to Figures 1-1 and 1-2 in Chapter 1 for depictions of these study area boundaries surrounding the 185th light rail station location. The rectangular-shaped subarea includes portions of the Echo Lake, Meridian Park, and North City neighborhoods of Shoreline, with 185th Street as a central spine of the subarea from the Aurora Avenue N (SR 99) corridor at the west edge to 15th Avenue NE corridor at the east edge. The subarea extends approximately one-half mile to the north and south of the 185th corridor. For more information about the study area boundaries, refer to Chapter 1, Section 1.2.2.

Proponent

City of Shoreline

Lead Agency

City of Shoreline

Responsible Official

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Planned Action Environmental Impact Statement Process

The Washington state legislature adopted the Planned Action process for SEPA to emphasize quality environmental review of early planning efforts and early public input to shape decisions. Basic steps in designating and implementing Planned Actions are to:

- Prepare an environmental impact statement (EIS);
- Designate the Planned Action improvement area by ordinance, where future projects would develop consistent with the EIS analysis; and
- Review permit applications for future projects for consistency with the designated Planned Action (based on an environmental checklist prepared by project proponents to compare proposed improvements to the Planned Action analysis).

The intent is to provide more detailed environmental analysis during formulation of planning proposals, rather than at the project permit review stage. A Planned Action designation by a jurisdiction reflects a decision that adequate environmental review has been completed and further environmental review under SEPA, for each specific development proposal or phase, would not be necessary if it is determined that each proposal or phase is consistent with the development levels specified in the adopted Planned Action Ordinance and supporting environmental analysis. Although future proposals that qualify as fitting within the threshold of the Planned Action would not be subject to additional SEPA review, they would be subject to application notification and permit process requirements.

The Planned Action Ordinance would be expected to encourage redevelopment and revitalization in the light rail station subarea. Property owners and potential developers would be encouraged to redevelop by the streamlined development process that takes place under the Planned Action process. This DEIS will help the City identify impacts of development and specific mitigation measures that developers would have to meet to qualify for a Planned Action project.

Required Approvals

In order to implement the selected alternative as an outcome of this DEIS, the following must be approved by the City Council:

- Adoption of a final *185th Street Station Subarea Plan* and provisions and regulations that would require amendments to the City's Comprehensive Plan and the Shoreline Development Code (Title 20); and
- Adoption of a Planned Action Ordinance.

After these City actions, permits to be acquired by individual development proposals would likely include, but not be limited

to: land use permits, site development permits, building permits, and right-of-way permits. If the proposed development is consistent with the subarea plan and analysis in this DEIS, additional environmental analysis would not be required.

Environmental Impact Statement Authors and Principal Contributors

This document has been prepared under the direction of the City of Shoreline, Planning & Community Development Department. Principal and contributing consultants are listed below.

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Date of Draft Environmental Impact Statement Issuance

June 9, 2014

Public Comments/Due Date

The City of Shoreline will accept written comments on or before **July 10, 2014**.

If mailing comments via the US Postal Service, comments must be postmarked by Midnight, July 10, 2014. If providing written comments via hand or commercial delivery, comments must be submitted by 5:00 pm, July 10, 2014. Address comments to the responsible official as follows:

Miranda Redinger

Department of Planning & Community Development
City of Shoreline
17500 Midvale Avenue N.
Shoreline, WA 98133

Comments also may be submitted via email to:

mredinger@shorelinewa.gov

In addition, the City will accept public comments at a public hearing, as follows:

Public Hearing/Planning Commission Meeting on the Draft Environmental Impact Statement for the 185th Street Station Subarea Plan, scheduled for July 10, 2014, 7:00 pm to 9:00 pm in the Shoreline City Council chambers, located at 17500 Midvale Avenue N. Shoreline, WA 98133

Type and Timing of Subsequent Environmental Review

After the close of the public comment period, the City will prepare a FEIS that contains responses to comments received and a Final Subarea Plan, based on analysis of the alternatives and comments received from the public. The FEIS will identify the proposed alternative for adoption, which may be one of the alternatives analyzed in the DEIS, or a new alternative containing components of the DEIS alternatives. If additional environmental analysis is required for the proposed alternative, it will be presented in the FEIS.

Date of Final Action and Implementation

The City anticipates taking final action on the adoption of the *185th Street Station Subarea Plan*, FEIS, and Planned Action Ordinance, along with supporting Comprehensive Plan and code amendments, in December 2014. If approved, it is envisioned that redevelopment of the station subarea would occur gradually, over the coming decades.

Previous Relevant Environmental and Planning Documents

Prior relevant environmental review was conducted in the following EISs, including the City's Comprehensive Plan and subsequent amendments:

- *Lynnwood Link Extension Draft Environmental Impact Statement* by Sound Transit, July 2013
- *City of Shoreline Comprehensive Plan* update, adopted by Ordinance 649 on December 10, 2012

- *City of Shoreline Town Center Subarea Plan*, adopted by City Council, July 25, 2011
- *North City Sub-Area Plan*, City of Shoreline, Washington, adopted as a Comprehensive Plan Amendment, July 2001
- *City of Shoreline Transportation Master Plan*, adopted December 12, 2011.

Where appropriate, relevant information found in prior environmental and planning documents is referenced and considered in this DEIS.

Location of Background Information

See "Contact Persons" above.

Availability of this DEIS and Copies for Purchase

This DEIS is posted on the City's home webpage for the project: www.shorelinewa.gov/lightrail, and may be downloaded and reviewed for free. Desk copies are available for review at Shoreline City Hall (17500 Midvale Avenue N, Shoreline, WA, 98133) and at the Shoreline Library (345 NE 175th Street, Shoreline, WA 98133 and 19601 21st Ave NW, Shoreline, WA 98177).

Copies of this DEIS (printed or on compact discs) may be purchased from the City of Shoreline Department of Planning and Community Development (17500 Midvale Avenue N, Shoreline, WA, 98133, see "Contact Persons") for the cost of production.

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Chapter 1

Environmental Summary

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Chapter 1—Environmental Summary

1.1 Introduction

This chapter summarizes the background, purpose, and location of the Planned Action subarea, mitigation measures, and significant avoidable adverse impacts identified as a result of this Draft Environmental Impact Statement (DEIS) for the 185th Street Station Subarea Plan. The State Environmental Policy Act (SEPA) process is further described below in Section 1.3 and in Chapter 2. The summary in this chapter is intentionally brief. Readers should consult individual sections in Chapter 3 of this DEIS for detailed information concerning the affected environment, impacts, and mitigation measures.

1.2 Purpose and Background of the Station Subarea Plan and Subarea Location

1.2.1 Purpose and Background

In spring of 2013, the City of Shoreline entered into community-based visioning and planning to address future land use, transportation, and neighborhood enhancements in the community's light rail station subareas at NE 185th and NE 145th Streets along Interstate 5 (I-5). This DEIS analyzes alternatives associated with the NE 185th Street Station Subarea. The 185th Street Station Subarea Plan is being shaped by public and

stakeholder engagement and will result in a plan for transit-oriented land uses and zoning provisions in the subarea as well as supporting public space enhancements, multi-modal transportation and utility system improvements, and other public infrastructure and amenities associated with the plan.

The City's station subarea planning process is guided by Framework Policies adopted by the City Council in May 2012 as well as specific policies of the Land Use Element (LU20-LU43) adopted into the Comprehensive Plan in December 2012. Other policies and provisions of the City of Shoreline's Comprehensive Plan, as well as citizen visioning work that culminated in Vision 2029, and adopted plans such as the Transportation Master Plan also serve as a foundation for the station subarea plan and will be integrated into the plan as applicable.

The City will adopt the 185th Street Station Subarea Plan and a supporting Planned Action Ordinance and amend its current Comprehensive Plan and the Shoreline Municipal Code, including the Development Code (Title 20), as appropriate to support the adopted subarea plan and ordinance. Adoption of the Planned Action Ordinance would streamline environmental review for redevelopment consistent with the station subarea plan and regulations, in accordance with the State Environmental Policy Act (SEPA) rules.

With the adoption of the Planned Action Ordinance and subsequent implementation, over the next several decades, neighborhoods in the subarea would attract a vibrant mix of land uses that offer additional housing choices, businesses serving the neighborhood, jobs, and recreation opportunities, as well as other services to support new growth. In the vicinity of the new

light rail station, redevelopment would create a transit-oriented mix of land uses, increasing the number of residents living in proximity to the station to maximize ridership.

1.2.2 Location

Through a separate public process for the Lynnwood Link Extension, which included development of a DEIS, Sound Transit identified NE 185th Street on the east side of Interstate 5 (I-5), north of the overpass, as the preferred location for one of the two light rail stations to potentially be built in Shoreline. A park-and-ride structure, also to be constructed by Sound Transit, would be potentially located on the west side of I-5, also north of the 185th Street overpass. The City of Shoreline supports this proposed station location as Sound Transit's preferred alternative for the Lynnwood Link Extension, and identifies the location in the City's Comprehensive Plan Land Use Map.

For the purposes of developing the 185th Street Station Subarea Plan and completing environmental analysis for this DEIS, the City of Shoreline Planning Commission determined study area boundaries through considerations of factors such as policy direction, topography, ability to walk and bike to and from the station, and other existing conditions and influencing factors. The Planning Commission recommended using two study areas with separate boundary lines for the 185th Street Station Subarea Plan, and for this DEIS, the subarea is defined by these two study area boundaries, one that delineates a land use focus and the other that delineates a mobility (multi-modal transportation) focus. These study area boundaries were then reviewed and adopted by City Council.

Refer to **Figures 1-1 and 1-2** at the end of this chapter for depictions of the study area boundaries surrounding the 185th light rail station location. Together, the two study areas make up the “subarea” that is the focus of this planning process. The rectangular-shaped subarea includes portions of the Echo Lake, Meridian Park, and North City Neighborhoods of Shoreline and borders the north boundary of the Ridgecrest Neighborhood. N/NE 185th Street serves as a central west to east spine of the subarea from the Aurora Avenue N (State Route/SR 99) corridor at Shoreline's Town Center to the 15th Avenue NE corridor at the North City subarea. The 185th Street Station Subarea extends approximately one-half mile to the north and south of the 185th corridor.

1.2.3 Regional Planning Context

Shoreline is part of the Seattle metropolitan area. In anticipation of the region's growth, Sound Transit received voter approval to plan and extend light rail service from Seattle to Lynnwood, via the Lynnwood Link Extension north of Northgate, with two stops in Shoreline. Light rail represents a significant change to transit service in the region and Shoreline and provides additional opportunities for residents to connect to regional destinations. In addition to expanded transportation options, redevelopment in station areas will provide opportunities for redevelopment that is transit supportive and provides residents with a greater variety of services, housing choices, and amenities than currently exist.

Overall, the central Puget Sound region is making a voter approved \$25 billion investment in regional rapid transit. Planning in light rail station areas is consistent with regional planning initiatives, including the Growing Transit Communities

Partnership administered by Puget Sound Regional Council, which is designed to help make the most of the regional investment in transit by locating housing, jobs, and services close enough to transit so that more people will have a faster and more convenient way to travel.

1.3 State Environmental Policy Act Process

1.3.1 Planned Action

The City of Shoreline proposes to designate the 185th Street Station Subarea Plan as a Planned Action, pursuant to SEPA and implementing rules. According to the Washington Administrative Code (WAC) 197-11-164, a Planned Action is characterized by the following:

- Designated by a Planned Action Ordinance;
- Analyzed through an environmental impact statement that addresses significant impacts;
- Prepared in conjunction with a comprehensive plan, a subarea plan, a master planned development, a phased project, or with subsequent or implementing projects of any of these categories;
- Located within an Urban Growth Area (UGA);
- Not an essential public facility unless they are accessory to or part of a project that otherwise qualifies as a Planned Action; and

- Consistent with an adopted comprehensive plan (but comprehensive plan and code provisions may be amended as part of the process of adopting the Planned Action).

Projects meeting these requirements qualify as Planned Action projects and do not require a subsequent SEPA threshold determination, but still require a completed environmental checklist to be submitted. Future projects within the Planned Action area must be reviewed for consistency with the adopted Planned Action Ordinance, as well as City's zoning and development regulations, and development agreement where applicable. Projects within the defined Planned Action area would be required to acquire all necessary permits and satisfy all related public notice requirements, just as with other projects in the City.

The Final Environmental Impact Statement (FEIS) will identify a Preferred Alternative that will be the basis of the Planned Action Ordinance, along with a maximum level of growth allowed within the 185th Street Station Subarea. Consistency with this limit would be ensured through monitoring of incoming redevelopment applications and their approval consistent with the Subarea Plan, Planned Action Ordinance, and other applicable City of Shoreline regulations.

1.3.2 Prior Environmental Review

While SEPA analysis related to specific land use and zoning changes in the 185th Street Station Subarea was not conducted as part of Sound Transit's July 2013 Lynnwood Link Extension DEIS, Sound Transit analyzed conditions in the subarea and surrounding areas that would be affected by the construction of light rail

station and supporting facilities. Several topics and areas of analysis in the Sound Transit DEIS also are relevant to this DEIS for the 185th Street Station Subarea. In addition, the City of Shoreline Comprehensive Plan, Town Center Subarea Plan, North City Sub-Area Plan, all developed in accordance with SEPA, contain information relevant to the 185th Street Station Subarea. Where appropriate, relevant information found in these prior environmental and planning documents is referenced and considered in this DEIS.

1.4 Organization of this Document

This DEIS for the 185th Street Station Subarea Planned Action is organized into the following chapters:

- **Chapter 1 – Summary:** This chapter provides a brief discussion of the Alternative 1—No Action, as well as the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth. This chapter also summarizes the environmental review and the public involvement processes, as well as potential environmental impacts and recommended mitigations measures associated with each alternative.
- **Chapter 2 – Alternatives:** This chapter describes proposed objectives and provides a more detailed description of Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth, related to the 185th Street Station Subarea. It also summarizes public review opportunities.
- **Chapter 3 – Affected Environment, Analysis of Potential Significant Impacts, and Mitigation Measures:** This chapter describes the existing conditions for each

environmental topic area and includes an analysis of the potential significant impacts associated with each EIS alternative. Recommended mitigation measures to reduce impacts to less than significant levels are also discussed.

- **Chapter 4 – References:** This chapter contains a list of all documents and personal communications referenced in the analyses contained in Chapter 3.
- **Chapter 5 – Distribution List:** This chapter contains a list of all government agencies and community groups who will receive notices of availability or copies of the DEIS.

1.5 Public and Stakeholder Involvement and the Planning Process

Public and stakeholder involvement has been an integral part of developing the 185th Street Station Subarea Plan. The City of Shoreline has created opportunities for public, stakeholder, and agency engagement, including review and comment throughout the planning and environmental review process, as follows:

- **Project Webpages.** The City has created project webpages for the subarea plan and DEIS, accessible via: www.shorelinewa.gov/lightrail. The information on the webpages provides background information on the subarea plan and DEIS, describes the schedule, and provides links to relevant documents as they are released for public review. Contact information for City staff is also provided to allow the public to submit comments or ask questions about the subarea plan and DEIS. In the future,

information related to the Planned Action Ordinance and FEIS also will be posted on the webpages.

- **Scoping Comment Period.** Public and agency comments were solicited in a 21-day scoping period from January 16, 2014 to March 6, 2014. During this period, the general public, as well as public agencies and stakeholders, were invited to submit written comments on the scope of the EIS and offer written suggestions. The scoping notice is provided in the Appendix. Based on public and stakeholder input received, analysis of public services (including police, fire, and school services) was added to the scope of the DEIS. Surface water runoff and management also was added, as part of the Utilities section, along with habitat and vegetation considerations (see Parks, Recreation, and Open Space section).
- **Community Workshops/Public Meetings.** During the scoping period, the City also hosted a public workshop on February 20, 2014, along with several stakeholder group sessions held with interested agencies and organizations. In addition to taking comments from the public on February 20, the City answered questions about the subarea plan and EIS. In an earlier public and stakeholder workshop series held in October 2013, the City and engaged attendees in planning exercise to graphically illustrate potential options for organization of land uses in the subarea. Previous to these workshop series, the City held visioning workshops in the spring and summer of 2013 to gather public comments and ideas on the vision for the station subarea.

- **DEIS Comment Period and Public Meeting.** This DEIS was released for public review on June 9, 2014, initiating a comment period through July 10, 2014. The general public, as well as public agencies and stakeholders are invited to submit comments on the alternatives, identified environmental impacts, and mitigation measures. A public meeting will be held on June 3, 2014 to provide another opportunity to gather comments and answer questions on the DEIS. See the Fact Sheet, Page 4, for more information. The City will issue a FEIS anticipated in fall 2014 that will provide responses to comments and identifying a proposed alternative informed by comments received and analysis in the DEIS.
- **Public Hearing and Legislative Meetings.** The Planning Commission and City Council have held and will hold study sessions, hearings, and deliberations on the subarea plan development and design standards associated with the Planned Action Ordinance. Please see the City's website (www.shorelinewa.gov) for a schedule of meetings. A public hearing with the Planning Commission is scheduled for July 10, 2014, which will provide an additional opportunity to gather comments and answer questions on the DEIS. See the Fact Sheet, Page 4 for more information. City Council meetings will occur in fall 2014. Interested citizens, stakeholders, and agency representatives should check the City's website for these meeting schedules and agendas.

Figures 1.3 and 1.4 at the end of this section illustrate subarea planning process and DEIS/FEIS review process.

1.6 Objectives and Alternatives

Objectives

Washington’s State Environmental Policy Act (SEPA) requires a statement of objectives that address the purpose and need for the proposal and around which reasonable alternatives can be evaluated. The following objectives are provided to address the purpose and need for the 185th Street Station Subarea Planned Action.

- Plan for future redevelopment of the 185th Street Station Subarea in Shoreline by defining transit-oriented land use options that will increase and support the opportunity for more future and existing residents’ to conveniently access transit.
- Create a vibrant, transit-oriented station subarea that enhances neighborhood character and provides amenities such as signage and wayfinding elements, parks, open space and community gathering areas, public art, lighting, and streetscape features.
- Increase housing choices and options for all income levels, including affordable housing.
- Introduce opportunities for neighborhood business, shopping, and services.
- Encourage use of multi-modal transportation modes by:
 - Enhancing bicycle, pedestrian safety and mobility;
 - Improving local transit connections to and from the light rail station;

- Minimizing traffic impacts to surrounding neighborhoods through traffic calming, as well as improvements to intersections and streets; and
 - Identifying mechanisms to manage parking in the subarea.
- Protect environmentally sensitive areas.
 - Foster economic development.
 - Promote sustainable development by encouraging green building and green infrastructure treatments in the subarea.
 - Plan for appropriate transitions between new and existing development through a phased program for change that is compatible with the community’s vision for the subarea.

Proposed Action and Alternatives

This DEIS evaluates three alternatives that establish a range of land use patterns and development types within the 185th Street Station Subarea. These include Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth. For more information about land use and redevelopment characteristics related to the three alternatives, refer to Chapter 3, Section 3.1 of this DEIS. For more information about population and growth rate assumptions, refer to Chapter 3, Section 3.2.

Alternative 1—No Action

Under the Alternative 1—No Action, the 185th Street Station Subarea Plan would not be adopted, and existing planning and zoning provisions would remain. With Alternative 1—No Action,

the light rail station and park and ride structure would be constructed. However, land uses in the station subarea would not change, and there would not be opportunities for transit-oriented development that would increase the number of residents in proximity to the light rail station. Improvements and enhancements associated with new development would not occur and capital investment in the subarea would be limited.

Because property owners would still be allowed to maximize development potential under existing zoning, it is anticipated that some property owners may choose to add accessory dwelling units or increase the number of dwelling units on their existing parcels. As such, population in the subarea would be expected to increase to a total of 8,734 people within the next 20 years (by 2035 or sooner). Compared to the 2014 estimated population of the subarea of 7,944, this would be an additional 790 people. Also under Alternative 1—No Action, there would be an expected 3,639 households and 1,736 jobs within the station subarea by 2035 or sooner, compared to the 2014 levels of 3,310 households and 1,448 jobs. In summary, under Alternative 1—No Action an estimated 329 new households and 288 new jobs would be added in the subarea by 2035.

Alternative 2—Some Growth

Under Alternative 2—Some Growth, the 185th Street Station Subarea would transition from current land uses, which are predominantly single family homes, church properties, and the Shoreline Center site, to a mix of transit-oriented development land uses. The new framework for land use and supporting improvements in the station subarea would include zoning changes focused along N and NE 185th Street, 10th Avenue NE,

and NE 180th Street, connecting a corridor between Shoreline's Town Center (Aurora Avenue) and the North City District.

Alternative 2—Some Growth would increase the population to approximately 17,510 people and facilitate the opportunity for approximately 7,296 households and 9,750 jobs in the subarea, including a portion of the Town Center District and all of the North City shopping area, with full build-out of the proposed zoning. This also assumes that the Shoreline Center site is completely redeveloped to the zoned density. Growth and change would be expected to occur gradually, over many decades in the subarea. This would result in a net increase of approximately 9,566 people, 3,986 households, and 8,302 jobs in the subarea at full build-out. Based on regional growth trends, it is anticipated that full build-out would take approximately 30 to 50 years (2045 to 2065) or longer to be realized.

Alternative 3—Most Growth

Under Alternative 3—Most Growth, the 185th Street Station Subarea would transition from current land uses to a compact village of mixed land uses surrounding the light rail station. This new framework for land use and supporting improvements would involve more extensive changes in zoning (proposing higher densities and affecting a larger area than under Alternative 2) surrounding the proposed light rail station, but would still be focused generally along the N-NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor.

Alternative 3—Most Growth would increase the population of the subarea to 37,315 at full build-out. This growth would facilitate the opportunity for 15,548 households and approximately 27,050

jobs in the station subarea, including a portion of the Town Center District, all of the North City shopping area, and the Shoreline Center with full build-out of the proposed zoning. This would result in a net increase of 29,371 people, 12,238 households, and 25,602 jobs in the subarea. As under Alternative 2—Some Growth, growth and change under Alternative 3—Most Growth would be expected to occur gradually, over many decades. Based on regional growth trends, it is anticipated that full build-out would take approximately 60 to 100 years (2075 to 2115) or longer to be realized.

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

Adoption of the 185th Street Station Subarea Planned Action will provide additional housing and employment options, increasing the number of people living and working in proximity to the light rail station. The plan will be facilitated by changes in land use and zoning, as well as development provisions such as building heights, design standards, and parking ratios. Plan and regulation changes, along with capital improvements, and other measures will support redevelopment of the area to more intensive mixed-use character consistent with the region and City's vision for light rail station areas.

The DEIS provides analysis of a reasonable range of alternatives. The City will make a determination about the Preferred Alternative based on the results of this analysis and public and agency comments received on the DEIS. The Preferred Alternative may be a hybrid of the alternatives in the DEIS, or a new

alternative. Additional analysis will be provided in the FEIS to analyze potential impacts associated with the Preferred Alternative. The FEIS also will describe specific capital improvement projects and design provisions to support implementation of the Preferred Alternative, which ultimately will become the basis for the 185th Street Station Subarea Plan.

New development would facilitate transportation improvements, along with development of parks and public spaces, and other neighborhood amenities. The station subarea would change from a predominantly single family neighborhood to a more urban neighborhood with a mix of densities, including single family housing around the periphery transitioning to various types of attached single family and then to multi-family and mixed use in areas nearest to the station. Major issues associated with the potential change in land use include the change in character of the subarea from single family to more urban residential and mixed use development, as well as the associated demand for transportation improvements, public services, and utilities. Issues to be resolved include selection of a Preferred Alternative, which will be presented and analyzed in the FEIS and development of the final subarea plan.

1.8 Summary of Potential Impacts and Mitigation Measures

Table 1-1, starting on page 11 summarizes the environmental impacts and mitigation measures for each element of the environment evaluated in Chapter 3 of the DEIS. The summary addresses impacts and mitigation measures for all three

alternatives: Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth.

1.9 Significant Unavoidable Adverse Impacts

This section addresses the potential for significant unavoidable adverse impacts, summarizing the results of the environmental analysis. No significant unavoidable adverse impacts are anticipated with implementation of the proposed and recommended mitigation measures.

Land Use Patterns, Plans and Policies

Alternative 2—Some Growth and Alternative 3—Most Growth would result in greater intensity of land uses, housing and employment in the subarea than Alternative 1—No Action. While implementation of either Alternative 2 or 3 would require updating the City's Comprehensive Plan and revising Municipal Code provisions (including zoning and Development Code requirements), the proposed changes to land use patterns do conform to and support the City's Comprehensive Plan policy direction and regional vision for light rail station subareas.

Impacts on land use compatibility would be mitigated with implementation of design and transition standards in the City's Development Code, along with new development provisions adopted to support the subarea plan. Required Comprehensive Plan amendments include updating the plan's land use map, which would be adopted concurrently with the 185th Street Station Subarea Plan and Planned Action Ordinance, along with revisions to zoning and the Development Code. With

implementation of a high-capacity transit-supportive alternative and application of mitigation measures and amendments, no significant unavoidable adverse impacts on land use patterns, plans, and policies would be anticipated.

Population, Housing, and Employment

Implementation of either Alternative 2—Some Growth and Alternative 3—Most Growth would result in a greater variety of housing types, as well as an increased quantity of housing in the subarea. Development Code provisions and additional mitigation measures would encourage affordable housing options in the subarea. With application of mitigation measures and Development Code amendments, no significant unavoidable adverse impacts on housing would be expected. Implementation of either Alternative 2 or Alternative 3 would result in beneficial effects by expanding housing opportunities to fit a fuller range of needs in the community (with Alternative 3 overall providing the greatest quantity of housing and range of housing types).

Under Alternative 1—No Action, future housing opportunities would be limited to primarily various types of single family (with the exception of areas within the Town Center and North City Subareas). As such, Alternative 1—No Action would not accommodate the same range of housing needs as Alternatives 2 and 3. Alternative 1 would not be as beneficial in meeting community and regional objectives related to expanding housing options, including affordable housing.

Transportation

Although the effects of additional vehicles in creating traffic congestion can be mitigated to varying degrees through the

proposed transportation improvements, the actual increases in traffic under any of the alternatives would be considered an unavoidable impact. The significance and negativity of this impact can be mitigated with improvements and transportation demand management over time. Increases in traffic would occur under all three alternatives, Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth., as a result of growth in traffic throughout the city and in the subarea regardless of redevelopment activities due to development of the light rail station and other expected growth and change in the city and region. As discussed earlier in this chapter, the rate of growth and change in the subarea would be expected to occur very gradually, over many decades. Development of the Preferred Alternative would occur in phases, allowing increases in traffic to be addressed with planned improvements and transportation demand management over time, meeting City concurrency standards.

A basic goal of implementing high-capacity transit in the region is to reduce the overall impact of traffic and provide more opportunities to citizens to travel via fast, efficient, and reliable services. The more people living and working near light rail transit stations, the more opportunities there would be for people to use the high-capacity transit system, rather than drive to and from destinations. This, in turn, would result in beneficial effects to the environment such as reductions in traffic-generated pollution and greenhouse gas emissions.

Public Services

The increased population will require additional public services such as police, fire, emergency services, schools, parks and

recreation, solid waste, and other services. Under Alternative 2—Some Growth and Alternative 3—Most Growth, the demand for increased services and facilities would occur gradually, over many decades, and the increases in housing and employment would help generate additional revenue and funding for needed services. Development fees, sales tax revenues, property taxes generated from new households, and customer service charges to new customers would help to offset the costs of providing additional public services. Under Alternative 1—No Action, there would be an increase in demand for public services, but at a much lower level than under Alternative 2 or 3. Funding for new services would be expected to keep pace with demand under either Alternative 2 or 3. As such, no significant unavoidable adverse impacts are anticipated.

Utilities

Increased residential and employment population in the subarea would increase demand for utilities such as water, wastewater, surface water management, communications, and energy services under any of the alternatives. Alternatives 2 and 3 would create a substantially greater demand for utility services over time than Alternative 1. Because growth would be expected to occur very gradually over many decades, customer fees, service charges, and other funding would be obtained over time to help to offset the costs of providing additional utility services within the subarea, allowing service providers the opportunity to fiscally manage the increased demand. Given these considerations and application of mitigation measures such as capital improvement projects, no significant unavoidable adverse impacts would be anticipated.

Table 1-1 Summary of Potential Impacts and Mitigation Measures—All Alternatives

<i>Environmental Element</i>	Alternative 1— No Action	Alternative 2— Some Growth	Alternative 3— Most Growth
<p>Land Use Patterns, Plans, and Policies</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time. Updates to Shoreline Municipal Code, Development Code standards to encourage best design practices and design features that enhance the neighborhood and benefit the community and region (green building, Universal Design, public spaces/art integration, streetscape and landscape, etc.). See Section 3.1 of the DEIS for additional discussion about mitigation measures. 	<p>Although land use patterns under Alternative 1—No Action would remain consistent with current conditions and the level of change in urban form would be minimal, anticipated enhancements to neighborhood character as a result of private and public investment in the subarea would not be realized.</p> <p>Land use compatibility would not be a concern in general, although there is the potential for ongoing infill redevelopment of single family homes, addition of accessory dwelling units, and conversion to duplexes as individual property owners build to the allowed density of R-6.</p> <p>Alternative 1 is not consistent with adopted federal, state, regional, and City goals, policies, objectives and initiatives related to land use that supports high-capacity transit.</p>	<p>Alternative 2—Some Growth and Alternative 3—Most Growth would change land use patterns from current predominantly detached single family uses to mixed use, multifamily and attached single family use, along with some neighborhood-supporting retail and employment uses. The intensity of land use, including density, building height, and mass of urban form would be greater under Alternative3 than under Alternatives 2.</p> <p>While potential impacts to land use compatibility between new land uses and existing land uses in the subarea are the primary concern, these would be mitigated through a transition zone between more intensive uses and single family zones, as well as a variety of design and development regulations related to building setbacks, open space, and architectural treatments (such as step backs in the building façade).</p> <p>Required Comprehensive Plan amendments include updating the plan’s land use map, which would be adopted concurrently with the 185th Street Station Subarea Plan and Planned Action Ordinance, along with revisions to zoning and the Development Code. With application of mitigation measures and amendments, no significant unavoidable adverse impacts on land use patterns, plans, and policies would be anticipated.</p> <p>Alternatives 2 and 3 are consistent with and will reinforce goals, policies, objectives and initiatives (federal, state, regional, and local) that call for integrated land use and transportation solutions and vibrant transit-oriented communities around high-capacity transit stations.</p> <p>Because it is anticipated that the growth and change in the subarea would occur over many decades, the City and other service providers would be able to proactively monitor and plan for growth over time as part of ongoing planning and future comprehensive plan updates.</p>	

<i>Environmental Element</i>	Alternative 1— No Action	Alternative 2— Some Growth	Alternative 3— Most Growth
<p>Population, Housing, and Employment</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • It will be important for development regulations to provide specific requirements and/or incentives for affordable housing. • Design and development regulations that support the full diversity housing and livability needs of the community. • The City would monitor achievement of affordable housing goals as the neighborhood redevelops over time. • For additional discussion, refer to Section 3.2 of the DEIS. 	<p>Under Alternative 1—No Action, future housing opportunities would be limited and would not accommodate the same range of housing needs, choice, and affordability as Alternatives 2 and 3.</p> <p>With limited population and employment growth, the subarea would generate less economic development potential than under Alternative 2 or 3.</p>	<p>Under Alternative 2—Some Growth and Alternative 3—Most Growth, a greater variety of housing types, as well as an increased quantity of housing in the subarea. Development Code provisions and additional mitigation measures would require and encourage affordable housing options in the subarea. Implementation of either Alternative 2 or Alternative 3 would result in beneficial effects by expanding housing opportunities to fit a fuller range of needs in the community (with Alternative 3 overall providing the greatest quantity of housing and range of housing types).</p> <p>Both Alternatives would generate increases in population as well as jobs/employment opportunities. The added jobs would help the City achieve a better jobs-to-housing ratio. Increased population and employment would bring economic development opportunities.</p>	



Environmental Element	Alternative 1— No Action	Alternative 2— Some Growth	Alternative 3— Most Growth
<p>Transportation</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time. • Specific improvements such as intersection timing and phasing improvements and additional capacity at intersections. • Street improvements and enhanced pedestrian and bicycle connections. • Bike sharing and car sharing programs. • Shared parking agreements and parking management programs including residential parking zones. • Local transit signal priority and improvements to facilitate efficient transit connections. • Refer to Section 3.3 of the DEIS for specific locations of recommended improvements and other mitigation measures. These will be further evaluated with the Preferred Alternative in the FEIS. 	<p>Increases in traffic would occur under all three alternatives as a result of growth in traffic throughout the city and in the subarea regardless of redevelopment activities due to development of the light rail station and other expected growth and change in the city and region. At full build-out Alternative 3 would generate the most traffic and require the most mitigation. Parking demand would increase with the level of new development implemented over time, and would be highest under Alternative 3 at full build-out.</p> <p>As discussed earlier in this chapter, development in the subarea would occur gradually, over many decades under either Alternative 2 or 3, and it is anticipated that the pace of growth of either of these action alternatives would be similar. As such, improvements could be funded incrementally through state and federal grants as well as other funding strategies and capital improvements, meeting City growth management and concurrency requirements. Behavioral changes in driving habits and transportation demand management strategies, such as encouraging local transit use, bike share programs, flexible work and commute hours, and other techniques could help to reduce traffic and miles traveled over time.</p> <p>Over the long term, the level of improvements needed to address traffic would be greater under Alternative 3, than under Alternative 2, and substantially less than under Alternative 1. However, a basic goal of implementing high-capacity transit in the region is to reduce the overall impact of traffic and provide more opportunities to citizens to travel via fast, efficient, and reliable services. The more people living and working near light rail transit stations, the more opportunities there would be for use of the high-capacity transit system, rather than drive to and from destinations. This, in turn, would result in beneficial effects to the environment such as reductions in traffic-generated pollution and greenhouse gas emissions.</p>		

Environmental Element	Alternative 1— No Action	Alternative 2— Some Growth	Alternative 3— Most Growth
<p>Public Services</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time. • Development fees, sales tax revenues, property taxes generated from new households, and customer service charges to new customers would help to offset the costs of providing additional public services, and funding for new services would be expected to keep pace with demand. • Service providers reviewing the DEIS may make additional recommendations for mitigation measures, which will be integrated into the FEIS. • Refer to Section 3.4 of the DEIS for additional discussion. 	<p>Under Alternative 1—No Action, there would be an increase in demand for public services, but at a much lower level than under Alternatives 2 or 3.</p>	<p>The increased population will require additional public services such as police, fire, emergency services, schools, parks and recreation, solid waste, and other services. Ultimately, the highest demand would occur under build-out of Alternative 3—Most Growth.</p> <p>New schools would be needed to serve the growing neighborhood under Alternative 2 or 3, as well as additional parks, and increased levels of service of police, fire, and emergency services. The demand for other services, including City government, library, and community health services also would increase. Alternative 3 would generate the highest demand at build-out of the alternatives.</p> <p>Under both Alternatives 2 and 3, the demand for increased services and facilities would occur gradually, over many decades, and the increases in housing and employment would help generate additional revenue and funding for needed services. Redevelopment under Alternatives 2 or Alternative 3 would be expected to occur at the same general pace, which would allow service providers to plan proactively to meet the needs of the increasing population over time.</p> <p>In the coming years, service providers should update plans to align with adopted Station Subarea Plan, monitor growth over time, and adapt services and facilities to meet needs. Providers also should complete fiscal analysis to determine funding needs and budgeting allocations for capital improvements, staffing, equipment, and other resources to support providing services in the subarea as the population grows. The School District would continue its policy of retaining properties for future use in the subarea as may be needed for schools and facilities as population and households increases. The City could analyze potential locations for new neighborhood parks in the subarea and plan for future acquisition, design, and development.</p>	



Environmental Element	Alternative 1— No Action	Alternative 2— Some Growth	Alternative 3— Most Growth
<p>Utilities</p> <p>Mitigation Measures:</p> <ul style="list-style-type: none"> • Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time. • Pursuit of federal and state grants and funding sources to support infrastructure projects. • Consideration of the potential for regional stormwater facilities to serve the growing neighborhood. • Requirements for Low Impact Development and green infrastructure solutions would reduce the demand for surface water management. • Customer fees and charges, development fees, sales tax revenues, and property taxes generated from new households, would help to offset the costs of infrastructure improvements . • Refer to Section 3.5 of the DEIS for additional discussion. 	<p>Under Alternative 1, there would be an increase in demand for utility services with ongoing growth, but it would be minimal in comparison to that generated by Alternative 2 or Alternative 3. There is also the likelihood that less investment in the subarea due to the lack of change could have the unintended consequence of continued degradation of aging infrastructure. Problems related to drainage and other utility services would worsen over time.</p>	<p>Increased residential and employment population in the subarea would generate a higher demand for utilities such as water, wastewater, surface water management, energy (electricity and natural gas), and communications under any of the alternatives. Alternative 3 would generate the highest level of demand for utility services at build-out due to the extent of redevelopment proposed. With substantive investments in infrastructure systems over time, problems related to drainage and aging facilities could be addressed.</p> <p>Because growth would be expected to occur very gradually over many decades, customer fees, service charges, and other funding would be obtained over time to help to offset the costs of providing additional utility services within the subarea, allowing service providers the opportunity to fiscally manage the increased demand. Investment in infrastructure improvements and facility upgrades would be expected to keep pace with incremental demand due to the long term growth of the subarea under either Alternative 2 or Alternative 3, which would be expected to redevelop at a similar pace over time.</p> <p>Technological advancements in green building materials and energy conservation could be leveraged with new redevelopment projects in the subarea, which could result in benefits such as reduced energy use and greenhouse gas emissions.</p>	

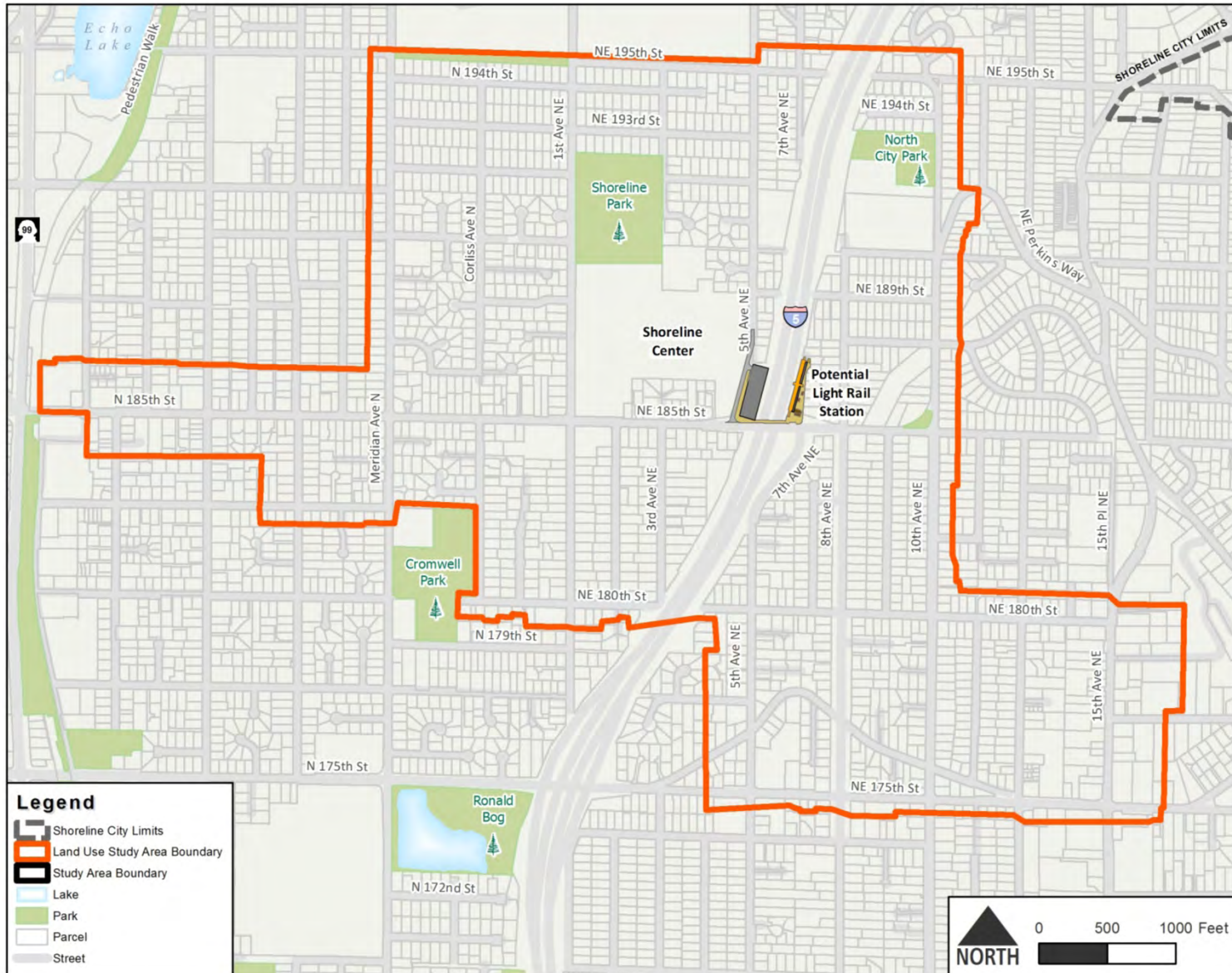


Figure 1-1 Land Use Study Area Boundaries

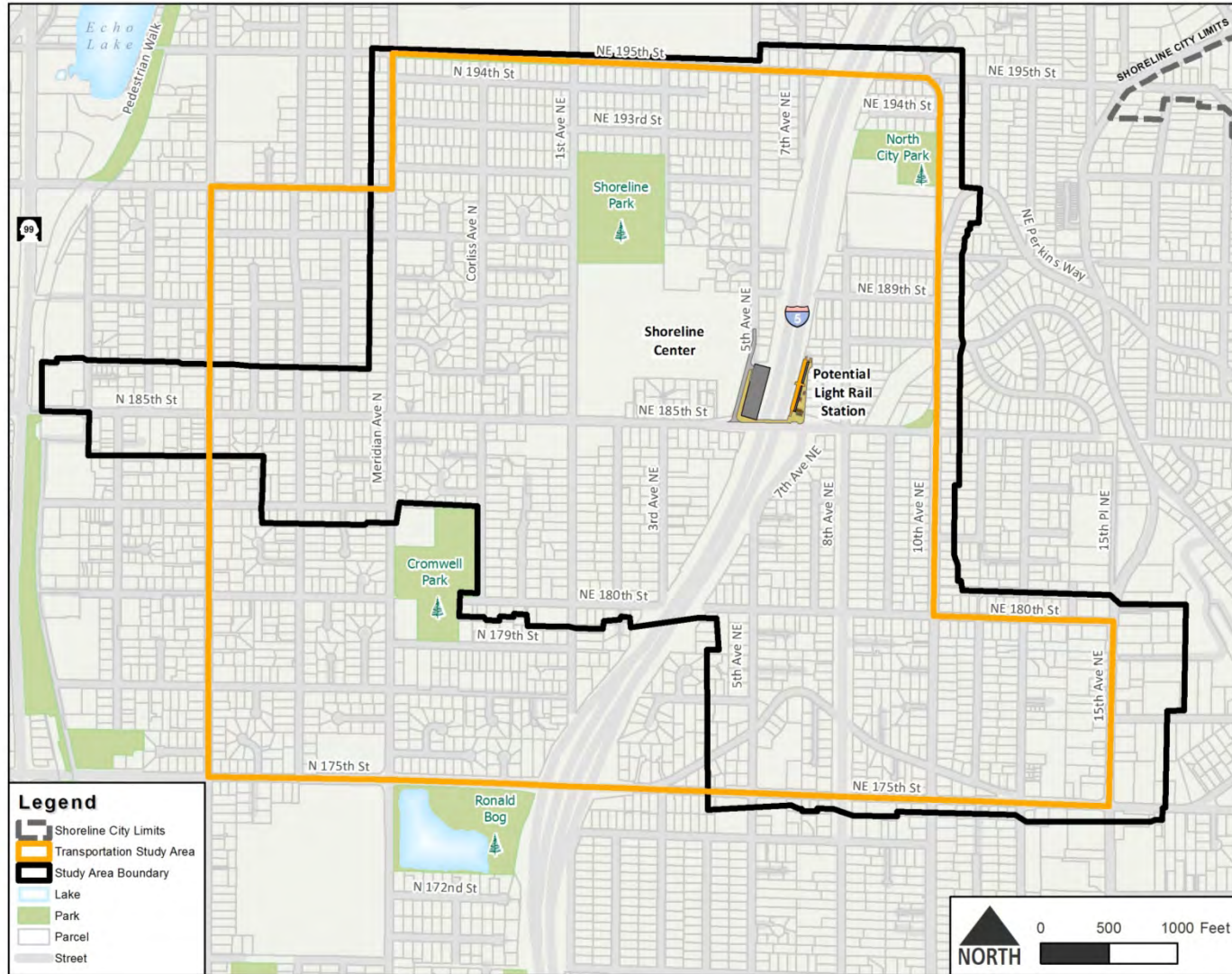


Figure 1-2 Mobility (Multi-Modal Transportation) Study Area Boundaries

185th Station Subarea Plan Schedule



Figure 1.3 Subarea Planning Process/Timeline

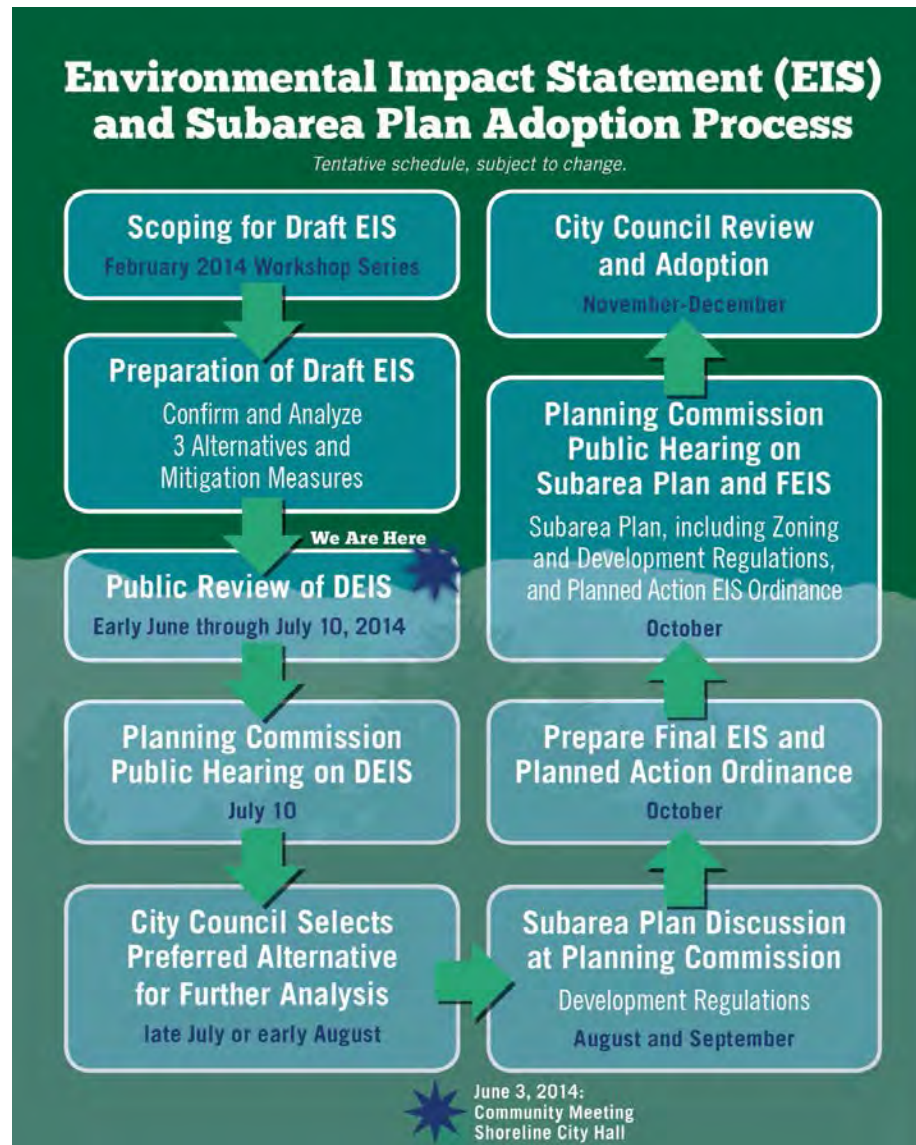


Figure 1.4 DEIS and FEIS/185th Street Station Subarea Plan Adoption Process

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Chapter 2

Description of the Alternatives DRAFT ENVIRONMENTAL IMPACT STATEMENT

Chapter 2—Description of the Alternatives

2.1 Introduction—Planned Action Provisions of the State Environmental Policy Act

The City of Shoreline has entered into this subarea planning process to more directly and fully address future land use and transportation needs in the NE 185th Street light rail station subarea. As an outcome of this planning process, the City will adopt the 185th Street Station Subarea Plan and amend existing plans and regulations to support implementation of the plan. While the 185th Street Station Subarea Plan is consistent with and supports the City of Shoreline’s Vision 2029, Comprehensive Plan, Transportation Master Plan, and other adopted plans and policies, certain provisions and maps of the Comprehensive Plan and Shoreline Municipal Code would need to be amended.

This Draft Environmental Impact Statement (DEIS) analyzes potential alternatives for the 185th Street Station Subarea Plan, including Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth. Under Alternative 1, the No Action Alternative, the current adopted land use and zoning in the subarea would be retained. Under the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth, land use and zoning would be amended.

Also as part of the subarea planning process, and consistent with the State Environmental Policy Act (SEPA) rules, the City intends to adopt a Planned Action Ordinance to support the 185th Street

Station Subarea Plan. The Planned Action Ordinance would streamline environmental review for development consistent with the subarea plan and supporting regulations. The basic steps in designating Planned Action projects are:

1. Prepare an environmental impact statement (EIS);
2. Designate the Planned Action improvement area by ordinance, where future projects would develop consistent with the EIS analysis; and
3. Review permit applications for future projects for consistency with the designated Planned Action (based on an environmental checklist prepared by project proponents to compare proposed improvements to the Planned Action analysis).

The intent is to provide more detailed environmental analysis during formulation of planning proposals, rather than at the project permit review stage. The Planned Action designation by a jurisdiction reflects a decision that adequate environmental review has been completed and further environmental review under SEPA, for each specific development proposal or phase, will not be necessary if it is determined that each proposal or phase is consistent with the development levels specified in a Planned Action Ordinance. Although future proposals that qualify as Planned Actions would not be subject to additional SEPA review, they would be subject to application notification and permit process requirements.

This DEIS addresses step 1 identified above by analyzing the potential environmental impacts related to three alternatives and prescribing mitigation to address potential impacts. The analysis

in the DEIS addresses variations within the three alternatives related to land use and zoning and the extent of growth and development that would result from implementation. Because this DEIS addresses the City's Comprehensive Plan and regulations and potential amendments to them, Section 2.2 Background discusses the aspects of the current plans and regulations that relate to the subarea. Section 2.3 describes the DEIS alternatives in more detail. Section 2.4 provides information on past and current relevant environmental review and planning processes.

2.2 Background

Background planning regulations and provisions are summarized below, including the Washington State Growth Management Act, Puget Sound Region Vision 2040 and the Growing Transit Communities Partnership, Countywide Planning Policies, and the City of Shoreline Vision 2029, Comprehensive Plan, and other relevant City planning policies and development regulations.

2.2.1 Washington State Growth Management Act

The Washington State Growth Management Act (GMA) identifies a comprehensive framework for managing growth and development within local jurisdictions. The City of Shoreline is required to plan in accordance with GMA. Comprehensive plans for cities planning under GMA must include the following elements: land use (including a future land use map), housing, transportation, public facilities, parks and recreation, economic development, and utilities. Additional elements such as subarea plans may be added at the option of the local jurisdiction. A GMA comprehensive plan must provide for adequate capacity to

accommodate the city's share of projected regional growth. It must also ensure that planned and financed infrastructure can support planned growth at a locally acceptable level of service. Development regulations are required to be consistent with and implement the comprehensive plan.

The GMA established fourteen statutory goals that guide the development of comprehensive plans, and for a plan to be valid, it must be consistent with these:

1. Guide urban growth to areas where urban services can be adequately provided;
2. Reduce urban sprawl;
3. Encourage efficient multi-modal transportation systems;
4. Encourage the availability of affordable housing to all economic segments of the population;
5. Encourage economic development throughout the state;
6. Assure private property is not taken for public use without just compensation;
7. Encourage predictable and timely permit processing;
8. Maintain and enhance natural resource-based industries;
9. Encourage retention of open space and development of recreational opportunities;
10. Protect the environment and enhance the state's quality of life;
11. Encourage the participation of citizens in the planning process;
12. Ensure adequate public facilities and services necessary to support development;

13. Identify and preserve lands and sites of historic and archaeological significance; and
14. Manage shorelines of statewide significance.

2.2.2 Puget Sound Region Vision 2040 and Growing Transit Communities Partnership

The proposed 185th Street Station Subarea Plan is consistent with the regional long-range plan, Vision 2040, as well as land use and transportation planning initiatives to support the region's investment in high-capacity transit, as described further below.

Vision 2040

Vision 2040 is an integrated, long-range vision for maintaining a healthy region and promoting the well-being of people and communities, economic vitality, and a healthy environment for the central Puget Sound region. It contains an environmental framework, a numeric regional growth strategy, policy sections guided by overarching goals, implementation actions, and measures to monitor progress.

The following overarching goals provide the framework for each of the six major policy sections of VISION 2040.

- **Environment**—The region will care for the natural environment by protecting and restoring natural systems, conserving habitat, improving water quality, reducing greenhouse gas emissions and air pollutants, and addressing potential climate change impacts. The region acknowledges that the health of all residents is connected to the health of the environment. Planning at all levels should consider the impacts of land use,

development patterns, and transportation on the ecosystem.

- **Development Patterns**—The region will focus growth within already urbanized areas to create walkable, compact, and transit-oriented communities that maintain unique local character. Centers will continue to be a focus of development. Rural and natural resource lands will continue to be permanent and vital parts of the region.
- **Housing**—The region will preserve, improve, and expand its housing stock to provide a range of affordable, healthy, and safe housing choices to every resident. The region will continue to promote fair and equal access to housing for all people.
- **Economy**—The region will have a prospering and sustainable regional economy by supporting businesses and job creation, investing in all people, sustaining environmental quality, and creating great central places, diverse communities, and high quality of life.
- **Transportation**—The region will have a safe, cleaner, integrated, sustainable, and highly efficient multimodal transportation system that supports the regional growth strategy, promotes economic and environmental vitality, and contributes to better public health.
- **Public Services**—The region will support development with adequate public facilities and services in a coordinated, efficient, and cost-effective manner that supports local and regional growth planning objectives.

Vision 2040 includes multi-county policies to support each of these major policy sections. These policies serve as foundational

guidance for countywide planning policies in King County and also for comprehensive planning and subarea planning in Shoreline.

Growing Transit Communities Partnership

In recognition of the \$25 billion investment the central Puget Sound region is making a voter approved regional rapid transit, the Growing Transit Communities Partnership is designed to help make the most of this investment by locating housing, jobs, and services close enough to transit so that more people will have a faster and more convenient way to travel. The Partnership developed a comprehensive set of Corridor Action Strategies, as well as other tools to support development of jobs and housing in areas associated with transit investments. For more information visit: <http://www.psrc.org/growth/growing-transit-communities/growing-communities-strategy/>

The Partnership also worked with the Center for Transit-Oriented Development to create a People + Place Typology for the region's 74 high-capacity transit station areas. The 185th Street station area in Shoreline was designated with the typology, "Build Urban Places," characterized as follows.

"Build Urban Places transit communities are neighborhoods or centers with weak to emerging real estate markets and lower physical form and activity, located primarily along major highways or arterials in the middle sections of the North and South corridors respectively. With low risk of displacement and good existing or future transit access to job centers these communities are poised for medium-term growth, however, their existing physical form and activity levels limit TOD potential. Key strategies focus on market-priming through strategic planning

and key infrastructure improvements in order to attract pioneering, market rate TOD."

Key strategies for the "Build Urban Places" typology include:

- Intensify activity with transformative plans for infill and redevelopment.
- Identify and fund catalytic capital facilities investments.
- Provide a full range of tools for new affordable housing production.
- Conduct a community needs assessment and make targeted investments.

The 185th Street Station Subarea Plan is carrying these strategies forward.

2.2.3 Countywide Planning Policies

As part of the comprehensive planning process, King County and its cities have developed countywide planning policies. These policies were designed to help the 39 cities and the County address growth management in a coordinated manner. The policies were adopted by King County Council, and subsequently ratified by cities, including the City of Shoreline, in 2013.

Taken together the countywide planning policies address issues related to growth, economics, land use, and the environment. Specific objectives include:

- Implementation of Urban Growth Areas;
- Promotion of contiguous and orderly development;

- Siting of public capital facilities;
- Creating affordable housing plans and criteria; and
- Ensuring favorable employment and economic conditions in the County.

The countywide planning policies also set growth targets for cities. Refer to Section 3.2 for the growth targets established for Shoreline. As a precursor to the countywide planning policies, the vision and framework for King County 2030 call for *vibrant, diverse and compact urban communities*, stating that:

“Within the Urban Growth Area little undeveloped land now exists and urban infrastructure has been extended to fully serve the entire Urban Growth Area. Development activity is focused on redevelopment to create vibrant neighborhoods where residents can walk, bicycle or use public transit for most of their needs.”

Other provisions and policies relevant to the station subarea plan include the following.

Environment

- EN-2** Encourage low impact development approaches for managing stormwater, protecting water quality, minimizing flooding and erosion, protecting habitat, and reducing greenhouse gas emissions.
- EN-16** Plan for land use patterns and transportation systems that minimize air pollution and greenhouse gas emissions, including:

- Maintaining or exceeding existing standards for carbon monoxide, ozone, and particulates;
- Directing growth to Urban Centers and other mixed use/ high density locations that support mass transit, encourage non-motorized modes of travel and reduce trip lengths;
- Facilitating modes of travel other than single occupancy vehicles including transit, walking, bicycling, and carpooling;
- Incorporating energy-saving strategies in infrastructure planning and design;
- Encouraging new development to use low emission construction practices, low or zero net lifetime energy requirements and “green” building techniques; and
- Increasing the use of low emission vehicles, such as efficient electric-powered vehicles.

EN-19 Promote energy efficiency, conservation methods and sustainable energy sources to support climate change reduction goals.

EN-20 Plan and implement land use, transportation, and building practices that will greatly reduce consumption of fossil fuels.

Development Patterns

DP-2 Promote a pattern of compact development within the Urban Growth Area that includes housing at a range of urban densities, commercial and industrial development, and other urban facilities, including medical, governmental, institutional, and educational uses and parks and open space. The Urban Growth Area will include a mix of uses that are convenient to and support public transportation in order to reduce reliance on single occupancy vehicle travel for most daily activities.

DP-3 Efficiently develop and use residential, commercial, and manufacturing land in the Urban Growth Area to create healthy and vibrant urban communities with a full range of urban services, and to protect the long-term viability of the Rural Area and Resource Lands. Promote the efficient use of land within the Urban Growth Area by using methods such as:

- Directing concentrations of housing and employment growth to designated centers;
- Encouraging compact development with a mix of compatible residential, commercial, and community activities;
- Maximizing the use of the existing capacity for housing and employment; and
- Coordinating plans for land use, transportation, capital facilities and services.

DP-4 Concentrate housing and employment growth within the designated Urban Growth Area. Focus housing growth within countywide designated Urban Centers and locally designated local centers. Focus employment growth within countywide designated Urban and Manufacturing/Industrial Centers and within locally designated local centers.

DP-5 Decrease greenhouse gas emissions through land use strategies that promote a mix of housing, employment, and services at densities sufficient to promote walking, bicycling, transit, and other alternatives to auto travel.

DP-6 Plan for development patterns that promote public health by providing all residents with opportunities for safe and convenient daily physical activity, social connectivity, and protection from exposure to harmful substances and environments.

DP-7 Plan for development patterns that promote safe and healthy routes to and from public schools.

DP-13 All jurisdictions shall plan to accommodate housing and employment targets.

DP-39 Develop neighborhood planning and design processes that encourage infill development, redevelopment, and reuse of existing buildings and that, where appropriate based on local plans, enhance the existing community character and mix of uses.

DP-40 Promote a high quality of design and site planning in publicly-funded and private development throughout the Urban Growth Area.

DP-42 Design new development to create and protect systems of green infrastructure, such as urban forests, parks, green roofs, and natural drainage systems, in order to reduce climate altering pollution and increase resilience of communities to climate change impacts.

DP-43 Design communities, neighborhoods, and individual developments using techniques that reduce heat absorption, particularly in Urban Centers.

DP-44 Adopt design standards or guidelines that foster infill development that is compatible with the existing or desired urban character.

Housing

H-1 Address the countywide need for housing affordable to households with moderate, low and very-low incomes, including those with special needs. The countywide need for housing by percentage of Area Median Income (AMI) is:

- 50-80 percent of AMI (moderate) 16 percent of total housing supply
- 30-50 percent of AMI (low) 12 percent of total housing supply

- 30 percent and below AMI (very-low) 12 percent of total housing supply

H-2 Address the need for housing affordable to households at less than 30 percent AMI (very low income), recognizing that this is where the greatest need exists, and addressing this need will require funding, policies and collaborative actions by all jurisdictions working individually and collectively.

H-4 Provide zoning capacity within each jurisdiction in the Urban Growth Area for a range of housing types and densities, sufficient to accommodate each jurisdiction's overall housing targets and, where applicable, housing growth targets in designated Urban Centers.

H-9 Plan for housing that is accessible to major employment centers and affordable to the workforce in them so people of all incomes can live near or within reasonable commuting distance of their places of work. Encourage housing production at a level that improves the balance of housing to employment throughout the county.

H-10 Promote housing affordability in coordination with transit, bicycle, and pedestrian plans and investments and in proximity to transit hubs and corridors, such as through transit oriented development and planning for mixed uses in transit station areas.

H-12 Plan for residential neighborhoods that protect and promote the health and well-being of residents by

supporting active living and healthy eating and by reducing exposure to harmful environments.

- H-13** Promote fair housing and plan for communities that include residents with a range of abilities, ages, races, incomes, and other diverse characteristics of the population of the county.

Economy

- EC-2** Support economic growth that accommodates employment growth targets through local land use plans, infrastructure development, and implementation of economic development strategies.

- EC-5** Help businesses thrive through:

- Transparency, efficiency, and predictability of local regulations and policies;
- Communication and partnerships between businesses, government, schools, and research institutions; and
- Government contracts with local businesses.

- EC-7** Promote an economic climate that is supportive of business formation, expansion, and retention and emphasizes the importance of small businesses in creating jobs.

- EC-9** Identify and support the retention of key regional and local assets to the economy, such as major educational facilities, research institutions, health care facilities, manufacturing facilities, and port facilities.

- EC-12** Celebrate the cultural diversity of local communities as a means to enhance the county's global relationships.

- EC-13** Address the historic disparity in income and employment opportunities for economically disadvantaged populations, including minorities and women, by committing resources to human services; community development; housing; economic development; and public infrastructure.

- EC-15** Make local investments to maintain and expand infrastructure and services that support local and regional economic development strategies. Focus investment where it encourages growth in designated centers and helps achieve employment targets.

- EC-16** Add to the vibrancy and sustainability of our communities and the health and well-being of all people through safe and convenient access to local services, neighborhood-oriented retail, purveyors of healthy food (e.g. grocery stores and farmers markets), and transportation choices.

Transportation

- T-3** Increase the share of trips made countywide by modes other than driving alone through coordinated land use planning, public and private investment, and programs focused on centers and connecting corridors, consistent with locally adopted mode split goals.

- T-4** Develop station area plans for high-capacity transit stations and transit hubs. Plans should reflect the unique

characteristics and local vision for each station area including transit supportive land uses, transit rights-of-way, stations and related facilities, multi-modal linkages, and place-making elements.

- T-6** Foster transit ridership by designing transit facilities and services as well as non-motorized infrastructure so that they are integrated with public spaces and private developments to create an inviting public realm.
- T-12** Address the needs of non-driving populations in the development and management of local and regional transportation systems.
- T-15** Design and operate transportation facilities in a manner that is compatible with and integrated into the natural and built environments in which they are located. Incorporate features such as natural drainage, native plantings, and local design themes that facilitate integration and compatibility.
- T-19** Design roads and streets, including retrofit projects, to accommodate a range of motorized and non-motorized travel modes in order to reduce injuries and fatalities and to encourage non-motorized travel. The design should include well-defined, safe and appealing spaces for pedestrians and bicyclists.
- T-20** Develop a transportation system that minimizes negative impacts to human health, including exposure to environmental toxins generated by vehicle emissions.

- T-21** Provide opportunities for an active, healthy lifestyle by integrating the needs of pedestrians and bicyclists in the local and regional transportation plans and systems.
- T-22** Plan and develop a countywide transportation system that reduces greenhouse gas emissions by advancing strategies that shorten trip length or replace vehicle trips to decrease vehicle miles traveled.
- T-23** Apply technologies, programs and other strategies that optimize the use of existing infrastructure in order to improve mobility, reduce congestion, increase energy-efficiency, and reduce the need for new infrastructure.

Public Facilities and Services

Policies under Public Facilities and Services emphasize the Growth Management Act's requirement that jurisdictions determine which facilities are necessary to serve the desired growth pattern and how they will be financed, in order to ensure timely provision of adequate services and facilities. This is a focus of the station subarea plan, supported by the analysis in this DEIS. The Public Facilities and Services section also encourages:

- Collaboration among jurisdictions;
- Conservation and efficient use of water resources;
- Provision of public sanitary sewer service or alternative high performance technologies (such as reuseable waste water systems);

- Reduction of the solid waste stream, and reuse and recycling;
- Reduced energy consumption through efficiency and conservation as a means to lower energy costs and mitigate environmental impacts associated with traditional energy supplies and the use of renewable and alternative energy resources to help meet the County’s long-term energy needs;
- Provision of telecommunication infrastructure to serve growth and development in a manner consistent with the regional and countywide vision; and
- Provision of human and community services to meet the needs of current and future residents in King County communities through coordinated planning, funding, and delivery of services by the county, cities, and other agencies.

2.2.4 City of Shoreline Vision 2029

In fall 2008, the City of Shoreline began working with the community to create a vision for the next 20 years to help maintain Shoreline’s quality of life. The process engaged hundreds of citizens and stakeholders through a series of “Community Conversations” hosted by neighborhood associations and community groups, as well as Town Hall meetings hosted by the City Council. The process generated over 2,500 comments, which the Planning Commission synthesized into a vision statement and eighteen framework goals for the city. These were subsequently adopted by the City Council in May 2009. The vision and framework goals are presented below.

Vision 2029

Shoreline in 2029 is a thriving, friendly city where people of all ages, cultures, and economic backgrounds love to live, work, play and, most of all, call home. Whether you are a first-time visitor or long-term resident, you enjoy spending time here. There always seems to be plenty to do in Shoreline – going to a concert in a park, exploring a Puget Sound beach or dense forest, walking or biking miles of trails and sidewalks throughout the city, shopping at local businesses or the farmer’s market, meeting friends for a movie and meal, attending a street festival, or simply enjoying time with your family in one of the city’s many unique neighborhoods.

People are first drawn here by the city’s beautiful natural setting and abundant trees; affordable, diverse and attractive housing; award-winning schools; safe, walkable neighborhoods; plentiful parks and recreation opportunities; the value placed on arts, culture, and history; convenient shopping, as well as proximity to Seattle and all that the Puget Sound region has to offer.

The city’s real strengths lie in the diversity, talents and character of its people. Shoreline is culturally and economically diverse, and draws on that variety as a source of social and economic strength. The city works hard to ensure that there are opportunities to live, work and play in Shoreline for people from all backgrounds.

Shoreline is a regional and national leader for living sustainably. Everywhere you look there are examples of sustainable, low impact, climate-friendly practices come to life – cutting edge energy-efficient homes and businesses, vegetated roofs, rain gardens, bioswales along neighborhood streets, green buildings, solar-powered utilities, rainwater harvesting systems, and local

food production to name only a few. Shoreline is also deeply committed to caring for its seashore, protecting and restoring its streams to bring back the salmon, and to making sure its children can enjoy the wonder of nature in their own neighborhoods.

A City of Neighborhoods—Shoreline is a city of neighborhoods, each with its own character and sense of place. Residents take pride in their neighborhoods, working together to retain and improve their distinct identities while embracing connections to the city as a whole. Shoreline’s neighborhoods are attractive, friendly, safe places to live where residents of all ages, cultural backgrounds and incomes can enjoy a high quality of life and sense of community. The city offers a wide diversity of housing types and choices, meeting the needs of everyone from newcomers to long-term residents.

Newer development has accommodated changing times and both blends well with established neighborhood character and sets new standards for sustainable building, energy efficiency and environmental sensitivity. Residents can leave their car at home and walk or ride a bicycle safely and easily around their neighborhood or around the whole city on an extensive network of sidewalks and trails.

No matter where you live in Shoreline there’s no shortage of convenient destinations and cultural activities. Schools, parks, libraries, restaurants, local shops and services, transit stops, and indoor and outdoor community gathering places are all easily accessible, attractive and well maintained. Getting around Shoreline and living in one of the city’s many unique, thriving neighborhoods is easy, interesting and satisfying on all levels.

Neighborhood Centers—The city has several vibrant neighborhood “main streets” that feature a diverse array of shops, restaurants and services. Many of the neighborhood businesses have their roots in Shoreline, established with the help of a local business incubator, a long-term collaboration between the Shoreline Community College, the Shoreline Chamber of Commerce and the City.

Many different housing choices are seamlessly integrated within and around these commercial districts, providing a strong local customer base. Gathering places - like parks, plazas, cafes and wine bars - provide opportunities for neighbors to meet, mingle and swap the latest news of the day. Neighborhood main streets also serve as transportation hubs, whether you are a cyclist, pedestrian or bus rider. Since many residents still work outside Shoreline, public transportation provides a quick connection to downtown, the University of Washington, light rail and other regional destinations.

You’ll also find safe, well-maintained bicycle routes that connect all of the main streets to each other and to the Aurora core area, as well as convenient and reliable local bus service throughout the day and throughout the city. If you live nearby, sidewalks connect these hubs of activity to the surrounding neighborhood, bringing a car-free lifestyle within reach for many.

The Signature Boulevard—Aurora Avenue is Shoreline’s grand boulevard. It is a thriving corridor, with a variety of shops, businesses, eateries and entertainment, and includes clusters of some mid-rise buildings, well-designed and planned to transition to adjacent residential neighborhoods gracefully. Shoreline is

recognized as a business-friendly city. Most services are available within the city, and there are many small businesses along Aurora, as well as larger employers that attract workers from throughout the region. Here and elsewhere, many Shoreline residents are able to find family-wage jobs within the city.

Housing in many of the mixed-use buildings along the boulevard is occupied by singles, couples, families, and seniors. Structures have been designed in ways that transition both visually and physically to reinforce the character of adjacent residential neighborhoods.

The improvements put in place in the early decades of the 21st century have made Aurora an attractive and energetic district that serves both local residents and people from nearby Seattle, as well as other communities in King and Snohomish counties. As a major transportation corridor, there is frequent regional rapid transit throughout the day and evening. Sidewalks provide easy access for walking to transit stops, businesses, and connections to adjacent neighborhoods.

Aurora has become a green boulevard, with mature trees and landscaping, public plazas, and green spaces. These spaces serve as gathering places for neighborhood and citywide events throughout the year. It has state-of-the-art stormwater treatment and other sustainable features along its entire length. As you walk down Aurora you experience a colorful mix of bustling hubs – with well designed buildings, shops and offices – big and small – inviting restaurants, and people enjoying their balconies and patios. The boulevard is anchored by the vibrant Town Center, which is focused between 175th and 185th Street. This district is characterized by compact, mixed-use, pedestrian-

friendly development highlighted by the Shoreline City Hall, the Shoreline Historical Museum, Shorewood High School, and other civic facilities. The interurban park provides open space, recreational opportunities, and serves as the city's living room for major festivals and celebrations.

A Healthy Community—Shoreline residents, City government and leaders care deeply about a healthy community. The City's commitment to community health and welfare is reflected in the rich network of programs and organizations that provide human services throughout the city to address the needs of all its residents.

Shoreline is a safe and progressive place to live. It is known region wide for the effectiveness of its police force and for programs that encourage troubled people to pursue positive activities and provide alternative treatment for non-violent and non-habitual offenders.

Better for the Next Generation—In Shoreline it is believed that the best decisions are informed by the perspectives and talents of its residents. Community involvement in planning and opportunities for input are vital to shaping the future, particularly at the neighborhood scale, and its decision making processes reflect that belief. At the same time, elected leaders and City staff strive for efficiency, transparency and consistency to ensure an effective and responsive City government.

Shoreline continues to be known for its outstanding schools, parks and youth services. While children are the bridge to the future, the city also values the many seniors who are a bridge to its shared history, and redevelopment has been designed to

preserve our historic sites and character. As the population ages and changes over time, the City continues to expand and improve senior services, housing choices, community gardens, and other amenities that make Shoreline such a desirable place to live.

Whether for a 5-year-old learning from volunteer naturalists about tides and sea stars at Richmond Beach or a 75-year-old learning yoga at the popular Senior Center, Shoreline is a place where people of all ages feel the city is somehow made for them. And, maybe most importantly, the people of Shoreline are committed to making the city even better for the next generation.

Framework Goals

The original framework goals for the city were developed through a series of more than 300 activities held in 1996-1998. They were updated through another series of community visioning meetings and open houses in 2008-2009. These Framework Goals provide the overall policy foundation for the Comprehensive Plan and support the City Council's vision. When implemented, the Framework Goals are intended to preserve the best qualities of Shoreline's neighborhoods today and protect the City's future. To achieve balance in the city's development the Framework Goals must be viewed as a whole and not one pursued to the exclusion of others. Shoreline is committed to being a sustainable city in all respects.

FG 1: Continue to support exceptional schools and opportunities for lifelong learning.

FG 2: Provide high quality public services, utilities, and infrastructure that accommodate anticipated levels of growth, protect public health and safety, and enhance the quality of life.

FG 3: Support the provision of human services to meet community needs.

FG 4: Provide a variety of gathering places, parks, and recreational opportunities for all ages and expand them to be consistent with population changes.

FG 5: Encourage an emphasis on arts, culture and history throughout the community.

FG 6: Make decisions that value Shoreline's social, economic, and cultural diversity.

FG 7: Conserve and protect our environment and natural resources, and encourage restoration, environmental education and stewardship.

FG 8: Apply innovative and environmentally sensitive development practices.

FG 9: Promote quality building, functionality, and walkability through good design and development that is compatible with the surrounding area.

FG 10: Respect neighborhood character and engage the community in decisions that affect them.

- FG 11:** Make timely and transparent decisions that respect community input.
- FG 12:** Support diverse and affordable housing choices that provide for Shoreline’s population growth, including options accessible for the aging and/or developmentally disabled.
- FG 13:** Encourage a variety of transportation options that provide better connectivity within Shoreline and throughout the region.
- FG 14:** Designate specific areas for high density development, especially along major transportation corridors.
- FG 15:** Create a business friendly environment that supports small and local businesses, attracts large businesses to serve the community and expand our jobs and tax base, and encourages innovation and creative partnerships.
- FG 16:** Encourage local neighborhood retail and services distributed throughout the city.
- FG 17:** Strengthen partnerships with schools, non-governmental organizations, volunteers, public agencies and the business community.
- FG 18:** Encourage Master Planning at Fircrest School that protects residents and encourages energy and design innovation for sustainable future development.

2.2.5 City of Shoreline Comprehensive Plan

The City of Shoreline adopted its current Comprehensive Plan by Ordinance 649 on December 10, 2012. As required under GMA, the City’s current Comprehensive Plan and corresponding regulations were prepared and adopted to guide future development and fulfill the City’s responsibilities. The Comprehensive Plan contains all required elements and many optional elements.

A comprehensive plan indicates how a community envisions its future, and sets forth strategies for achieving the desired vision. A comprehensive plan guides how a city will grow, identifies compatible land uses, a range of housing and employment choices, an efficient and functional transportation network, and adequate public facilities; and protects environmental and historic resources.

A comprehensive plan can be an effective management tool for a city, providing an opportunity for community-defined direction and greater predictability for property owners. Development regulations, which implement aspects of comprehensive plans, govern such factors as allowable uses, size and location of buildings and improvements, and standards for environmental protection.

Elements Contained in the Current Comprehensive Plan

The City of Shoreline Comprehensive Plan includes the following elements:

- Land Use
- Community Design

- Housing
- Transportation
- Economic Development
- Natural Environment
- Parks, Recreation & Open Space
- Capital Facilities
- Utilities

Specific Policies Related to Light Rail Station Areas

As part of its 2012 Comprehensive Plan update, the City of Shoreline adopted specific policies related to light rail station areas that provide a guiding foundation for the subarea plan.

- LU20: Collaborate with regional transit providers to design transit stations and facilities that further the City's vision by employing superior design techniques, such as use of sustainable materials; inclusion of public amenities, open space, and art; and substantial landscaping and retention of significant trees.
- LU21: Work with Metro Transit, Sound Transit, and Community Transit to develop a transit service plan for the light rail stations. The plan should focus on connecting residents from all neighborhoods in Shoreline to the stations in a reliable, convenient, and efficient manner.
- LU22: Encourage regional transit providers to work closely with affected neighborhoods in the design of any light rail transit facilities.

- LU23: Work with neighborhood groups, business owners, regional transit providers, public entities, and other stakeholders to identify and fund additional improvements that can be efficiently constructed in conjunction with light rail and other transit facilities.
- LU24: Maintain and enhance the safety of Shoreline's streets when incorporating light rail, through the use of street design features, materials, street signage, and lane markings that provide clear, unambiguous direction to drivers, pedestrians, and bicyclists.
- LU25: Evaluate property within a ½ mile radius of a light rail station for multi-family residential choices (R-18 or greater) that support light rail transit service, non-residential uses, non-motorized transportation improvements, and traffic and parking mitigation.
- LU26: Evaluate property within a ¼ mile radius of a light rail station for multi-family residential housing choices (R-48 or greater) that support light rail transit service, non-residential uses, non-motorized transportation improvements, and traffic and parking mitigation.
- LU27: Evaluate property along transportation corridors that connects light rail stations and other commercial nodes in the city, including Town Center, North City, Fircrest, and Ridgecrest for multi-family, mixed-use, and non-residential uses.

- LU28: Implement a robust community involvement process that develops tools and plans to create vibrant, livable, and sustainable light rail station areas.
- LU29: Create and apply innovative methods and tools to address land use transitions in order to manage impacts on residents and businesses in a way that respects individual property rights. Develop mechanisms to provide timely information so residents can plan for and respond to changes.
- LU30: Encourage and solicit the input of stakeholders, including residents; property and business owners; non-motorized transportation advocates; environmental preservation organizations; and transit, affordable housing, and public health agencies.
- LU31: Create a strategy in partnership with the adjoining neighborhoods for phasing redevelopment of current land uses to those suited for *Transit-Oriented Communities (TOCs)*, taking into account when the city’s development needs and market demands are ready for change.
- LU32: Allow and encourage uses in station areas that will foster the creation of communities that are socially, environmentally, and economically sustainable.
- LU33: Regulate design of station areas to serve the greatest number of people traveling to and from Shoreline. Combine appropriate residential densities with a mix of commercial and office uses, and multi-modal transportation facilities.
- LU34: Pursue market studies to determine the feasibility of developing any of Shoreline’s station areas as destinations (example: regional job, shopping, or entertainment centers).
- LU35: Identify the market and potential for redevelopment of public properties located in station and study areas.
- LU36: Encourage development of station areas as inclusive neighborhoods in Shoreline with connections to other transit systems, commercial nodes, and neighborhoods.
- LU37: Regulate station area design to provide transition from high-density multi-family residential and commercial development to single-family residential development.
- LU38: Through redevelopment opportunities in station areas, promote restoration of adjacent streams, creeks, and other environmentally sensitive areas; improve public access to these areas; and provide public education about the functions and values of adjacent natural areas.
- LU39: Use the investment in light rail as a foundation for other community enhancements.
- LU40: Explore and promote a reduced dependence upon automobiles by developing transportation alternatives and determining the appropriate number of parking stalls required for TOCs. These alternatives may include: ride-

sharing or vanpooling, car-sharing (e.g. Zipcar), bike-sharing, and walking and bicycle safety programs.

LU41: Consider a flexible approach in design of parking facilities that serve light rail stations, which could be converted to other uses if demands for parking are reduced over time.

LU42: Transit Oriented Communities should include non-motorized corridors, including undeveloped rights-of-way, which are accessible to the public, and provide shortcuts for bicyclists and pedestrians to destinations and transit. These corridors should be connected with the surrounding bicycle and sidewalk networks.

LU43: Employ design techniques and effective technologies that deter crime and protect the safety of transit users and neighbors.

Comprehensive Plan Definition of Transit-Oriented Communities (TOCs):

Shoreline's Comprehensive Plan defines transit-oriented communities as:

"Transit-Oriented Communities (TOCs) are mixed-use residential or commercial areas designed to maximize access to public transport, and often incorporate features to encourage transit ridership. A TOC typically has a center with a transit station, surrounded by relatively high-density development, with progressively lower-density development spreading outward from the center. TOCs generally are located within a radius of 1/4

to 1/2 mile from a transit stop, as this is considered to be an appropriate scale for pedestrians."

2.2.6 Other Relevant City of Shoreline Plans

The City of Shoreline has adopted several other plans that have served as reference documents for this DEIS and that provide foundational guidance for the 185th Street Station Subarea Plan. These include the following.

- Transportation Master Plan, Adopted in 2011, with amendments adopted in December 2012 and December 2013
- Parks, Recreation, and Open Space Master Plan, Adopted July 25, 2011
- Surface Water Master Plan, Adopted December 2011
- Town Center Subarea Plan, Adopted July 25, 2011
- North City Subarea Plan, Adopted July 2001

2.2.7 Development Regulations

The City manages development through provisions of the Shoreline Municipal Code (SMC) and Title 20 of the SMC, the Development Code. Applicable sections of the code include the following.

Shoreline Municipal Code

Title 1 General Provisions

Title 2 Administration

Title 3 Revenue and Finance

Title 8 Health and Safety

Title 9 Public Peace, Morals and Welfare

Title 10 Vehicles and Traffic

Title 12 Streets, Sidewalks, and Public Places

Title 13 Utilities

Title 14 Environment

Title 15 Buildings and Construction

Title 16 Land Use and Development

Title 17 Subdivisions

Title 18 Zoning

Title 20 Development Code

Title 20—Development Code

The Development Code’s regulations guide land use, building location and height, parking, landscaping, urban design, environmental protection, infrastructure, and historic preservation, as well as other elements. For more information, refer to Chapter 3, Section 3.1 Land Use Patterns, Plans and Policies.

2.3 Alternatives

2.3.1 Introduction to the DEIS Alternatives

This DEIS analyzes three alternatives: Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Most Growth. This section of the DEIS discusses these alternatives in relation to the planning context. Refer to Chapter 1 for a description of the

subarea context including the land use and mobility study area boundaries. Chapter 1 also presents objectives for the 185th Street Station Subarea to demonstrate the purpose and need for the Planned Action.

Alternative 1—No Action would retain existing Comprehensive Plan and zoning designations, and the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth, propose changes to land use and zoning. Alternative 1—No Action assumes the same level of growth for the next 20 years as that assumed for the Transportation Master Plan (using the dispersed population scenario).

For the two action alternatives, full build-out would be expected to occur over many decades—30 to 50 years or more for Alternative 2—Some Growth, and 60 to 100 years or more for Alternative 3—Most Growth. The expected build-out timeframes are analyzed in the DEIS in order to understand and assess long-term capital project needs to support the redevelopment that could occur through the proposed zoning changes.

Under all three alternatives, it is assumed that the proposed light rail station would be constructed, along with a park-and-ride structure for 500 cars and other improvements in the vicinity of the station.

2.3.2 Comparison of Alternatives

Land use, zoning, urban form, and comprehensive plan comparisons of the three alternatives are summarized below. The intent to select the Preferred Alternative from the range of alternatives studied in this DEIS is also discussed below. For more detailed information, refer to Section 3.1 of this DEIS.

Land Use and Zoning

Under both action alternatives (Alternative 2—Some Growth and Alternative 3—Most Growth), key sites such as the Shoreline Center and other sites in the vicinity of the light rail station would be zoned to encourage transit-oriented development consisting of a mix of residential, retail/commercial, office, and public uses.

Land use concepts related to both action alternatives propose configuration of mix of higher intensity land uses along the key connecting corridor between Aurora Avenue N/Town Center Subarea and the North City Subarea of N/NE 185th Street, 10th Avenue NE, and NE 180th Street.

Under Alternative 1—No Action, existing single family land uses zoned primarily R-6 (residential, 6 units per acre) would remain. Residents would be allowed to develop accessory dwelling units and attached single family units (such as duplexes), which may increase density in the subarea from the current overall average of 2.7 units per acre to closer to the 6 units per acre that is allowed by the current R-6 zoning. However, these density levels are not optimal for supporting high-capacity transit and would not provide the range of housing choices and affordability levels that are encouraged by adopted policies in the region and the City of Shoreline. Also the level of redevelopment likely would not include improvements such as streetscape and public amenities, and would not be consistent with the regional vision for high-capacity transit station areas.

Urban Form

Under Alternative 2, the Shoreline Center site and other sites near the proposed transit station would be zoned Community Business (CB), which allows a maximum building height of 60 feet. The CB zone would facilitate development of an active ground floor with retail and commercial uses and up to 5 levels above, a common approach to transit-oriented development (TOD) in station areas.

A new zoning designation, Multi-Residential (MUR) is proposed for Alternative 2—Some Growth and Alternative 3—Most Growth, which would allow various types of mixed use and transit-oriented development. Land uses that are active at the street level are desirable in a vibrant, pedestrian-friendly, transit-oriented neighborhood. As such, in the MUR zone, mixed use buildings that have active ground floors with retail and other uses that promote pedestrian traffic and sustain street level interest are envisioned for along key streets in the subarea, including the N/NE 185th Street/10th Avenue NE/NE 180th Street corridor. The uses in these buildings above the ground floor level would be predominantly residential, but in some locations also could be office/employment. The MUR zoning would allow a maximum building height of 85 feet, which would optimize TOD potential and is consistent with building code requirements and common construction approaches in TOD throughout the region and the US.

Alternative 3—Most Growth proposes a greater extent of zoning change and higher density uses than Alternative 2—Some Growth, which focuses zoning change more closely to the corridor. A new zoning designation is introduced under

Alternative 3, Master Use Permit (MUP). Redevelopment projects within this zone would be approved through a master planning process that allows flexibility in applying development standards and regulations. The MUP designation also could facilitate bonus height and density in exchange for the development's inclusion of various design features and community amenities (such as affordable housing, green building, universal design, public open space, and other elements). Under the MUP designation, mixed use development including a variety of densities of multi-family housing, commercial and retail, office/employment, and civic/recreational would be allowed.

Under Alternative 3, the Shoreline Center site could be developed with buildings to a maximum height of 140 feet within the MUP zone. Other areas of MUP zoning in the subarea would be allowed a maximum building height of 85 feet (same as the MUR zone). The proposed maximum height of 140 feet for the Shoreline Center site, the largest single-ownership parcel in the subarea would maximize longer term redevelopment options. Although the Shoreline School District has no current plans for redeveloping the site, the zoning would provide the flexibility to convert the site to higher density use at some point in the future.

In addition to the zones described above, portions of the subarea would be upzoned under Alternatives 2 and 3 to R-48 (residential, 48 units per acre), R-24 (residential, 24 units per acre), R-18 (residential, 18 units per acre), NB (neighborhood business), and TC (Town Center near the Aurora Avenue N corridor). For more information about the land uses currently allowed in these zones, refer to Section 3.1 of the DEIS.

There are several places of the subarea where the existing zoning (primarily R-6, with some R-8 and R-12) would remain in place under Alternatives 2 and 3. Under Alternative 2, more areas would remain in existing zoning than under Alternative 3.

The R-48, R-24, R-18, NB, CB, and TC zones are existing designations in the Development Code, and the City is currently examining how these zoning designations may need to be updated to support the type of development envisioned for the subarea. Where these zones are located along the N/NE 185th Street/10th Avenue NE/NE 180th Street corridor, and other key streets near the transit station (portions of 5th Avenue NE, 8th Avenue NE, and 1st Avenue NE), active ground floor uses would be encouraged to support a pedestrian-friendly neighborhood just as intended by the MUR zone. The City is also evaluating how updates in regulations can support more conversion of single family home conversion to professional office, and neighborhood supporting businesses such as small shops and cafes, hair salons and barber shops, art studios, and other uses.

Given that there are sometimes challenges in leasing out active ground floor spaces before residential uses have fully built-out in some transit-oriented districts, the City would allow developers flexibility to lease ground floor for other purposes than active retail, including residential use, as long as the ground level is built to commercial standards that will allow active use in the long-term.

In summary, the maximum building heights under existing and proposed zones in the subarea would be:

- R-48 40 feet
- R-24 40 feet

- R-18 40 feet
- NB 50 feet
- CB 60 feet
- MUR 85 feet (under Alternative 2 and 3)
- MUP 140 feet at the Shoreline Center site and 85 feet elsewhere (under Alternative 3)

For areas to be retained in existing zoning, these are primarily zoned R-6 and R-8, which allow maximum building heights of 35 feet. Areas zoned R-12 would be allowed maximum building heights of 40 feet.

Selection of the Preferred Alternative

Upon completion of this DEIS and receipt of public and agency comments, the City of Shoreline intends to identify a Preferred Alternative, which may be one of the alternatives described in the DEIS, or a new alternative that mixes components of the alternatives. Given this intent, the two action alternatives generally represent “bookends” for a range of possible growth levels and locations in the subarea. If a new alternative is developed as a result of the DEIS analysis and public and agency comments, it would represent a “hybrid” of the two alternatives addressed in this DEIS. If needed, additional environmental analysis would be provided in the FEIS to support this Preferred Alternative.

To help facilitate implementation of the 185th Street Station Subarea Plan and supporting regulations, a Planned Action Ordinance would be adopted pursuant to WAC 197-11-164 to 172. The Planned Action Ordinance would be focused on the Preferred Alternative and would include specific mitigation

measures identified in the FEIS for the Preferred Alternative (integrated into the ordinance as development provisions).

Adoption of the Planned Action Ordinance would exempt future development projects consistent with the subarea plan and environmental analysis from the need to prepare their own separate environmental impact statements.

Comprehensive Plan Land Use Designations and Zoning Designations

Under Alternative 1—No Action current Comprehensive Plan, zoning, and development regulations would be retained. Redevelopment of land uses in the station area would be limited to that allowed under existing zoning, which is primarily Residential, six units per acre (R-6). The No Action Alternative would retain the current Comprehensive Plan map and provisions, but would be inconsistent with Comprehensive Plan policies and provisions pertinent to light rail station areas (listed above). These policies and provisions would not be implemented.

Also under Alternative 1—No Action, the SEPA review process for any future development projects would not be streamlined because there would be no Planned Action Ordinance. Standard review would be required on a per-project basis.

Implementation of either of the two action alternatives, Alternative 2—Some Growth or Alternative 3—Most Growth, or a hybrid of these or new alternative, would require amendments to the land use map of the City’s Comprehensive Plan, as well as amendments to the Municipal Code, including zoning provisions and development regulations. The Comprehensive Plan map

would need to be amended to reflect the land uses proposed. It is not anticipated that specific policies in the Comprehensive Plan would need to be amended. However, the capital facilities element would need to be updated to reflect investment priorities to support the Preferred Alternative.

Existing Shoreline Comprehensive Plan

Land Use Map Designations

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Institution Campus
- Planned Area 3
- Mixed Use 2
- Mixed Use 1
- Town Center District
- Public Facility
- Public Open Space
- Private Open Space
- Future Service and Annexation Area
- Light Rail Station Study Areas (1 & 2)

Existing Zoning Designations in the City of Shoreline

- Parks
- R-6, Residential, 6 dwelling units per acre (single family)

- R-8, Residential, 8 dwelling units per acre (single family)
- R-12, Residential, 12 dwelling units per acre (single family, duplex, townhouses, cluster)
- R-18, Residential, 18 dwelling units per acre (multi-family, townhouses, apartments)
- R-24, Residential, 24 dwelling units per acre (multi-family, townhouses, apartments)
- R-48, Residential, 48 dwelling units per acre (multi-family, apartments)
- TC-1 to TC-4, Town Center (commercial, civic, and transportation-oriented uses)
- CB—Community Business (mixed use, apartments, retail and personal services)
- MB—Mixed Business (vertical or horizontal mixed use near/along Aurora Avenue N)

Development Regulations

A specific set of development regulations would be prepared to support the Preferred Alternative, when identified for the subarea plan. The regulations would specify requirements for the new zoning categories, if applied, and would include new provisions that may not be currently covered in the existing Municipal and Development Codes. The new regulations would be adopted as part of the subarea plan and integrated into City codes as needed to support implementation. These would include provisions for building height, bulk, character/form, setbacks, transitions between land uses, surface coverages, parking ratios, and other requirements.

Planned Action Ordinance

The Preferred Alternative would be adopted via a Planned Action Ordinance, which is expected to encourage redevelopment and revitalization of the station subarea by streamlining the project review process. This DEIS and the subsequent FEIS will help the City identify impacts of development and specific mitigation measures that projects within the subarea would have to meet to qualify as a Planned Action project.

According to WAC 197-11-164, a Planned Action has the following characteristics:

- Is designated a Planned Action by ordinance;
- Has had the significant environmental impacts addressed in an EIS;
- Has been prepared in conjunction with a comprehensive plan, subarea plan, master planned development, phased project, or with subsequent or implementing projects of any of these categories;
- Is located within an urban growth area;
- Is not an essential public facility; and
- Is consistent with an adopted comprehensive plan.

Under the Preferred Alternative, the Planned Action would be established by an ordinance (a draft of the ordinance will be provided as an Appendix to the FEIS).

WAC 197-11-168 requires that the Planned Action Ordinance include:

- A description of the components of the Planned Action;
- A finding that the probable significant environmental impacts of the Planned Action have been identified and adequately addressed in an EIS; and the identification of mitigation measures that must be applied to a project for it to qualify as a Planned Action project.

Following the completion of the environmental impact statement process, the City would designate the 185th Street Station Subarea as a Planned Action by ordinance, pursuant to SEPA and implementing rules. Planned Action projects would include those studied in this DEIS, excluding essential public facilities. The draft ordinance will identify mitigation, as described in this DEIS and the subsequent FEIS, which would be applicable to future Planned Action projects. Some of the mitigation measures would apply to all study area projects, while others would be applied on a case-by-case basis.

2.3.3 Growth Forecasts

The City of Shoreline is forecasted to grow in the coming years. Growth forecasts and targets for Shoreline and the subarea are discussed in Chapter 3, Section 3.2 Population, Housing, and Employment.

Location and Timing of Growth

While the subarea plan is focused on the study areas shown in **Figure 1-1** and **Figure 1-2**, for purposes of population and employment projection calculations the limits of Traffic Analysis Zones (TAZ) boundaries are assumed as the study area. TAZs are commonly used for analyzing population and demographics regionally in planning because the TAZ boundaries correlate to

census tract boundaries. In some cases, the TAZ boundaries extend beyond the land use and mobility study area boundaries designated for the subarea. TAZs related to the subarea are depicted in **Figure 2-1**.

It is anticipated that future growth under each alternative would likely occur first on larger sites in the subarea that are readily available for redevelopment based on property owners' interest in selling. Since most of the parcel sizes in the subarea are single family lots, multiple property owners would need to coordinate to aggregate their properties into larger parcels for redevelopment. This would take time, and as such it is anticipated that the projected growth would happen very gradually, over decades, as indicated above.

Horizon Year Assumptions

For the purposes of this DEIS, impacts of the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth, have been analyzed based on full build-out in order to understand the long-range capital improvement needs to serve growth. Full build-out for Alternative 2 would be expected to occur by approximately 30 to 50 years (or more) and for Alternative 3 by approximately 60 to 100 years (or more).

In order to align the Planned Action with a 20-year planning horizon (to the year 2035) common for comprehensive planning and subarea planning, 20-year growth targets will be set for the Preferred Alternative and a list of capital improvement projects will be developed to support that level of growth in the subarea. Potential impacts associated with the Preferred Alternative identified in the FEIS also will be analyzed to the horizon year of 2035 for comparison purposes, which will require an assumption

of a percentage of growth by 2035 for the analysis and phasing assumptions. The FEIS will include specific impacts analysis and recommended mitigation measures (and capital improvements) to support the Preferred Alternative.

2.3.4 Potential Future Alternatives

The City Council will consider Planning Commission recommendations and select a Preferred Alternative that is one of the alternatives analyzed in this DEIS or a “hybrid” within the range of the “bookends” of the two primary action alternatives. The FEIS will provide additional analysis and content as needed to support this Preferred Alternative. City Council will consider and decide on City actions and certain capital projects needed to support development of the Preferred Alternative with a priority on the phase likely to occur through the horizon year of 2035.

The City will monitor growth and change in the subarea in the coming years and at some point in the future may decide to revisit the subarea plan to make amendments in line with future conditions. This may involve adjustment of the proposed plan within the range of alternatives studied in the DEIS and FEIS, including the Preferred Alternative identified in the FEIS. Future development of a new alternative also may be considered by the City in the future, which may or may not require a supplemental level of environmental analysis (Supplemental EIS) to support its adoption.

2.3.5 Alternatives Eliminated From Consideration

In the visioning and design workshop stages of the 185th Street Station Subarea Plan, a number of concepts were considered,

including some that were analyzed and eliminated. Some participants in visioning sessions suggested a broader level of change and higher densities. Some participants suggested that a minimal level of change was more appropriate. In synthesizing input from the visioning and design workshops, City staff, Planning Commission, and City Council representatives worked to develop the alternatives presented in this DEIS as representing the “bookends” that are most representative of the community’s vision for the station subarea. As such, concepts with higher densities and levels of change than Alternative 3 and with lower densities and level of change than Alternative 2 were eliminated.

2.3.6 Benefits and Disadvantages of Delaying the Proposed Alternative

The Preferred Alternative will include the adoption of the *185th Street Station Subarea Plan* and supporting regulations and the Planned Action Ordinance. Delaying its implementation would delay the associated potential impacts identified in this DEIS, including intensification of growth in the station subarea that would alter current land use; changes in building heights and density; some traffic and transportation impacts; and other effects described in Chapter 3. It would also substantially delay development of the station subarea and eliminate or reduce the likelihood that the subarea would develop in a manner consistent with the regional vision for high-capacity station areas and with the Shoreline Comprehensive Plan’s vision for the station area as described policies LU 20 through LU 43.

At an early stage of the station subarea planning process, the City considered two potential options for subarea planning and timing. Option A would have adopted a subarea plan that re-

designated the area with the appropriate comprehensive plan land use designation(s) and simultaneously re-zoned the parcels so as to implement the appropriate zoning district. Option B would have adopted a subarea plan that re-designated the area with the appropriate comprehensive plan land use designation(s) but waited until a later date to re-zone the parcels. The City determined that the best approach would be Option A for the reasons described below.

Re-designating and re-zoning at the same time keeps planning and development regulations in alignment. The purpose and function of the subarea is furthered and the intended uses would be able to move into implementation more immediately. A concern in waiting to re-zone is that zoning is a development regulation, and GMA requires development regulations that are “consistent with and implement the comprehensive plan” per RCW 36.70A.040(3). Thus, if the underlying zoning (development regulation) of a parcel is not in alignment with the land use designation (comprehensive plan), then the zoning is neither consistent with nor implementing the comprehensive plan and in direct conflict with .040(3). In addition, because existing zoning may actually allow uses that are not intended by the newly-adopted subarea plan and its comprehensive plan land use designations, the purpose and function of the subarea would be impeded because uses not intended within the subarea would be allowed to go forward and could potentially conflict with future goals and policies for the subarea’s development.

A subarea plan is intended to be an integrated component of the City’s Comprehensive Plan and not a stand-alone feature. RCW 36.70A.080 (2) grants the city the ability to include a subarea plan

within its comprehensive plan. As the Growth Board stated in *Laurelhurst*, CPSGMHB Case 03-3-0008:

“Subarea plans are neither defined nor required by the GMA; Subarea plans are an optional element that a jurisdiction may include in its GMA Plan. All that can be inferred from the statute, and prior Board cases, is that subarea plans are, as the pre-fix “sub” implies, subsets of the comprehensive plan of a jurisdiction. Additionally, subarea plans typically augment and amplify policies contained in the comprehensive plan.”

Given these considerations and directives, the City of Shoreline determined to proceed with planning and re-zoning of the subarea through the Planned Action Ordinance process.

2.4 Environmental Review

2.4.1 Purpose

The purpose of environmental review is to provide decision makers and citizens with information about the potential environmental consequences of proposed actions, such as plans, policies, regulations, and permits. SEPA requires that governments consider environmental effects of proposals before taking an action. An EIS provides the greatest amount of information about potential environmental impacts and offers mitigation measures to reduce these impacts. The City’s past and current environmental review process is described below.

2.4.2 Prior Environmental Review

Prior environmental review was conducted in the following EISs, including the City’s Comprehensive Plan and subsequent amendments:

- *Lynnwood Link Extension Draft Environmental Impact Statement* by Sound Transit, July 2013
- *City of Shoreline Comprehensive Plan* update, adopted by Ordinance 649 on December 10, 2012
- *City of Shoreline Town Center Subarea Plan*, adopted by City Council, July 25, 2011
- *North City Sub-Area Plan*, City of Shoreline, Washington, adopted as a Comprehensive Plan Amendment, July 2001

Where appropriate, relevant information found in prior environmental and planning documents is referenced and considered in this DEIS.

2.4.3 Current Environmental Review

Pursuant to SEPA Rules (WAC 197-11-408 through 410), the City issued a Determination of Significance and Scoping Notice (see Appendix), on January 16, 2014. Public and agency comments were solicited in a 21-day scoping period from January 16, 2014 to March 6, 2014. During this period, the general public, as well as public agencies and stakeholders, were invited to submit written comments on the scope of the EIS and offer written suggestions.

Consistent with City noticing requirements, the notice was published in the City’s newspaper of record and mailed to property owners inside the study area and within 300 feet, representing approximately 2,500 addresses. It was also sent to

federal and state agencies to which the City sends SEPA notices and determinations. As a courtesy, it was posted on the City's website.

As described in the Scoping Notice, the following topics are addressed in Chapter 3 of this DEIS:

- Land Use Patterns/Plans and Policies
- Housing
- Transportation
- Parks and Recreation (now Public Services)
- Utilities

Based on the public and stakeholder input received, analysis of public services (including police, fire, and school services) was added to the scope of the DEIS. Surface water runoff and management and water quality also were added as part of the Utilities section, along with habitat and vegetation considerations (as part of the Parks, Recreation, and Open Space subsection of the Public Services section).

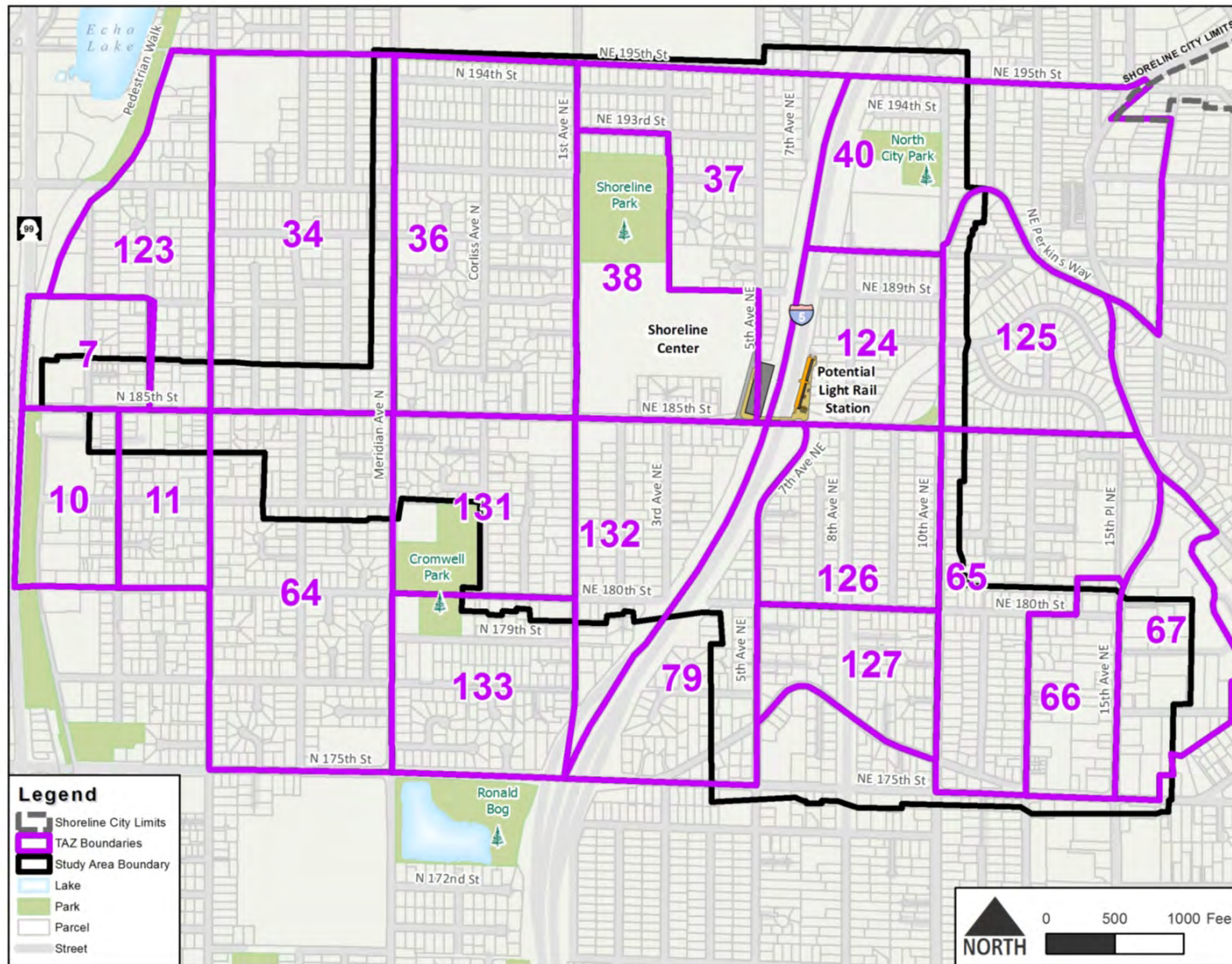


Figure 2.1 Traffic Analysis Zones in the Vicinity of the Subarea

Chapter 3

**Affected Environment, Analysis of
Potential Impacts, and Mitigation Measures**
DRAFT ENVIRONMENTAL IMPACT STATEMENT

Chapter 3—Affected Environment, Analysis of Potential Impacts, and Mitigation Measures

3.1 Land Use Patterns, Plans and Policies

This section describes the affected environment, analyzes potential impacts, and provides recommendations for mitigation measures for land use patterns, plans, and policies. Information about the intended community character associated with the two action alternatives is also addressed.

3.1.1 Affected Environment

For purposes of evaluating land use patterns, this analysis considers the land use study area shown in **Figure 3.1-1** as well as surrounding land uses just beyond the study area. This analysis considers the City of Shoreline Comprehensive Plan, including all subarea portions within the study area and related plans such as the Town Center Subarea Plan (adopted July 2011) and the North City Subarea Plan (adopted July 2001). Applicable elements of the City's Municipal and Development Codes are also summarized including zoning provisions, historic preservation policies, development standards, and other regulations.

Station Subarea Context

For the purposes of developing the 185th Street Station Subarea Plan and completing environmental analysis for this DEIS, the City of Shoreline Planning Commission determined study area boundaries through considerations of factors such as topography and the ability to walk and bike to and from the station, policy direction from Shoreline City Council, access to arterial streets, opportunity sites, environmental assets, and other existing conditions and influences. The Planning Commission recommended using two sets of boundary lines applicable to these conditions, and for this DEIS, the subarea is defined by two boundaries, one that delineates the study area for land use and another that delineates the study area for mobility (multi-modal transportation). These boundaries were then reviewed and adopted by City Council as Ordinance 671 on September 23, 2013.

The subarea includes portions of the Echo Lake, Meridian Park, and North City neighborhoods and borders the Ridgecrest neighborhood of Shoreline. N/NE 185th Street is the central spine of the subarea, which extends west to east from the Aurora Avenue (SR 99) corridor to the 15th Avenue NE corridor. The subarea extends approximately one-half mile to the north and south of the 185th corridor.

For purposes of population, housing, and employment projections and transportation planning, traffic analysis zone (TAZ) boundaries in proximity to the study area boundaries have also been referenced. Because TAZ boundaries align with census tract boundaries, they are commonly used for planning and analysis purposes. Refer to Section 3.2 Population, Housing, and Employment for additional information and a map of the TAZ boundaries.

Proposed Sound Transit Light Rail Station Facilities

Through a separate DEIS process, Sound Transit identified NE 185th Street on the east side of Interstate 5 (I-5), north of the overpass, as the preferred location for one of the two light rail stations to potentially be built in Shoreline. A park-and-ride structure, also to be constructed by Sound Transit, potentially would be located on the west side of I-5, also north of the 185th Street overpass. The City of Shoreline supports the station

location proposed by Sound Transit, and identifies the location in the City’s Comprehensive Plan Land Use Map. **Figure 3.1-2** shows an exhibit from the Lynnwood Link DEIS (published by Sound Transit and the Federal Transit Administration in July 2013). The figure shows a conceptual level plan for the 185th Street Station with possible locations of the station and park-and-ride structure. Figure 3.1-2 is also the preferred alternative identified by Shoreline City Council.

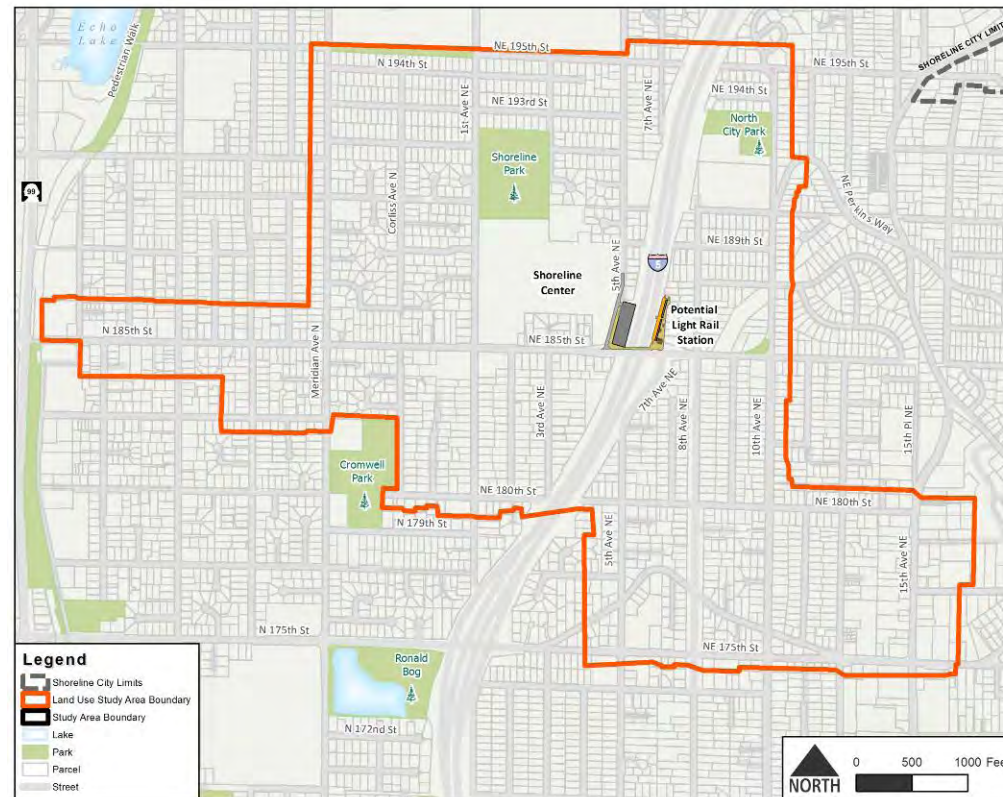


Figure 3.1-1 Land Use Study Area Boundary for the 185th Street Station Subarea

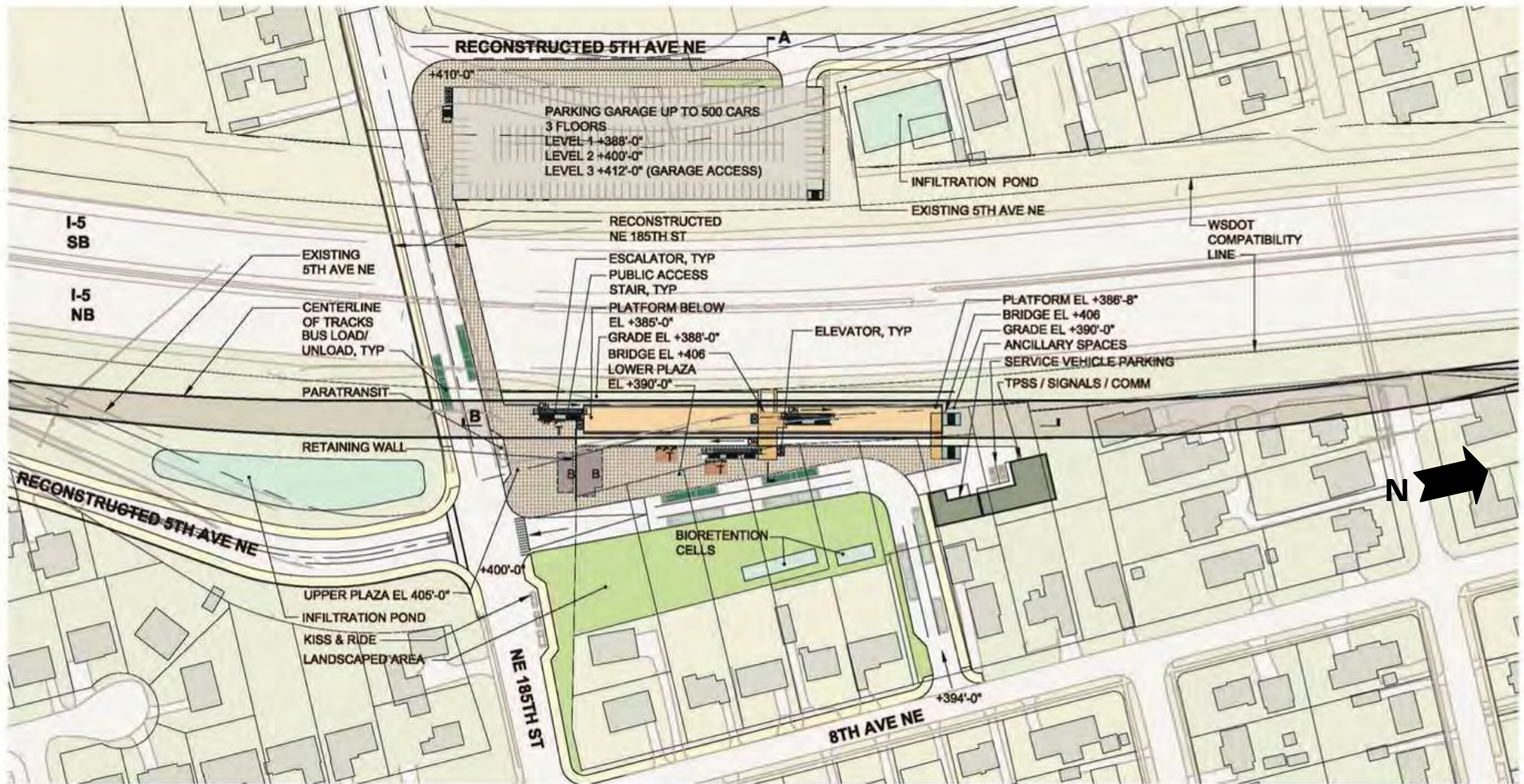


Figure 3.1-2 Sound Transit’s Conceptual Design Plan for the 185th Street Station

(Source: Lynnwood Link Extension Draft Environmental Impact Statement, Sound Transit and Federal Transit Administration, July 2013)

Land Use Patterns in the Subarea

History and Settlement of the Area

Early accounts of Shoreline tell how Native Americans traveled along the shores of Puget Sound and local streams collecting swordfern and kinnikinnick at Richmond Beach, and wild cranberries at what are now Ronald Bog and Twin Ponds parks. Controlled fires were set in the Richmond Highlands and North City areas to create meadows for the cultivation of certain wild plants and to provide inviting, open spaces for small game.

In the 1880s, the US Government opened the region to homesteading after railroad fever gripped the Northwest. Speculators planned towns in anticipation of the transcontinental railroad route. Among these was Richmond Beach, platted in 1890. The arrival of the Great Northern Railroad in Richmond Beach in 1891 spurred the growth of the small town and increased the pace of development in the wooded uplands.

Construction of the Seattle to Everett Interurban trolley line through Shoreline in 1906, and the paving of the North Trunk Road with bricks in 1913, made travel to and from Shoreline easier, which increased suburban growth. People could live on a large lot, raise much of their own food and still be able to take the Interurban, train, or (beginning in 1914) the bus to work or high school in Seattle. Children could attend one of two local elementary schools, and general stores provided most of the goods that could not be grown at home. Local produce from fruit orchards, chicken farms and strawberry crops could be shipped to the city via the Interurban or the train. The Fish family's Queen City Poultry Ranch on Greenwood at 159th was a prosperous chicken farm that attracted many visitors curious about scientific farming techniques. Ronald Station along the trolley line was located in the vicinity of the present-day Park at Town Center.

During the early twentieth century, Shoreline attracted large developments drawn by its rural yet accessible location. These included the Highlands and Seattle Golf Club (circa 1908) and the Firland Tuberculosis Sanitarium (circa 1911), which is now Crista Ministries. Commercial centers formed around the Interurban stops at Ronald (175th Street and Aurora Avenue N) and Richmond Highlands (185th Street and Aurora Avenue N). Car travel had broadened the settlement pattern considerably by the mid-1920s. Although large tracts of land had been divided into smaller lots in the 1910s in anticipation of future development, houses were still scattered.

A precursor to Interstate 5, Highway 99 was constructed to stretch from Mexico to Canada, offering more convenient access than ever before to America's new auto travelers. Originally known as the Pacific Highway, but later named Aurora Speedway and Aurora Avenue, there are conflicting histories of the source of the name "Aurora." Some say the name was meant to honor Aurora, Illinois, the hometown of Dr. Edward Kilbourne a Fremont founder. However, others say the name recognized the highway as a route to the north, toward the Aurora Borealis. Regardless of how the highway got its present name, it changed the face of the area north of Seattle forever, and as more people took to the road in automobiles, there was less need for the old trolley line. The Interurban made its last run in February of 1939. By the late 1930s and early 1940s, commercial development concentrated along Aurora Avenue/Highway 99, which saw steadily increasing use as part of the region's primary north-south travel route. Traffic on 99 swelled, particularly after the closing of the Interurban.

The Great Depression and World War II (1930-1945) slowed the pace of housing development. During the Depression, many Shoreline families managed to live off land they had purchased in better times. During World War II, building materials were rationed and private housing construction virtually stopped. The only major

development in Shoreline during the war was the Naval Hospital (now Fircrest). At its peak in 1945, the hospital housed over 2,000 patients and 600 staff members.

With the end of the war came a substantial demand for family housing. The late 1940s saw large housing developments such as Ridgecrest (NE 165th to 155th Streets, 5th to 10th Avenues NE) spring up seemingly overnight. Schools ran on double shifts as families with young children moved into the new homes. In the late 1940s, business leaders and residents began to see Shoreline as a unified region rather than scattered settlements concentrated at Interurban stops and railroad accesses.

In 1944, the name "Shoreline" was used for the first time to describe the school district. Coined by a student at the Lake City Elementary School, it defined a community which went from the Seattle city line to Snohomish county line and from the shore of Puget Sound to the shore of Lake Washington.

Shoreline continued to grow, becoming an attractive place to live in the central Puget Sound region due to the great neighborhoods, schools, parks, and other community features. After it became clear that an additional north-south freeway would be needed to handle the cross-state traffic, Interstate 5 was constructed in the 1960s, with the final segment in Washington state opening on May 14, 1969. With its opening, motorists could travel without stopping from the northern California state line to the Canadian border, and Highway 99 became more of a regional route and alternate travel way to Interstate 5. The Interstate 5 corridor bisected the community that had become known as Shoreline, and made east-west travel on local roads more difficult.

Although known as "Shoreline" for decades, the community did not become officially incorporated city until 1995, and prior to that it remained an unincorporated area of King County north of Seattle.

Today with over 50,000 residents, Shoreline is Washington's 15th largest city.

Present-Day Land Use Patterns

The subarea today consists primarily of single family neighborhoods zoned as R-6 (residential, six units per acre) and developed at an average density of 2.7 units per acre. In addition to single family residential uses, there are several churches, parks, schools, and school properties within and in proximity to the subarea. For example, the Shoreline Center, owned and operated by the Shoreline School District, is a large complex that serves many community functions (see Key Opportunity Sites in the Subarea for more information).

Most of the study area neighborhoods were developed as single-family housing in the decades following World War II, primarily from the mid- to late 1940s through the 1970s, when the area was part of unincorporated King County. When the neighborhoods were originally developed, street standards did not require sidewalks, and as such, most of the local streets today do not have sidewalks or bike lanes. The City of Shoreline, incorporated in 1995, now has jurisdiction over this area and works with the community to prioritize capital transportation and infrastructure improvements throughout the city. Although some improvements have been made in the study area in recent years, budget constraints have limited the level of street and utility improvements completed to date.

Growth and change over the past 50 years in the subarea has been minimal, limited to areas that are zoned to accommodate redevelopment into a mix of residential, commercial, retail, and office uses, such as in the North City area and along the Aurora Avenue N corridor. Refer to Section 3.2 for a discussion of population, housing, and employment, including existing conditions, trends, and growth forecasts and targets.

While the focus of planning is the subarea surrounding the proposed light rail station, boundaries also encompass existing commercial/retail and multi-family land use areas in a portion of the North City business district (north of NE 175th Street) and along Aurora Avenue N, as part of the Town Center district.

Neighborhoods in the Subarea

The subarea includes the following defined Shoreline neighborhoods:

- Meridian Park
- Echo Lake
- North City

Other neighborhoods on the periphery of the subarea include Ridgecrest, Ballinger, and Parkwood. **Figure 3.1-3** illustrates the neighborhood area boundaries in proximity to the study area.

Shoreline’s neighborhoods are very engaged in the community and maintain active neighborhood associations. Shoreline’s Council of Neighborhoods consists of two representatives from each of the neighborhood associations (including those listed above). The Council of Neighborhoods meets monthly to network, learn about other neighborhood happenings and meet with City representatives. This two-way communication allows neighborhood associations to provide community input and the City to present information on programs and projects. Brief descriptions, including historical information, for the four primary neighborhoods in the study area follow.

Meridian Park—Located in the center of Shoreline, the Meridian Park Neighborhood extends north to south from N 185th Street to N 160th Street and west to east from Aurora Avenue N to Interstate 5. The neighborhood has several parks, including Cromwell Park

(bordering the subarea) and Ronald Bog natural area and park (located outside the subarea), home to the signature artwork the “Ponies.” The neighborhood is proud of opportunities residents have to get close to nature, with a diversity of wildlife at Ronald Bog Park and other areas, including ducks, birds, turtles, frogs, and an occasional beaver, to name a few.

Similar to the history of other Shoreline neighborhoods, many of the homes were developed during the post World War II era and the Baby Boom decades. Families were attracted to the opportunities to purchase new homes developed at economical prices located in various plats. The area became known as a great place to live, and high quality schools were established along with parks to serve the new residents. Today, the predominant land use in Meridian Park still consists of single family homes, with the exception of commercial uses along Aurora Avenue.

Echo Lake—The Echo Lake Neighborhood extends from the Shoreline city limits and county line (at 205th Street) to the north, to 185th Street to the south, and extends east and west between Aurora Avenue N (State Route/Highway 99) and Interstate 5.

Echo Lake has an interesting history that intertwines with the history of Shoreline. Settlers started moving to the area by 1862 and in 1900, a shingle mill was built at the north end of Echo Lake. The mill burned down in 1912 and was never rebuilt. Meanwhile, workers were busy building the Interurban streetcar rail line, headquartered at a camp located near the mill. The trolley line extended between Seattle and Everett and brought more people to Echo Lake and the surrounding area for recreation. (Today, the Interurban Trail, a signature public recreation corridor in Shoreline, follows the old streetcar’s alignment.)

Existing Conditions in the 185th Street Station Subarea



Cromwell Park



Looking East on 180th Street



Shoreline Center from the south end



Aurora Avenue North green street improvements



North City Park



Shoreline Pool operated by the City of Shoreline



Looking North on 8th Avenue NE



Seattle City Light powerline corridor



North City Subarea, 15th Avenue NE

As more people began owning automobiles, Echo Lake became a popular attraction for day trips. The North Trunk Road was constructed in 1913 to serve the area and paved in brick. A portion of this road, today known as Ronald Place (named after Judge Ronald, an advocate for construction of the road), has been preserved as an important historic feature of Shoreline.

Interest in the area prompted development in the 1910s and 1920s and “Echo Lake Park” became one of the first plats, advertised as “an ideal setting for getting away and owning your own little piece of rural America.” After residences became established, businesses followed, and eventually the new, straight Highway 99 was built replacing portions of the old winding brick road.

While more and more businesses sprang up along the Highway 99 thoroughfare, changing the character of the corridor, Echo Lake continued to be known as a fun place to go into the 1930s, 1940s, 1950s, and beyond. The Echo Lake Bathing Beach and Holiday Resort were popular weekend escapes for visitors from the city, looking for a rural retreat.

Echo Lake’s history as a popular recreational destination continues to this day with the recent development of the Dale Turner Family YMCA near the south end of the lake. The Echo Lake Apartments are another recent mixed-use redevelopment project with multi-family residences and businesses at the corner of Aurora Avenue N and N 192nd Street. While land uses along Aurora Avenue N are predominantly commercial, elsewhere throughout the Echo Lake Neighborhood there are a variety of single family and multi-family housing options, along with schools, parks, and other community destinations, including the Shoreline Center.

North City—The North City Neighborhood is located east of Interstate 5 and extends to NE 195th Street to the north, NE 160th Street to the south, and the City of Lake Forest Park to the east. 15th Avenue NE is the central spine of the neighborhood and the North

City business district (discussed in more detail later in this section) has become a commercial hub for Shoreline neighborhoods east of Interstate 5. The eastern edges of the neighborhood rise in elevation and the roads wind through hilly topography to provide access to homes. An interesting story from the 1900s is that residents of the area used to race motorcycles down the hill at NE 185th Street, which came to be called “motorcycle hill”.

With commercial, mixed use, office, and multi-family residential uses concentrated primarily in the North City business district centered around NE 175th Street, the remainder of the neighborhood consists primarily of single family homes. With approximately 2,859 homes, North City is one of the largest neighborhoods in Shoreline. With recent and ongoing redevelopment of the business district, the neighborhood now offers a variety of housing choices (for sale homes and condominiums as well as homes and apartments for rent) for a diversity of budgets. The neighborhood also features nearby parks with playgrounds and active recreation facilities, as well as natural open spaces, wooded areas with trails, and other amenities that are easily accessible by foot.

Ridgecrest—The Ridgecrest Neighborhood extends from I-5 east to 15th Ave NE and from the southern boundary of NE 145th Street to the northern boundary of NE 175th Street.

The first major housing development in the neighborhood happened in the mid 1940s, near the end of World War II. Returning soldiers could purchase any one of the 100 houses that were built in 100 days. So many families with school age children moved to the neighborhood that the newly completed Ridgecrest Elementary School had to run double shifts. The majority of the single family housing stock was built in the late 1940s to early 1950s on large lots, set well back from the streets. Although some homes in this neighborhood were built in earlier, including a log cabin built in

1933 from trees logged from the property that still stands today (but is located outside the station subarea).

Today, Ridgecrest is a primarily a middle income, working class neighborhood that is both multi-cultural and multi-generational. According to the 2010 US Census, Ridgecrest had 6,116 residents and 2,175 homes, making it one of the most populated neighborhood in Shoreline. The neighborhood also has nine churches and four parks, as well as Shoreline’s only theatre and skate park and the oldest operating 7-11 store in the State of Washington.

Special Districts and Key Opportunity Sites in the Subarea

North City Subarea/Subarea Plan

The North City Subarea is a business district that includes primarily commercial uses as well as some mixed use, multi-family residential, and office/employment uses. Located at the east end of the 185th Street Station Subarea, North City is a linear district focused around the central spine of 15th Avenue NE, extending from 24th Avenue NE to a few blocks south of NE 170th Street. The City of Shoreline adopted a subarea plan for North City in 2001. The subarea has been undergoing redevelopment and revitalization as a result of plan adoption, and additional opportunities for redevelopment still exist in the subarea today.

The purpose of the plan was to:

- Provide a planning policy framework unique to North City.
- Preserve the privacy and safety of existing neighborhoods.
- Act as an incentive to redevelopment, particularly along 15th Avenue NE.

- Provide design direction for the improvement of 15th Avenue NE (and adjacent properties).

Key provisions and policies of the North City Subarea Plan include the following.

- Recommendations to apply best practices and sound neighborhood planning principles to the redevelopment of the district, and design guidelines illustrating potential improvements and redevelopment approaches.
- 15th Avenue NE serves as the service core for North City. Over time, it will be transformed into a “Main Street,” with lively street character and local services similar to the Lake City area only with housing and/or offices above. A specific goal of the plan is to:

“Create a retail/pedestrian-friendly “main street” district along 15th Avenue NE, between NE 172nd Street and just north of NE 180th Street.”

Other key provisions of the plan include recognizing the heart of North City as being located along 15th Avenue NE, between NE 175th and 177th Streets and the corner of NE 175th Street as the gateway to the area. The plan therefore requires first floor retail here. Retail is allowed, along with residential on the rest of the street. In order to maximize the spatial quality of a neighborhood main street, the buildings along 15th Avenue NE area required to step back from the street as they get higher. In order to establish a walkable shopping environment, 15th Avenue NE is reduced to three lanes, the middle lane functioning as the left-turn lane. This configuration will slow traffic without impeding flow.

Historic Photos of Shoreline



Historic photos of the Echo Lake Neighborhood; the image above, circa 2010, shows the old Interurban Streetcar line looking northwest with the steam-generated Mowatt Sawmill in the distance. The image below, circa 1916, shows a group visiting from Ballard in Seattle for a day of berry picking near the lake. (Photos courtesy of the Echo Lake Neighborhood Association and Shoreline Historical Society, with some photos donated by Florence Butske.)



The historic image above from 1930 shows a woman standing along the new Highway 99, with the new Echo Lake Bathing Beach sign, and the image below shows the Interurban Trolley crossing under the trestle at N 200th Street. (Photos courtesy of the Echo Lake Neighborhood Association and Shoreline Historical Society, and photos donated by Florence Butske.)

While these historical scenes are from locations outside the station subarea, they provide context of the history of development of the Shoreline area.

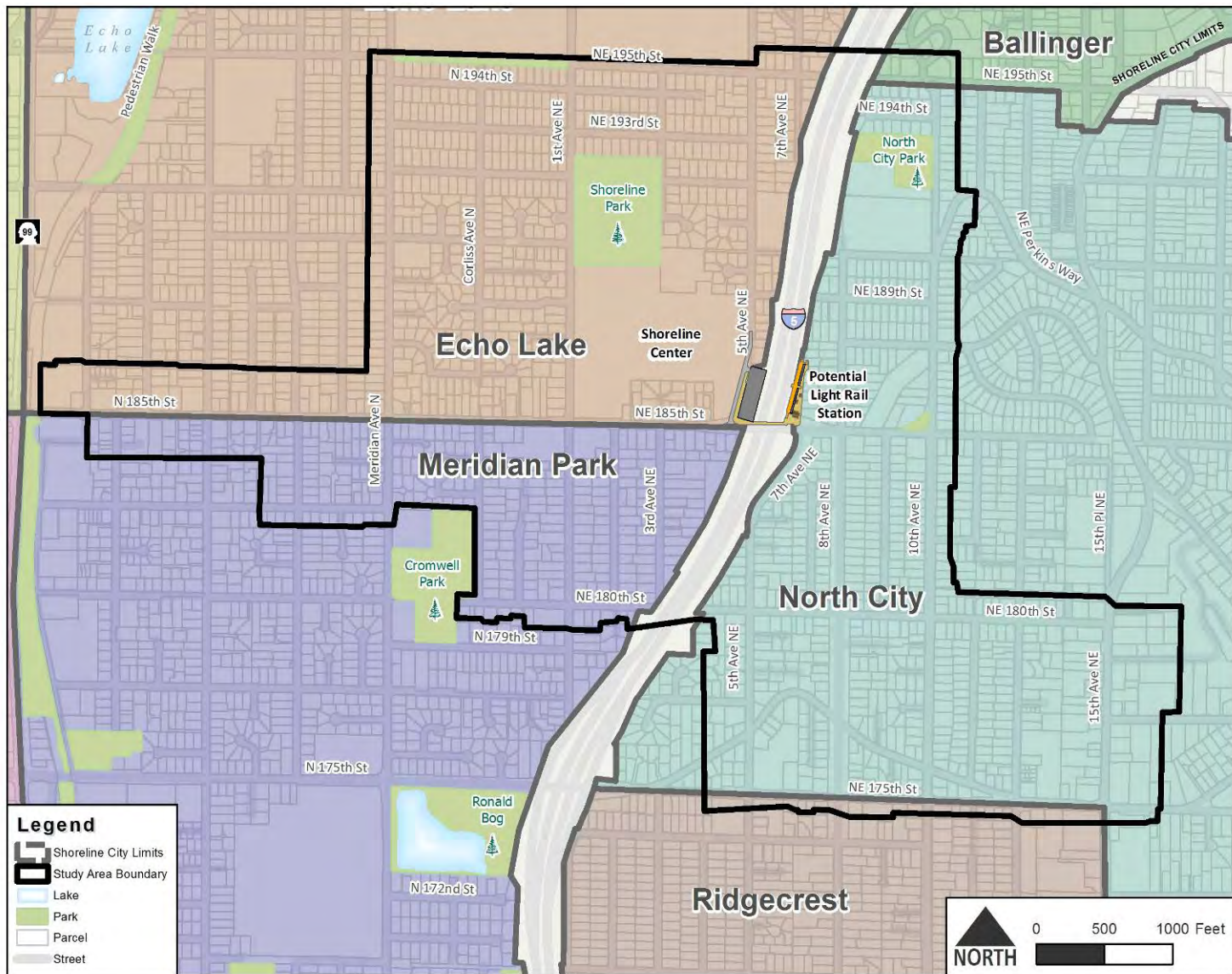


Figure 3.1-3 Existing Neighborhoods in the Vicinity of the 185th Street Station Subarea

The illustrations below are vision concepts from the North City Subarea Plan.

SITE 1: SW CORNER OF 15TH AVENUE NE & NE180TH STREET



SITE 4: SW CORNER OF 15TH AVENUE NE & NE 175TH STREET



Located in the middle mile of the city's three-mile-long Aurora corridor (Highway/SR 99), Town Center is the geographic center of the city of Shoreline. Located at the crossroads of three of the city's most heavily traveled roads, N 175th Street, N 185th Street and Aurora Avenue N, Town Center is the civic and symbolic center of the community. Early in the life of the new City of Shoreline, a citizens survey identified this area as the "Heart of Shoreline."

The Town Center Subarea Plan, adopted in 2011, makes note of the growth management strategy in the Vision 2040 plan for the central Puget Sound region, which forecasts an additional 1.7 million people and 1.4 million jobs in the region by 2040 with only a negligible increase in the size of the region's urban growth area. This strategy, combined with state climate change targets to reduce greenhouse gas emissions and vehicle miles traveled, means there will be increasing pressure on close-in cities such as Shoreline to accommodate future growth.

Shoreline's ability to accommodate these pressures while maintaining the community's reputation as one of America's best places to live will be a critical in the coming decades. Implementation of the Town Center Subarea Plan will be one important strategy to help Shoreline meet that challenge.

Portions of the Town Center Vision Statement restated below articulate the intended future for this central core of the City:

"Shoreline Town Center in 2029 is the vibrant cultural and civic heart of the city with a rich mix of housing and shopping options, thriving businesses, and public spaces for gatherings and events. People of diverse cultures, ages, and incomes enjoy living, working, and interacting in this safe, healthy, and walkable urban place.

Town Center Subarea/Subarea Plan

...Notable features include a number of green open spaces with both large and intimate enclosed plazas, storefronts opening onto parks and wide sidewalks, underground and rear parking, numerous ground-floor and corner retail options within mixed use buildings, and internal streets within large blocks with other pathways that provide safe, walkable and bikable connections throughout the Center...

Building heights range from one to three stories within transition areas adjacent to single family residential areas along Linden and Stone Avenues and up to six stories in mixed-use buildings along sections of Aurora Avenue N, while buildings in the Midvale and Firlands areas are generally four to five story mixed-use structures. Building materials, facades, designs, landscape spaces, as well as public art and green infrastructure features represent a wide variety of styles and functions while maintaining a harmonious look and feel.

The City of Shoreline has long been committed to the realization of the three E's of sustainability—environmental quality, economic vitality, and social equity—and Town Center has successfully integrated these values to achieve sustainable development.”

Consistent with this vision and the goals and policies of the Town Center Subarea Plan, there are redevelopment and revitalization opportunities throughout Town Center, some of which have already been realized and some still to be implemented in the coming years.

The 185th Street Station Subarea overlaps with the Town Center Subarea at the west end of N 185th Street, near the intersection with Aurora Avenue N. There are opportunities to enhance the sense of gateway toward the west to Town Center, within the 185th Street Station Subarea, as well as to enhance the sense of

gateway toward the east, as the key corridor connecting to the 185th Street light rail station.

Goals and policies of the Town Center Subarea Plan that also have relevance to the 185th Street Station Subarea Plan are summarized below.

- Goal TC-1:** Create a Town Center that embodies the sustainability values of environmental quality, economic vitality, and social equity.
- Goal TC-2:** Create a Town Center that is complete, compact, and connected to its neighborhoods and the region.
- Goal TC-3:** Create a “sense of place” in Town Center that provides a focal point for Shoreline’s civic life and community-wide identity and embraces its unique history.
- Goal TC-4:** Create an economically and culturally thriving Town Center through the coordinated efforts of the City, the School District, and other public sector organizations, business organizations, community non-profits, and neighborhood associations.
- Policy TC-2:** Create a safe, attractive, and walkable Town Center that links mixed-use, mid-rise buildings, a broad range of housing choices, major civic amenities, public gathering places, and bus rapid transit service.
- Policy TC-3:** Increase the variety of housing choices in Town Center and increase opportunities for moderate cost housing. Reduce new housing construction

costs and incentivize affordable housing in Town Center.

Policy TC-4: Publicize innovative “green infrastructure” including City Hall, Shorewood High School, and Aurora Avenue N as models for private projects in Town Center.

Policy TC-6: Connect Town Center to other parts of Shoreline and the region by promoting multi-modal transportation choices, including high-capacity transit on Aurora, frequent local bus service, bicycle paths, and improved pedestrian walkways.

Policy TC-8: Enhance the sustainability of adjacent residential neighborhoods through targeted investments in green street links to Town Center, and focused programs to enhance energy conservation and carbon neutrality.

Policy TC-9: Create a seamless network of safe, convenient, and attractive walkway improvements within Town Center that also connects to all streets, the Interurban Trail, high-capacity transit on Aurora, and adjacent neighborhoods.

Policy TC-10: Create safe and attractive pedestrian crossings of Aurora, walkways to better link uses with Town Center, and more direct and attractive walkways from adjacent neighborhoods.

Policy TC-11: Give clear visual indication of Town Center’s boundaries with gateway treatments such as signs and landscaping

Policy TC-12: Create a hierarchy of Boulevard, Storefront, and Greenlink streets to serve different mobility and access roles within Town Center. (*N 185th Street is designated as a “Boulevard” street in the subarea plan.*)

Policy TC-13: Post public “wayfinding” signs to direct motorists and bicyclists to public destinations within and near Town Center.

Policy TC-15: Consider the creation of new rights-of-way, or the vacation of other rights-of-way in order to facilitate better vehicular and pedestrian circulation. Encourage parcel aggregation and more comprehensive site development designs in order to create a more pedestrian friendly environment and promote mixed use development.

Policy TC-16: Protect adjacent residential areas from impacts generated by developments in Town Center. Create a medium density buffer between the commercial uses in Town Center and the single family neighborhoods east of Midvale that limits lighting, signage, and noise impacts. Oriented commercial uses west of Aurora so that they have primary access and impacts oriented toward Aurora, rather than to the neighborhood west of Linden.

Policy TC-18: Recognize the environmental and aesthetic value of existing stands of prominent trees and promote a green built environment.

Policy TC-20: Celebrate the heritage of the community through preservation, education, and interpretation of artifacts and places in or near Town Center.

Policy TC-22: Encourage structured parking for commercial, multifamily, and mixed use developments, and reduce parking requirements in recognition of the availability of transit, on-street parking, walkability, and housing types.

Policy TC-23: Where feasible, minimize surface parking lots, located them in rear or side yards and screen them with landscaping, low walls, or fences, arbors, and other treatments to soften visual impacts.

Policy TC -25: Create a form-based development code and streamlined permit process that consolidates environmental review and design review into a single expedited administrative permit review. Adopt illustrated and clear design standards with a menu of options and opportunities for design flexibility.

Policy TC-26: Adopt Town Center design standards and design review process so that new projects are consistent with the vision and goals for Town Center.

Shoreline Center

The Shoreline Center (which includes the Shoreline Conference Center) was once the location of Shoreline High School and is now the home of central offices of the School District, offices for several local non-profit agencies, and conference center facilities. The Shoreline Center is owned and operated by the Shoreline School District, which allocates proceeds from the Center's operations to the general fund of the 10,000 student district. The forty-acre campus, located just west of the I-5 corridor and north of N185th Street, also includes the Shoreline Stadium (a venue for local and regional school sports events), the Spartan Recreation Center (a multi-use community facility jointly owned

and operated by the Shoreline School District and the City of Shoreline), and the Shoreline / Lake Forest Park Senior Center (a community support center and gathering place for senior citizens). On adjacent property to the north of the campus, the City of Shoreline operates the Shoreline Pool and Shoreline Park.

The Conference Center hosts a wide variety of events from small meetings and workshops to large conferences and conventions, and social gatherings such as community banquets and wedding receptions. One of the ten largest event venues in the Seattle area, the Conference Center's hallways serve as a gallery for art work created by students of the Shoreline School District, enjoyed by hundreds of thousands of visitors each year. Works by local professional artisans are also displayed in the on-site gallery of the Shoreline Lake Forest Park Arts Council.

Recognizing the potential opportunities that could be afforded with redevelopment of the large site, the School District intends to hire a consultant to examine the best use for their property with regard to their mission. Redevelopment concepts in the 185th Street Station Subarea Plan can help to inform potential options for the Shoreline Center site, and the City welcomes input from the District about their long-term vision for properties within the subarea.

North City Elementary School Site

The North City school site, located at 816 NE 190th Street in the subarea, is the former site of the North City Elementary School. Presently, the North City Cooperative Preschool and Home Education Exchange (providing resources to home schooled students and parent teachers) are operated at this location. The four-acre North City Park site is located to the north of the school site. The elementary school, which had an enrollment of approximately 375 students, was closed at the end of the 2006-2007 school year after Shoreline School District determined

elementary students could be accommodated at other schools. This resulted from a decline in student enrollment that occurred over the previous decade. Given that this site is actively used and there would be a need for additional school facilities and services in the future as the neighborhood grows, the Shoreline School District intends to retain this property and 185th Street Station Subarea Plan recognizes its use as an important existing and future educational site.

Seattle City Light Rights-of-Way

Seattle City Light transmission lines occupy a right-of-way that extends through the subarea from north to south from the corner of 10th Avenue NE and NE 188th Street, diagonal through the block and then extending down the east side of the 8th Avenue NE right-of-way. While access must be maintained to the transmission towers for maintenance, Seattle City Light may allow public use under the transmission lines. These areas could potentially be used for public open space, community gardens, and connecting trails/paths through the subarea.

Church Properties

There are a number of church properties within the station subarea that hold potential for redevelopment due to their size and location along arterial and collector streets. If the property owners are willing and interested, portions or all of these sites have the potential to be redeveloped over time, converting all or portions of the site to housing (including affordable options). Proposed zoning for Alternative 2—Some Growth and Alternative 3—Most Growth would support this redevelopment. These properties could either be redeveloped directly by the owners or sold to interested developers in the future at the owners' discretion.

Surrounding Areas

Areas beyond those described above that surround the study area include the City of Lake Forest Park to the northeast and east, which is predominantly in single family use, similar to Shoreline. The subarea is surrounded by other incorporated areas of the City of Shoreline (to the north, west, and south). The proposed 145th Street Station Subarea also is located to the south, and is connected to the 185th Street Station via the north-south corridors of 5th and 8th Avenues NE.

Redevelopment Opportunities

Redevelopment opportunities in the study area are based on a specific station subarea market assessment prepared for the City of Shoreline by BAE Urban Economics (November 2013). Information from Sound Transit's Lynnwood Link Extension Station Area Transit-Oriented Development Potential report (April 2013) also was reviewed and is summarized below.

Redevelopment opportunities also consider the long-range potential for growth and change in the station subarea consistent with Shoreline's vision and the regional objective to maximize the number of people living and working in proximity to high-capacity transit.

Key findings of the station subarea market assessment completed by BAE Urban Economics include the following.

- Key target markets over time would include younger millennial and older empty nester households seeking both for sale and for rent options, as well as a more mixed use urban environment.
- There is the potential to create transit-oriented development at the new NE 185th Street Station and connect it via an enhanced transit boulevard to the emerging transit-oriented development of the Aurora

Avenue N/Town Center corridor and the mixed-use node in North City along 15th Avenue NE. The proximity of the core commercial area in North City to the proposed light rail station presents an opportunity to enhance access for pedestrians, bicycles, and local transit along NE 185th Street, 10th Avenue NE, and NE 180th Street, as well as other streets in the subarea. This is also the case in making connections to the Aurora Avenue N corridor, located approximately one mile from the proposed station. These improvements would enhance residents' access to and from the new station, as well as to and from retail and neighborhood services.

- The primary market opportunity for new development at the NE 185th Street Station Subarea is the development of residential units over the next 20 years. Approximately 700 units would represent 15 percent of the new residential growth that PSRC projects for all of Shoreline through 2035, but there would be additional longer-term demand beyond this. The redevelopment of the Shoreline Center site, west of I-5 would serve an important role in the station subarea's overall growth over the long-term.
- A variety of residential types could be supported around the station subarea, including a mix of for-sale condominiums, for rent apartments, townhouse and rowhouse units, various other types of multi-family and attached single family buildings, and small single family clustered housing/cottage units. Another potential product type based on Shoreline's aging population would be age-restricted (55+) housing.
- In the initial years of neighborhood redevelopment, after the light rail station is operating, it is anticipated that the demand for retail would be limited to a small amount of convenience oriented retail serving residents and transit riders and located at the transit station (once the station is operating). The station area currently lacks retail uses, with the nearest neighborhood retail located just over one-half mile away on 15th Avenue NE, and the city's primary commercial corridor on Aurora Avenue N one mile away. The station area is too far away from either of these areas and lacks I-5 access to draw some types of retail. However convenience-oriented, neighborhood retail uses (e.g. coffee shops, cafes, sundries, personal services, etc.) located at the station, or within a direct sight line between the station and any parking structure, would maximize access to transit riders and immediate area residents and have the greatest potential.
- Over the longer term, more demand for neighborhood-serving retail and services would be driven by increased population and households subarea. It may be beneficial to adopt zoning that would allow conversions of single family homes along major corridors for these types of uses (e.g. homes converted to dental office, tax accountants, coffee shops, etc.) to serve the transitioning demand over time.
- There appears to be little potential for office or other types of institutional uses. Shoreline does not currently have a substantial office market and is positioned between much larger office markets in Lynnwood and North Seattle. Most existing office space is geared toward local-serving professional and service firms.
- The existing development pattern of the station area and its location will cause redevelopment to happen very gradually, over many decades, due to the difficulty of assembling sites for development in the single-family neighborhoods given current parcel sizes. Development interest is likely to be more focused on the Aurora

Avenue N and North City corridors because they are established locations that already offer a mix of housing types and retail choices.

Sound Transit prepared the Lynnwood Link Extension Station Area Transit-Oriented Development Potential report in 2013, which included a preliminary market assessment of the demand for office space, multifamily housing, retail space, and lodging. The findings of the TOD Development Potential report were generally consistent with the findings of the subarea market assessment described above.

City of Shoreline Comprehensive Plan—Relevant Policies

This section identifies applicable goals and policies in the City’s Comprehensive Plan relevant to the subarea and Planned Action. These are in addition to the Framework policies and specific Land Use Element policies to guide station subarea planning in the Comprehensive Plan, which were summarized in Chapter 2. Existing Comprehensive Plan designations for the subarea also were described in Chapter 2. The Town Center and North City Subarea Plans were summarized earlier in this section. The City’s Transportation Master Plan is summarized in Section 3.3 and the Parks, Recreation, and Open Space Plan is summarized in Section 3.4. Other plans of the City and service providers are referenced in Sections 3.4 and 3.5 as relevant. Surface water/stormwater master plans and basin planning documents are referenced in Section 3.5.

Relevant Comprehensive Plan goals and policies are summarized below. Goals and policies that are not relevant to the subarea and Planned Action are not listed, and as such, there may be gaps in the number sequences with each element. Many of the goals and policies listed have relevance to land use, while others are

relevant to housing, transportation, public services, and utilities, and there for relate to other sections of this DEIS.

CITIZEN PARTICIPATION

Citizen participation goals and policies guide all areas of planning in the City of Shoreline, and as such are relevant to the 185th Street Station Subarea Planned Action.

GOALS

CP I: To maintain and improve the quality of life in the community by offering a variety of opportunities for public involvement in community planning decisions.

POLICIES

CP1: Encourage and facilitate public participation in appropriate planning processes, and make those processes user-friendly.

CP2: Consider the interests of the entire community, and the goals and policies of this Plan before making planning decisions. Proponents of change in planning guidelines should demonstrate that the proposed change responds to the interests and changing needs of the entire city, balanced with the interests of the neighborhoods most directly impacted by the project.

CP3: Ensure that the process that identifies new, or expands existing, planning goals and policies considers the effects of potential changes on the community, and results in decisions that are consistent with other policies in the Comprehensive Plan.

- CP4:** Consider community interests and needs when developing modifications to zoning or development regulations.
- CP5:** Encourage and emphasize open communication between developers and neighbors about compatibility issues.
- CP6:** Utilize a variety of approaches, encouraging a broad spectrum of public viewpoints, wherever reasonable, to oversee major revisions to the general elements and subareas of the Comprehensive Plan.
- CP7:** Educate residents about various planning and development processes, how they interrelate, and when community input will be most influential and effective.
- CP8:** Consider the interests of present and future residents over the length of the planning period when developing new goals, policies, and implementing regulations.

LAND USE GOALS AND POLICIES

The City’s Comprehensive Plan Land Use Element was reviewed to identify the goals and policies most relevant to the subarea. In addition to the land use policies developed to specifically guide station subarea planning, summarized in Chapter 2, the following land use goals and policies also are relevant.

GOALS

Goal LU I: Encourage development that creates a variety of housing, shopping, entertainment, recreation, gathering spaces, employment, and services that are accessible to neighborhoods.

- Goal LU II:** Establish land use patterns that promote walking, biking and using transit to access goods, services, education, employment, recreation.
- Goal LU III:** Create plans and strategies that implement the City’s Vision 2029 and Light Rail Station Area Planning Framework Goals for transit supportive development to occur within a ½ mile radius of future light rail stations.
- Goal LU IV:** Work with regional transportation providers to develop a system that includes two light rail stations in Shoreline, and connects all areas of the city to high-capacity transit using a multi-modal approach.
- Goal LU V:** Enhance the character, quality, and function of existing residential neighborhoods while accommodating anticipated growth.
- Goal LU VI:** Encourage pedestrian-scale design in commercial and mixed use areas.
- Goal LU VII:** Plan for commercial areas that serve the community, are attractive, and have long-term economic vitality.
- Goal LU VIII:** Encourage redevelopment of the Aurora corridor from a commercial strip to distinct centers with variety, activity, and interest. *(This goal is relevant to where the 185th Street corridor meets the Town Center Subarea along Aurora Avenue N.)*

Goal LU X: Nominate Shoreline as a Regional Growth Center as defined by the Puget Sound Regional Council. *(Implementation of the 185th Street Station Subarea Plan would build capacity for additional growth to support this goal.)*

Goal LU XII: Increase access to healthy food by encouraging the location of healthy food purveyors, such as grocery stores, farmers markets, and community food gardens in proximity to residential uses and transit facilities.

POLICIES

Residential Land Use

LU1: The Low Density Residential land use designation allows single-family detached dwelling units. Other dwelling types, such as duplexes, single-family attached, cottage housing, and accessory dwellings may be allowed under certain conditions. The permitted base density for this designation may not exceed 6 dwelling units per acre.

LU2: The Medium Density Residential land use designation allows single family dwelling units, duplexes, triplexes, zero lot line houses, townhouses, and cottage housing. Apartments may be allowed under certain conditions. The permitted base density for this designation may not exceed 12 dwelling units per acre.

LU3: The High Density Residential designation is intended for areas near employment and/or commercial areas, where high levels of transit service are present or likely. This designation creates a transition between commercial uses and lower intensity residential uses. Some commercial uses may also be permitted. The permitted

base density for this designation may not exceed 48 dwelling units per acre.

LU4: Allow clustering of residential units to preserve open space and reduce surface water run-off.

LU5: Review and update infill standards and procedures that promote quality development, and consider the existing neighborhood.

LU6: Protect trees and vegetation, and encourage additional plantings that serve as buffers. Allow flexibility in regulations to protect existing stands of trees.

LU7: Promote small-scale commercial activity areas within neighborhoods that encourage walkability, and provide opportunities for employment and “third places”.

LU8: Provide, through land use regulation, the potential for a broad range of housing choices and levels of affordability to meet the changing needs of a diverse community.

Mixed Use and Commercial Land Use

LU9: The Mixed-Use 1 (MU1) designation encourages the development of walkable places with architectural interest that integrate a wide variety of retail, office, and service uses, along with form-based maximum density residential uses. Transition to adjacent single-family neighborhoods may be accomplished through appropriate design solutions. Limited manufacturing uses may be permitted under certain conditions.

LU10: The Mixed-Use 2 (MU2) designation is similar to the MU1 designation, except it is not intended to allow more



intense uses, such as manufacturing and other uses that generate light, glare, noise, or odor that may be incompatible with existing and proposed land uses. The Mixed-Use 2 (MU2) designation applies to commercial areas not on the Aurora Avenue N or Ballinger Way corridors, such as Ridgecrest, Briarcrest, Richmond Beach, and North City. This designation may provide retail, office, and service uses, and greater residential densities than are allowed in low-density residential designations, and promotes pedestrian connections, transit, and amenities.

LU11: The Town Center designation applies to the area along the Aurora corridor between N 170th Street and N 188th Street and between Stone Avenue N and Linden Avenue N, and provides for a mix of uses, including retail, service, office, and residential with greater densities.

LU12: Reduce impacts to single-family neighborhoods adjacent to mixed use and commercial land uses with regard to traffic, noise, and glare through design standards and other development criteria.

LU13: Encourage the assembly and redevelopment of key, underdeveloped parcels through incentives and public/private partnerships.

Other Land Uses

LU15: The Public Facilities land use designation applies to a number of current or proposed facilities within the community. If the use becomes discontinued, underlying zoning shall remain unless adjusted by a formal amendment.

LU16: The Public Open Space land use designation applies to all publicly owned open space and to some privately owned property that might be appropriate for public acquisition. The underlying zoning for this designation shall remain until the City studies and approves the creation of a complementary zone for this designation.

LU17: The Private Open Space land use designation applies to all privately owned open space. It is anticipated that the underlying zoning for this designation shall remain.

LU19: Land Use and Mobility Study Areas designate areas to be studied with regard to subarea planning for light rail stations. The underlying zoning for this designation remains unless it is changed through an amendment to the Comprehensive Plan Land Use Map and Development Code.

Light Rail Station Areas

These policies, LU20 through LU43 were presented in Chapter 2 of this DEIS. The 185th Street Station Subarea Planned Action is directly relevant to these policies, and the policies would be supported and reinforced through implementation of either Alternative 2—Some Growth, Alternative 3—Most Growth, or a hybrid alternative or similar new alternative as may be identified in the FEIS as the Preferred Alternative.

Transit & Parking

LU49: Consider the addition of compatible mixed-uses and shared (joint use) parking at park and ride facilities.

LU50: Work with transit providers to site and develop park and rides with adequate capacity and in close proximity to transit service.

- LU51:** Encourage large commercial or residential projects to include transit stop improvements when appropriate.
- LU52:** Parking requirements should be designed for average need, not full capacity. Include regulatory provisions to reduce parking standards, especially for those uses located within ¼ mile of high-capacity transit, or serving a population characterized by low rates of car ownership. Other parking reductions may be based on results of the King County Right-Sized Parking Initiative.
- LU53:** Examine the creation of residential parking zones or other strategies to protect neighborhoods from spillover by major parking generators.

Sustainable Land Use

- LU54:** Educate the community about sustainable neighborhood development concepts as part of the subarea planning processes to build support for future policy and regulatory changes.
- LU55:** Explore whether “EcoDistricts” could be an appropriate means of neighborhood empowerment, and a mechanism to implement triple-bottom-line sustainability goals by having local leaders commit to ambitious targets for green building, smart infrastructure, and behavioral change at individual, household, and community levels.
- LU56:** Initiate public/private partnerships between utilities, and support research, development, and innovation for energy efficiency and renewable energy technology.

- LU57:** Explore providing incentives to residents and businesses that improve building energy performance and/or incorporate onsite renewable energy.
- LU58:** Support regional and state Transfer of Development Rights (TDR) programs throughout the city where infrastructure improvements are needed, and where additional density, height and bulk standards can be accommodated.
- LU59:** Consider social equity and health issues in siting uses, such as manufacturing and essential public facilities, to provide protection from exposure to harmful substances and environments.

Essential Public Facilities (EPF)

There are no Essential Public Facilities (EPFs) located within the areas proposed for zoning changes under Alternatives 2 and 3, and at this time, it is not anticipated that EPFs meeting the definition in the Revised Code of Washington (RCW) 36.70A.200(1) would be located or sited within the station subarea. While the proposed light rail facilities classify as EPFs, they are not the direct focus of this DEIS.

Water Quality and Drainage

- LU66:** Design, locate, and construct surface water facilities to:
- promote water quality;
 - enhance public safety;
 - preserve and enhance natural habitat;
 - protect critical areas; and

- reasonably minimize significant, individual, and cumulative adverse impacts to the environment.

LU67: Pursue state and federal grants to improve surface water management and water quality.

LU68: Protect water quality through the continuation and possible expansion of City programs, regulations, and pilot projects.

LU69: Protect water quality by educating citizens about proper waste disposal and eliminating pollutants that enter the stormwater system.

LU70: Maintain and enhance natural drainage systems to protect water quality, reduce public costs, protect property, and prevent environmental degradation.

LU72: Where feasible, stormwater facilities, such as retention and detention ponds, should be designed to provide supplemental benefits, such as wildlife habitat, water quality treatment, and passive recreation.

COMMUNITY DESIGN

Goals and policies related of the Community Design Element of the Comprehensive Plan are directly relevant to the 185th Street Station Subarea Planned Action.

GOALS

Goal CD I: Promote community development and redevelopment that is aesthetically pleasing, functional, and consistent with the City’s vision.

Goal CD II: Design streets to create a cohesive image, including continuous pedestrian improvements that connect to the surrounding neighborhoods.

Goal CD III: Expand on the concept that people using places and facilities draws more people.

Goal CD IV: Encourage historic preservation to provide context for people to understand their community’s past.

POLICIES

Site and Building Design

CD1. Encourage building design that creates distinctive places in the community.

CD2. Refine design standards so new projects enhance the livability and the aesthetic appeal of the community.

CD3. Encourage commercial, mixed–use, and multi-family development to incorporate public amenities, such as public and pedestrian access, pedestrian-oriented building design, mid-block connections, public spaces, activities, and solar access.

CD4. Buffer the visual impact on residential areas of commercial, office, industrial, and institutional development.

CD5. Encourage architectural elements that provide protection from the weather.

Signs

- CD6.** Encourage signage to be complementary in scale to the building architecture and site design.
- CD7.** Discourage multiple or large signs that clutter, distract, or dominate the streetscape of commercial areas.
- CD9.** Encourage the consolidation of signs on a single structure where a commercial development includes multiple businesses.
- CD10.** Encourage signs on multi-tenant buildings to be complementary in size and style for all commercial and mixed-use zones.
- CD11.** Discourage signage that is distracting to drivers.
- CD12.** Improve permit process for temporary signs or banners.

Vegetation and Landscaping

- CD13.** Encourage the use of native plantings throughout the city.
- CD14.** Encourage development to consolidate onsite landscape areas to be large enough to balance the scale of the development.
- CD15.** Encourage concentrated seasonal planting in highly visible, public and semi-public areas.
- CD16.** Where feasible, preserve significant trees and mature vegetation.

- CD17.** Prohibit use of invasive species in required landscaping, and encourage use of native plant species whenever possible.

Open Space

- CD18.** Preserve, encourage, and enhance open space as a key element of the community's character through parks, trails, water features, and other significant properties that provide public benefit.

Public Spaces

- CD19.** Preserve and enhance views from public places of water, mountains, or other unique landmarks as valuable civic assets.
- CD20.** Provide public spaces of various sizes and types throughout the community.
- CD21.** Design public spaces to provide amenities and facilities such as seating, lighting, landscaping, kiosks, and connections to surrounding uses and activities that contribute to a sense of security.
- CD22.** Consider Crime Prevention through Environmental Design (CPTED) principles when developing mixed use, commercial and high-density residential uses.
- CD23.** Utilize landscaping buffers between different uses to provide for natural transition, noise reduction, and delineation of space while maintaining visual connection to the public amenity.

CD24. Encourage building and site design to provide solar access, as well as protection from weather.

Public Art

CD25. Encourage a variety of artwork and arts activities in public places, such as parks, public buildings, rights-of-way, and plazas.

CD26. Encourage private donations of art for public display and/or money dedicated to the City's Municipal Art Fund.

Sidewalks, Walkways and Trails

CD27. Where appropriate and feasible, provide lighting, seating, landscaping, and other amenities for sidewalks, walkways, and trails.

Street Corridors

CD28. Use the Green Street standards in the Master Street Plan to provide an enhanced streetscape, including street trees, landscaping, natural surface water management techniques, lighting, pathways, crosswalks, pedestrian and bicycle facilities, decorative paving, signs, seasonal displays, and public art.

CD29. Provide identity and continuity to street corridors by using a comprehensive street tree plan and other landscaping standards to enhance corridor appearance and create distinctive districts.

CD30. Provide pedestrian gathering spaces to unify corners of key intersections involving principal arterials.

CD31. Establish and maintain attractive gateways at entry points into the city.

CD32. Use Low Impact Development techniques or green street elements, except when determined to be unfeasible. Explore opportunities to expand the use of natural surface water treatment in the right-of-way through partnerships with public and private property owners.

Freeway

CD33. Encourage the use of visual barriers and sound absorption methods to reduce impacts from the freeway to residential neighborhoods.

Neighborhood Commercial

CD34. Develop walkable commercial areas that provide adjacent neighborhoods with goods and services.

CD35. Encourage buildings to be sited at or near the public sidewalk.

Residential

CD36. Support neighborhood improvement projects with City grants. Possible projects include signs, crosswalks, traffic calming, fencing, special lighting, street furniture, trails, and landscaping.

CD37. Minimize the removal of existing vegetation, especially mature trees, when improving streets or developing property.

Historic Preservation

- CD38.** Preserve, enhance, and interpret Shoreline’s history.
- CD39.** Recognize the heritage of the community by naming or renaming parks, streets, and other public places with their original historic names or after major figures and events.
- CD40.** Educate the public about Shoreline’s history through commemoration and interpretation.
- CD42.** Develop incentives, such as fee waivers and code flexibility to encourage preservation of historic resources, including those that are currently landmarked, and sites that are not yet officially designated.
- CD43.** Encourage both public and private stewardship of historic sites and structures.
- CD44.** Work cooperatively with other jurisdictions, agencies, organizations, and property owners to identify and preserve historic resources.
- CD45.** Facilitate designation of historic landmark sites and structures to ensure that these resources will be recognized and preserved.

for transit and local businesses through increased residential density along arterials; and improved infrastructure, like sidewalks and stormwater treatment, through redevelopment.

Goal H II: Encourage development of an appropriate mix of housing choices through innovative land use and well-crafted regulations.

Goal H III: Preserve and develop housing throughout the city that addresses the needs of all economic segments of the community, including underserved populations, such as households making less than 30% of Area Median Income.

Goal H IV: “Protect and connect” residential neighborhoods so they retain identity and character, yet provide amenities that enhance quality of life.

Goal H V: Integrate new development with consideration to design and scale that complements existing neighborhoods, and provides effective transitions between different uses and intensities.

Goal H VI: Encourage and support a variety of housing opportunities for those with special needs, specifically older adults and people with disabilities.

Goal H VII: Collaborate with other jurisdictions and organizations to meet housing needs and address solutions that cross jurisdictional boundaries.

Goal H VIII: Implement recommendations outlined in the Comprehensive Housing Strategy.

HOUSING

GOALS

Goal H I: Provide sufficient development capacity to accommodate the 20 year growth forecast and promote other goals, such as creating demand



Goal H IX: Develop and employ strategies specifically intended to attract families with young children in order to support the school system.

POLICIES

Facilitate Provision of a Variety of Housing Choices

H1: Encourage a variety of residential design alternatives that increase housing choice.

H2: Provide incentives to encourage residential development in commercial zones, especially those within proximity to transit, to support local businesses.

H3: Encourage infill development on vacant or underutilized sites.

H4: Consider housing cost and supply implications of proposed regulations and procedures.

H5: Promote working partnerships with public and private groups to plan and develop a range of housing choices.

H6: Consider regulations that would allow cottage housing in residential areas, and revise the Development Code to allow and create standards for a wider variety of housing styles.

Promote Affordable Housing Opportunities

H7: Create meaningful incentives to facilitate development of affordable housing in both residential and commercial zones, including consideration of exemptions from certain development standards in instances where strict application would make incentives infeasible.

H8: Explore a variety and combination of incentives to encourage market rate and non-profit developers to build more units with deeper levels of affordability.

H9: Explore the feasibility of creating a City housing trust fund for development of low income housing.

H10: Explore all available options for financing affordable housing, including private foundations and federal, state, and local programs, and assist local organizations with obtaining funding when appropriate.

H11: Encourage affordable housing availability in all neighborhoods throughout the city, particularly in proximity to transit, employment, and/or educational opportunities.

H12: Encourage that any affordable housing funded in the city with public funds remains affordable for the longest possible term, with a minimum of 50 years.

H13: Consider revising the Property Tax Exemption (PTE) incentive to include an affordability requirement in areas of Shoreline where it is not currently required, and incorporate tiered levels so that a smaller percentage of units would be required if they were affordable to lower income households.

H14: Provide updated information to residents on affordable housing opportunities and first-time home ownership programs.

H15: Identify and promote use of surplus public and quasi-publicly owned land for housing affordable to low and moderate income households.

- H16:** Educate the public about community benefits of affordable housing in order to promote acceptance of local proposals.
- H17:** Advocate for regional and state initiatives to increase funding for housing affordability.
- H18:** Consider mandating an affordability component in Light Rail Station Areas or other Transit-Oriented Communities.
- H19:** Encourage, assist, and support non-profit agencies that construct, manage, and provide services for affordable housing and homelessness programs within the city.
- H20:** Pursue public-private partnerships to preserve existing affordable housing stock and develop additional units.

Maintain and Enhance Neighborhood Quality

- H21:** Initiate and encourage equitable and inclusive community involvement that fosters civic pride and positive neighborhood image.
- H22:** Continue to provide financial assistance to low-income residents for maintaining or repairing health and safety features of their homes through a housing rehabilitation program.
- H23:** Assure that site, landscaping, building, and design regulations create effective transitions between different land uses and densities.
- H24:** Explore the feasibility of implementing alternative neighborhood design concepts into the City's regulations.

Address Special Housing Needs

- H25:** Encourage, assist, and support social and health service organizations that offer housing programs for targeted populations.
- H26:** Support development of emergency, transitional, and permanent supportive housing with appropriate services for people with special needs, such as those fleeing domestic violence, throughout the city and region.
- H27:** Support opportunities for older adults and people with disabilities to remain in the community as their housing needs change, by encouraging universal design or retrofitting homes for lifetime use.
- H28:** Improve coordination among the County and other jurisdictions, housing and service providers, and funders to identify, promote, and implement local and regional strategies that increase housing opportunities.
- H29:** Support the development of public and private, short-term and long-term housing and services for Shoreline's population of people who are homeless.

Participate in Regional Housing Initiatives

- H30:** Collaborate with King and Snohomish Counties, other neighboring jurisdictions, and the King County Housing Authority and Housing Development Consortium to assess housing needs, create affordable housing opportunities, and coordinate funding.
- H31:** Partner with private and not-for-profit developers, social and health service agencies, funding institutions, and all

levels of government to identify and address regional housing needs.

H32: Work to increase the availability of public and private resources on a regional level for affordable housing and prevention of homelessness, including factors related to cost-burdened households, like availability of transit, food, health services, employment, and education.

H33: Support and encourage legislation at the county, state, and federal levels that would promote the City’s housing goals and policies.

TRANSPORTATION

GOALS

Goal T I. Maintain the transportation infrastructure so that it is safe and functional.

Goal T II. Develop a bicycle system that is connective, safe, and encourages bicycling as a viable alternative to driving.

Goal T III. Provide a pedestrian system that is safe, connects to destinations, accesses transit, and is accessible by all.

Goal T IV. Work with transit providers and regional partners to develop and implement an efficient and effective multimodal transportation system to address overall mobility and accessibility, and which maximizes the people carrying capacity of the surface transportation system.

Goal T V. Protect the livability and safety of neighborhoods from the adverse impacts of the automobile.

Goal T VI. Encourage alternative modes of transportation to reduce the number of automobiles on the road, promote a healthy city, and reduce carbon emissions.

Goal T VII. Develop a transportation system that enhances the delivery and transport of goods and services.

Goal T VIII. Coordinate the implementation and development of Shoreline’s transportation system with neighboring transit systems and regional partners.

Goal T IX. Support and encourage increased transit coverage and service to connect local and regional destinations to improve mobility options for all Shoreline residents.

Goal T X. Secure reliable funding to ensure continuous maintenance and improvement of the transportation system.

POLICIES

Sustainability and Quality of Life

T1. Work with the community and regional partners to create standards for development of the Light Rail Station Special Study Areas identified in the Land Use Map (Figure LU-1) and to implement Light Rail Framework Goals, which became LU20-LU43.

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| <p>T2. Place a higher priority on pedestrian, bicycle, and automobile safety than vehicle capacity improvements at intersections.</p> | <p>expand the use of natural stormwater treatment in the right-of-way through partnerships with public and private property owners.</p> |
| <p>T3. Reduce the impact of the city’s transportation system on the environment through the use of technology, expanded transit use, and non-motorized transportation options.</p> | <p>T11. Site, design, and construct transportation projects and facilities to avoid or minimize negative environmental impacts to the extent feasible.</p> |
| <p>T4. Enhance neighborhood safety and livability. Use engineering, enforcement, and educational tools to improve traffic safety on city roadways.</p> | <p>T12. Develop a regular maintenance program and schedule for all components of the transportation infrastructure. Maintenance schedules should be based on safety/imminent danger and preservation of transportation resources.</p> |
| <p>T5. Communicate with and involve residents and businesses in the development and implementation of transportation projects.</p> | <p>T13. Direct service and delivery trucks and other freight transportation to appropriate streets so that they can move through Shoreline safely and efficiently, while minimizing impacts to neighborhoods.</p> |
| <p>T6. Support and promote opportunities and programs so residents have options to travel throughout Shoreline and the region using modes other than single-occupancy vehicles.</p> | <p>T14. Implement a strategy for regional coordination that includes the following activities:</p> <ul style="list-style-type: none"> • Identify important transportation improvements in Shoreline that involve other agencies. These may include improvements that will help keep traffic on I-5 and off of Shoreline streets, such as changes to on-ramp metering and construction of a southbound collector-distributor lane from NE 205th Street to NE 145th Street; • Remain involved in federal, state, regional, and county budget and appropriations processes; • Participate in regional and county planning processes that will affect the City’s strategic interests; |
| <p>T7. Implement the City’s Commute Trip Reduction Plan.</p> | |
| <p>T8. In accordance with Complete Streets practices and guidelines, new or rebuilt streets shall address, as much as practical, right-of-way use by all users.</p> | |
| <p>T9. Develop a comprehensive, detailed street lighting and outdoor master lighting plan to guide ongoing public and private street lighting efforts.</p> | |
| <p>T10. Use Low Impact Development techniques or other elements of complete or green streets, except when determined to be infeasible. Explore opportunities to</p> | |

- Form strategic alliances with potential partners, such as adjacent jurisdictions or like-minded agencies;
- Develop legislative agendas, and meet with federal and state representatives who can help fund key projects;
- Develop a regional legislative agenda and meet with area representatives from the Puget Sound Regional Council, Sound Transit, and King County Council; and
- Develop partnerships with the local business community to advocate at the federal, state, and regional level for common interests.

T15. Balance the necessity for motor vehicle access to and from new development with the need to minimize traffic impacts to existing neighborhoods.

T16. Design and development standards that are adopted to minimize the negative traffic impacts of new development should also take into consideration the needs of the new residents that will occupy the buildings.

T17. Maintain the existing street grid network to maximize multi-modal connectivity throughout the city. Utilize mechanisms that are appropriate for different street classifications to address increased traffic volumes and speeds.

Bicycle System

T18. Implement the Bicycle System Plan included in the City's Transportation Master Plan. Develop a program to construct and maintain bicycle facilities that are safe, connect to destinations, access transit, and are easily accessible. Use short-term improvements, such as

signage and markings, to identify routes when large capital improvements will not be constructed for several years.

T19. Develop standards for creation of bicycle facilities.

T20. Educate residents about bicycle safety, health benefits of bicycling, and options for bicycling in the city. This program should include coordination or partnering with outside agencies.

Pedestrian System

T21. Implement the Pedestrian System Plan included in the City's TMP through a combination of public and private investments.

T22. When identifying transportation improvements, prioritize construction of sidewalks, walkways, and trails. Pedestrian facilities should connect to destinations, access transit, and be accessible by all.

T23. Design crossings that are appropriately located, and provide safety and convenience for pedestrians.

T24. Develop flexible sidewalk standards to fit a range of locations, needs, and costs.

T25. Develop a public outreach program to inform residents about options for walking in the city, and educate residents about pedestrian safety and health benefits of walking. This program should include coordination or partnering with outside agencies.

Transit System

- T26.** Make transit a more convenient, appealing, and viable option for all trips through implementation of the Shoreline Transit Plans included in the City's TMP.
- T27.** Monitor the level and quality of transit service in the city, and advocate for improvements as appropriate.
- T28.** Encourage development that is supportive of transit, and advocate for expansion and addition of new routes in areas with transit supportive densities and uses.
- T29.** Encourage transit providers to expand service on existing transit routes, in accordance with adopted transit agency service guidelines.
- T30.** Work with transportation providers to develop a safe, efficient, and effective multi-modal transportation system to address overall mobility and accessibility. Maximize the people-carrying capacity of the surface transportation system.
- T31.** Work with Metro Transit and the City of Seattle to implement "RapidRide" Bus Rapid Transit (BRT) service on the Aurora Avenue N corridor, and operate it as a convenient, appealing option for people who live or work in Shoreline, and those that want to visit.
- T32.** Work with transit agencies to improve east-west service across the city, and service from Shoreline to the University of Washington.
- T33.** Strengthen Aurora Avenue N as a high usage transit corridor that encourages cross-county, seamless service.
- T34.** Work with Sound Transit, the Shoreline School District, the Washington State Department of Transportation, King County Metro Transit, the City of Seattle, and Shoreline neighborhoods to develop the final light rail alignment and station area plans for the areas surrounding the future Link Light Rail stations. (See LU20 through LU43 for additional light rail station study area policies.)
- T35.** Work with King County Metro Transit and/or Sound Transit to develop a plan for bus service to serve the light rail station at Northgate coinciding with the opening of service at Northgate.
- T36.** Support and encourage the development of additional high-capacity transit service in Shoreline.
- T37.** Continue to install and support the installation of transit supportive infrastructure.
- T38.** Work with Metro Transit, Sound Transit, and Community Transit to develop a bus service plan that connects residents to light rail stations, high-capacity transit corridors, and park and ride lots throughout the city.
- T39.** Implement traffic mitigation measures at Light Rail Station Areas.
- T40.** Promote livable neighborhoods around the light rail stations through land use patterns, transit service, and transportation access.

Master Street Plan

- T41.** Design City transportation facilities with a primary purpose of moving people and goods via multiple modes, including automobiles, freight trucks, transit, bicycles, and walking, with vehicle parking identified as a secondary use.
- T42.** Implement the standards outlined in the Master Street Plan for development of the city's roadways.
- T43.** Frontage improvements shall support the adjacent land uses, and fit the character of the areas in which they are located.

Concurrency and Level of Service

- T44.** Adopt Level of Service (LOS) D at the signalized intersections on arterials and unsignalized intersecting arterials within the city as the level of service standard for evaluating planning level concurrency and reviewing traffic impacts of developments, excluding the Highways of Statewide Significance and Regionally Significant State Highways (I-5, Aurora Avenue N, and Ballinger Way). Intersections that operate worse than LOS D will not meet the City's established concurrency threshold. The level of service shall be calculated with the delay method described in the Transportation Research Board's Highway Capacity Manual 2010 or its updated versions. Adopt a supplemental level of service for Principal Arterials and Minor Arterials that limits the volume to capacity (V/C) ratio to 0.90 or lower, provided the V/C ratio on any leg of a Principal or Minor Arterial intersection may be greater than 0.90 if the intersection operates at LOS D or better.

These Level of Service standards apply throughout the city unless an alternative LOS standard is identified in the Transportation Element for intersections or road segments, where an alternate level of service has been adopted in a subarea plan, or for Principal or Minor Arterial segments where:

- Widening the roadway cross-section is not feasible, due to significant topographic constraints; or
- Rechannelization and safety improvements result in acceptable levels of increased congestion in light of the improved operational safety of the roadway.

Arterial segments meeting at least one of these criteria are:

- Dayton Avenue N from N 175th Street – N 185th Street: V/C may not exceed 1.10
- 15th Ave NE from N 150th Street – N 175th Street: V/C may not exceed 1.10

- T45.** The following levels of service are the desired frequency of transit service in the city:
- Headways on all-day service routes should be no less than thirty minutes, including weekends and evenings (strive for ten minute or less headways during the day on these routes).
 - Headways on peak-only routes should be no more than twenty minutes (strive for fifteen minute or less headways on these routes).

Transportation Improvements

T46. Projects should be scheduled, designed, and constructed with the following criteria taken into consideration:

- Greatest benefit and service to as many people as possible;
- Ability to be flexible and respond to a variety of needs and changes;
- Coordination with other City projects to minimize costs and disruptions;
- Ability to partner with private development and other agencies to leverage funding from outside sources; and
- Flexibility in the implementation of projects when funding sources or opportunities arise.

T47. Consider and coordinate the construction of new capital projects with upgrades or projects needed by utility providers operating in the city.

T48. Pursue corridor studies on key corridors to determine improvements that address safety, capacity, and mobility, and support adjacent land uses.

T49. Expand the city's pedestrian network. Prioritize projects shown on the Pedestrian System Plan included in the TMP using the following criteria:

- Ability to be combined with other capital projects or leverage other funding;
- Proximity to a school or park;
- Located on an arterial;

- Located in an activity center, such as Town Center, North City, Ballinger, or connects to Aurora Avenue N;
- Connects to an existing walkway or the Interurban Trail;
- Connects to transit; and/or
- Links major destinations such as neighborhood businesses, high density housing, schools, and recreation facilities.

T50. Prioritize projects that complete the city's bicycle networks, as shown on the Bicycle System Plan included in the TMP, using the following criteria:

- Connects to the Interurban Trail;
- Completes a portion of the routes connecting the Interurban and Burke Gilman Trails;
- Provides access to bus rapid transit or light rail;
- Connects to existing facilities;
- Connects to high-density housing, commercial areas, or public facilities;
- Connects to a regional route, or existing or planned facilities in a neighboring jurisdiction
- Links to a school or park; and/or
- Able to be combined with other capital projects or leverage other funding.

T51. Coordinate with the Washington State Department of Transportation to evaluate and design improvements to the interchange at NE 175th Street and I-5. Develop a funding strategy for construction.

T52. Continue to work with Seattle, King County, Sound Transit, and WSDOT to undertake a corridor study of 145th Street that would result in a plan for the corridor to improve safety, efficiency, and modality for all users.

Funding

T53. Aggressively seek grant opportunities to implement the City’s TMP, and work to ensure that Shoreline receives regional and federal funding for its high- priority projects.

T54. Support efforts at the state and federal level to increase funding for the transportation system.

T55. Identify and secure funding sources for transportation projects, including bicycle and pedestrian projects.

T56. Develop and implement a citywide transportation impact fee program to fund growth related transportation improvements, and when necessary, use the State Environmental Policy Act to provide traffic mitigation for localized development project impacts.

T57. Provide funding for maintenance, preservation, and safety.

ECONOMIC DEVELOPMENT

GOALS

Goal ED I: Maintain and improve the quality of life in the community by:

- Increasing employment opportunities and the job base;

- Supporting businesses that provide goods and services to local and regional populations;
- Reducing reliance on residential property tax to fund City operations and capital improvements;
- Providing quality public services;
- Complementing community character; and
- Maximizing opportunities along Bus Rapid Transit corridors and areas to be served by light rail.

Goal ED II: Promote retail and office activity to diversify sources of revenue, and expand the employment base.

Goal ED III: Facilitate private sector economic development through partnerships and coordinating funding opportunities.

Goal ED IV: Promote and sponsor improvements and events throughout Shoreline that attract investment.

Goal ED V: Grow revenue sources that support City programs, services, and infrastructure.

Goal ED VI: Support employers and new businesses that create more and better jobs.

Goal ED VII: Encourage multi-story buildings for efficient land use.

Goal ED VIII: Promote and support vibrant activities and businesses that grow the local economy.

Goal ED IX: Incorporate environmental quality and social equity into economic development as part of a triple-bottom-line approach to sustainability.

POLICIES

Quality Of Life

ED1: Improve economic vitality by:

- Promoting existing businesses;
- Recruiting new businesses;
- Assisting businesses to create strategies and action plans through the Small Business Accelerator Program;
- Encouraging increased housing density around commercial districts, especially those served by high-capacity rapid transit, to expand customer base; and
- Developing design guidelines to enhance commercial areas with pedestrian amenities, and “protect and connect” adjacent residential areas.

ED2: Promote non-motorized connections between commercial businesses, services, and residential neighborhoods.

ED3: Encourage and support home-based businesses in the city, provided that signage, parking, storage, and noise levels are compatible with neighborhoods.

ED4: Use incentives and development flexibility to encourage quality development.

ED5: Attract a diverse population, including artists and innovators. Attract families with young children to support schools. Identify other targeted populations that contribute to a vibrant, multi-generational community.

ED6: Work to reinvigorate economically blighted areas in Shoreline by establishing Community Renewal Areas with associated renewal plans.

ED7: Enhance existing neighborhood shopping and community nodes to support increased commercial activity, neighborhood identity, and walkability.

ED8: Explore whether creating an “Aurora Neighborhood” as a fifteenth neighborhood in Shoreline would allow the City to better serve citizens, and to capitalize on its infrastructure investment.

ED9: Promote land use and urban design that allows for smart growth and dense nodes of transit-supportive commercial activity to promote a self-sustaining local economy.

ED10: Coordinate with local community and technical colleges, and other institutions of higher learning, including the University of Washington, to train a workforce that is prepared for emerging jobs markets.

ED11: Diversify and expand the city’s job base, with a focus on attracting living-wage jobs, to allow people to work and shop in the community.

ED12: Revitalize commercial business districts, and encourage high-density mixed-use in these areas.



- ED13:** Support and retain small businesses, and create an environment where new businesses can flourish.
- ED14:** Encourage a mix of businesses that complement each other, and provide variety to the community to create activity and economic momentum.
- ED15:** Direct capital improvements to key areas to promote the city's image, create a sense of place, and grow and attract businesses.
- ED16:** Actively work with other jurisdictions, educational institutions, agencies, economic development organizations, and local business associations to stimulate business retention, and implement interlocal and regional strategies.
- ED17:** Provide fast, predictable, and customer service-oriented permitting processes for commercial improvements, expansions, and developments.
- ED18:** Use and/or conduct market research as needed to guide the City's economic development strategies and to assist businesses.
- ED19:** Coordinate and initiate financial assistance for businesses, when appropriate, using county, state, and federal program funds, facility grants, loans, and revolving loan funds.
- ED20:** Encourage businesses to plan for shared parking when redeveloping commercial areas in order to provide adequate (but not excessive) parking. Other considerations in design of mixed-use or multi-tenant parking areas should include opportunities for interconnectivity and shared space, number and placement of curb cuts, and routes for ingress/egress.
- ED21:** Support public/private partnerships to facilitate or fund infrastructure improvements that will result in increased economic opportunity.
- ED22:** Provide incentives for land uses that enhance the city's vitality through a variety of regulatory and financial strategies.
- ED23:** Encourage the redevelopment of key and/or underused parcels through incentives and public/private partnerships.
- ED24:** Attract and promote clean, green industry within the city.
- ED25:** Develop regulations for food carts, which allow for incubator businesses while respecting established local restaurants, including temporary use for events.
- Placemaking**
- ED26:** Consider establishing specific districts, such as cultural, entertainment, or ecological districts.
- ED27:** Develop a vision and strategies for creating dense mixed-use nodes anchored by Aurora's retail centers, including how to complement, support, and connect them with mid-rise residential, office, and destination retail buildings.
- ED28:** Practice the activities of placemaking:
- Create unique cachet, or distinctive character;

- Build infrastructure;
- Collaborate;
- Assist businesses that serve the community; and
- Hone legislation.

ED29: Reinvent Aurora Square to help catalyze a master-planned, sustainable lifestyle destination.

ED30: Unlock the Fircrest excess property to create living-wage jobs while respecting and complementing its existing function as a facility for people with disabilities.

ED31: Plan the Light Rail Station Areas to create connectivity for appropriate growth.

ED32: Foster on-going placemaking projects:

- Revitalize development areas in:
 - o Town Center
 - o Echo Lake
 - o North City
 - o Richmond Beach
 - o Ridgecrest/Briarcrest
 - o Ballinger
- Attract mid-sized businesses;
- Support farmers market;
- Expand events and festivals;
- Surplus institutional property; and
- Support educational institutions.

NATURAL ENVIRONMENT

GOALS

Goal NE I. Minimize adverse impacts on the natural environment through leadership, policy, and regulation, and address impacts of past practices where feasible.

Goal NE II. Lead and support efforts to protect and improve the natural environment, protect and preserve environmentally critical areas, minimize pollution, and reduce waste of energy and materials.

Goal NE III. Regulate land disturbances and development to conserve soil resources and protect people, property, and the environment from geologic hazards, such as steep slope, landslide, seismic, flood, or erosion hazard areas.

Goal NE IV. Protect, enhance, and restore habitat of sufficient diversity and abundance to sustain indigenous fish and wildlife populations.

Goal NE V. Protect clean air and the climate for present and future generations through reduction of greenhouse gas emissions, and promotion of efficient and effective solutions for transportation, clean industries, and development.

Goal NE VI. Manage the stormwater system through the preservation of natural systems and structural solutions in order to:



- Protect water quality;
- Provide for public safety and services;
- Preserve and enhance fish and wildlife habitat, and critical areas;
- Maintain a hydrologic balance; and
- Prevent property damage from flooding and erosion.

Goal NE VII. Continue to require that natural and on-site solutions, such as infiltration and rain gardens, be proven infeasible before considering engineered solutions, such as detention.

Goal NE VIII. Preserve, protect, and where feasible, restore wetlands, shorelines, and streams for wildlife, appropriate human use, and the maintenance of hydrological and ecological processes.

Goal NE IX. Use education and outreach to increase understanding, stewardship, and protection of the natural environment.

Goal NE X. Maintain and improve the city’s tree canopy.

POLICIES

General

NE1. Promote infill and concurrent infrastructure improvements in areas that are already developed in order to preserve rural areas, open spaces, ecological functions, and agricultural lands in the region.

NE2. Preserve environmental quality by taking into account the land’s suitability for development, and directing intense development away from *areas*.

NE3. Balance the conditional right of private property owners to develop and alter their land with protection of native vegetation and critical areas.

NE4. Conduct all City operations to minimize adverse environmental impacts by reducing consumption and waste of energy and materials; minimizing use of toxic and polluting substances; reusing, reducing, and recycling; and disposing of all waste in a safe and responsible manner.

NE5. Support, promote, and lead public education and involvement programs to raise awareness about environmental issues; motivate individuals, businesses, and community organizations to protect the environment; and provide opportunities for the community and visitors to practice stewardship, and enjoy Shoreline’s unique environmental features.

NE6. Provide incentives for site development that minimizes environmental impacts.

NE7. Coordinate with other governmental agencies, adjacent communities, and non-profit organizations to protect and enhance the environment.

NE8. Continue to identify and map the location of all critical areas and buffers located within Shoreline. If there is a conflict between the mapped location and field information collected during project review, field information that is verified by the City shall govern.

NE9. Environmentally critical areas may be designated as open space, and should be conserved and protected from loss or degradation wherever feasible.

NE10. Remove regulatory barriers and create incentives to encourage the use of sustainable building methods and materials (such as those specified under certification systems like LEED, Built Green, Salmon-Safe, and Living Building Challenge) that may reduce impacts on the built and natural environment.

Geological and Flood Hazard Areas

NE11. Mitigate drainage, erosion, siltation, and landslide impacts, while encouraging native vegetation.

NE12. Seek to minimize risks to people and property in hazard areas through education and regulation.

NE13. Research information available on tsunami hazards and map the tsunami hazard areas located in Shoreline. Consider the creation of development standards and emergency response plans for tsunami hazard areas to minimize tsunami-related impacts.

NE14. Inform landowners about site development, drainage, and yard maintenance practices that affect slope stability and water quality.

NE15. Develop technical resources for better understanding of overall hydrology, and utilize innovative approaches to resolve long-standing flooding issues.

NE16. Prioritize the resolution of flooding problems based on public safety risk, property damage, and flooding frequency.

NE17. Promote public education and encourage preparation in areas that are potentially susceptible to geological and flood hazards.

Vegetation Protection

NE18. Develop educational materials, incentives, policies, and regulations to conserve native vegetation on public and private land for wildlife habitat, erosion control, and human enjoyment. The City should establish regulations to protect mature trees and other native vegetation from the adverse impacts of residential and commercial development, including short-plat development.

NE19. Minimize removal of healthy trees, and encourage planting of native species in appropriate locations.

NE20. Minimize clearing and grading if development is allowed in an environmentally critical area or critical area buffer.

NE21. Identify and protect wildlife corridors prior to, during, and after land development through public education, incentives, regulation, and code enforcement.

NE22. Encourage the use of native and low-maintenance vegetation.

Wetlands and Habitat Protection

NE23. Participate in regional species protection efforts, including salmon habitat enhancement and restoration.

NE24. Preserve critical wildlife habitat, including those identified as priority species or priority habitats by the Washington Department of Fish and Wildlife, through

regulation, acquisition, incentives, and other techniques. Habitats and species of local importance will also be protected in this manner.

- NE25.** Strive to achieve a level of no net loss of wetlands function, area, and value within each drainage basin.
- NE26.** Restore existing degraded wetlands where feasible.
- NE27.** Focus on wetland and habitat restoration efforts that will result in the greatest benefit for areas identified by the City as priority for restoration.

Streams and Water Resources

- NE28.** Support and promote basin stewardship programs to prevent adverse surface water impacts, and to identify opportunities for watershed improvements.
- NE29.** Stream alterations, other than habitat improvement should only occur when it is the only means feasible, and should be the minimum necessary.
- NE30.** Identify and prioritize potential stream enhancement projects through surface water basin planning and its public participation process. Enhancement efforts may include daylighting of streams that have been diverted into underground pipes or culverts, removal of anadromous fish barriers, or other options to restore aquatic environments to a natural state.
- NE31.** Work with citizen volunteers, state and federal agencies, and Indian tribes to identify, prioritize, and eliminate physical barriers and other impediments to anadromous fish spawning and rearing habitat.

NE32. Preserve and protect natural surface water storage sites, such as wetlands, aquifers, streams, and water bodies that help regulate surface flows and recharge groundwater.

NE33. Conserve and protect groundwater resources.

NE34. Provide additional public access to Shoreline's natural features, including the Puget Sound shoreline. The City will attempt to reach community and neighborhood agreement on any proposal to improve access to natural features where the proposal has the potential to negatively impact private property owners.

NE35. Educate the public on best management practices regarding use of pesticides and fertilizers to prevent runoff of chemicals and pollution of water bodies.

Clean Air and Climate Protection

- NE36.** Support federal, state, and regional policies intended to protect clean air in Shoreline and the Puget Sound Basin.
- NE37.** Advocate for expansion of mass transit and encourage car-sharing, cycling, and walking to reduce greenhouse gas emissions, and as an alternative to dependence on automobiles.
- NE38.** Reduce the amount of air-borne particulates through continuation and possible expansion of the street-sweeping program, dust abatement on construction sites, education to reduce burning of solid and yard waste, and other methods that address particulate sources.

NE39. Support and implement the Mayor’s Climate Protection Agreement, climate pledges and commitments undertaken by the City, and other multi-jurisdictional efforts to reduce greenhouse gases, address climate change, sea-level rise, ocean acidification, and other impacts of changing of global conditions.

Sustainability

NE40. Establish policy decisions and priorities considering long-term impacts on natural and human environments.

NE41. Lead by example and encourage other community stakeholders to commit to sustainability. Design our programs, policies, facilities, and practices as models to be emulated.

NE42. Recognize that a sustainable community requires and supports economic development, human health, and social benefit. Make decisions using the “triple bottom line” approach to sustainability (environment, economy, and social equity).

NE43. Promote community awareness, responsibility, and participation in sustainability efforts through public outreach programs and other opportunities for change. Serve as catalyst and facilitator for partnerships to leverage change in the broader community.

NE44. Apply adaptive management techniques and clearly communicate findings to the Shoreline community: individuals, businesses, non-profits, utilities, and City decision-makers. Use analytical and monitoring tools with performance targets to evaluate investments.

NE45. Design natural infrastructure into projects whenever feasible to mimic ecological processes.

NE46. Create incentives to encourage enhancement and restoration of wildlife habitat on both public and private property through new and existing programs, such as the Backyard Wildlife Habitat stewardship certification program.

PARKS, RECREATION, AND OPEN SPACE

GOALS

Goal PR I. Preserve, enhance, maintain, and acquire built and natural facilities to ensure quality opportunities exist.

Goal PR II. Provide community-based recreational and cultural programs that are diverse and affordable.

Goal PR III. Meet the parks, recreation, and cultural service needs of the community by equitably distributing resources.

Goal PR IV. Establish and strengthen partnerships with other public agencies, non-governmental organizations, volunteers, and City departments to maximize the public use of all community resources.

Goal PR V. Engage the community in park, recreation, and cultural services decisions and activities.

POLICIES

- PR1.** Preserve, protect, and enhance the city's natural, cultural, and historical resources; encourage restoration, education, and stewardship.
- PR2.** Provide a variety of indoor and outdoor gathering places for recreational and cultural activities.
- PR3.** Maintain current facilities, and plan, develop, and acquire assets as the need is identified.
- PR4.** Maintain environmentally sustainable facilities that reduce waste, protect ecosystems, and address impacts of past practices.
- PR5.** Create efficiencies and reduce maintenance costs by using contracted services and volunteers where feasible.
- PR6.** Maintain safe, attractive facilities using efficient and environmentally sustainable practices.
- PR7.** Encourage a variety of transportation options that provide better connectivity to recreation and cultural facilities.
- PR8.** Improve accessibility and usability of existing facilities
- PR9.** Provide and enhance recreational and cultural programs to serve all ages, abilities, and interests.
- PR10.** Provide affordable programs and offer financial support for those who qualify.
- PR11.** Create programs to support and encourage an active and healthy lifestyle.
- PR12.** Determine the community's needs by conducting need assessments.
- PR13.** Adjust program and facility offerings to align with demographic trends and needs assessment findings.
- PR14.** Equitably distribute facilities and program offerings based on identified needs.
- PR15.** Collaborate with and support partners to strengthen communitywide facilities and programs.
- PR16.** Seek partners in the planning, enhancement, and maintenance of facilities and programs.
- PR17.** Develop mechanisms for public outreach, communication, and coordination among partners.
- PR18.** Encourage consistent and effective public involvement in short- and long-range park planning processes.
- PR19.** Provide public relations and publicity efforts to inform citizens of communitywide opportunities.
- PR20.** Create volunteer opportunities to encourage citizen involvement and participation.

CAPITAL FACILITIES

GOALS

- Goal CF I:** Provide adequate public facilities that address past deficiencies and anticipate the needs of growth through acceptable levels of service, prudent use of fiscal resources, and realistic timelines. To support Goal CF I:
- Acquire Seattle Public Utilities (SPU) water system in Shoreline;
 - As outlined in the 2002 Interlocal Operating Agreement, complete the assumption of the Ronald Wastewater District; and prepare for the expiration of the Shoreline Water District franchise (scheduled for 2027) by evaluating the possibility of assumption and consolidation with the City’s water system acquired from the City of Seattle (SPU), among other options.
- Goal CF II:** Ensure that capital facilities and public services necessary to support existing and new development are available, concurrent with locally adopted levels of service and in accordance with Washington State Law.
- Goal CF III:** Provide continuous, reliable, and cost-effective capital facilities and public services in the city and its Urban Growth Area in a phased, efficient manner, reflecting the sequence of development as described in other elements of the Comprehensive Plan.

- Goal CF IV:** Enhance the quality of life in Shoreline through the planned provision of capital facilities and public services that are provided either directly by the City or through coordination with other public and private entities.
- Goal CF V:** Facilitate, support, and/or provide citywide utility services that are:
- Consistent, reliable, and equitable;
 - Technologically innovative, environmentally sensitive, and energy efficient;
 - Sited with consideration for location and aesthetics; and
 - Financially sustainable.
- Goal CF VI:** Maintain and enhance capital facilities that will create a positive economic climate, and ensure adequate capacity to move people, goods, and information.

POLICIES

General

- CF1:** The City’s 6-year CIP shall serve as the short-term budgetary process for implementing the long-term Capital Facility Plan (CFP). Project priorities and funding allocations incorporated in the CIP shall be consistent with the long-term CFP.
- CF2:** Obtain and maintain an inventory that includes locations and capacities of existing City-managed and non-City-managed capital facilities.



- CF3:** Review capital facility inventory findings and identify future needs regarding improvements and space, based on adopted levels of service standards and forecasted growth, in accordance with this Plan and its established land uses.
- CF4:** Coordinate with public entities that provide services within the City's planning area in development of consistent service standards.
- CF5:** Identify, construct, and maintain infrastructure systems and capital facilities needed to promote the full use of the zoning potential in areas zoned for commercial and mixed-use.
- CF6:** Ensure appropriate mitigation for both the community and adjacent areas if Shoreline is selected as a site for a regional capital facility, or is otherwise impacted by a regional facility's expansion, development, or operation.

Financing and Funding Priorities

- CF7:** Work with service providers to ensure that their individual plans have funding policies that are compatible with this element.
- CF8:** Capital Facility improvements that are needed to correct existing deficiencies or maintain existing levels of service should have funding priority over those that would significantly enhance service levels above those designated in the Comprehensive Plan.
- CF9:** Improvements necessary to provide critical City services such as police, surface water, and transportation at designated service levels concurrent with growth shall

have funding priority for City funds over improvements that are needed to provide capital facilities.

- CF10:** Consider all available funding and financing mechanisms, such as utility rates, bonds, impacts fees, grants, and local improvement districts for funding capital facilities.
- CF11:** Evaluate proposed public capital facility projects to identify net costs and benefits, including impacts on transportation, stormwater, parks, and other public services. Assign greater funding priority to those projects that provide a higher net benefit and provide multiple functions to the community over projects that provide single or fewer functions.
- CF12:** Utilize financing options that best facilitate implementation of the CIP in a financially prudent manner.

Mitigation and Efficiency

- CF13:** Maximize on-site mitigation of development impacts to minimize the need for additional capital facility improvements in the community.
- CF14:** Promote the co-location of capital facilities, when feasible, to enhance efficient use of land, reduce public costs, and minimize disruption to the community.
- CF15:** Through site selection and design, seek opportunities to minimize the impact of capital facilities on the environment, and whenever possible, include enhancements to the natural environment.

CF16: Promote water reuse and water conservation opportunities that diminish impacts on water, wastewater, and surface water systems, and promote conservation or improvement of natural systems.

CF17: Encourage the use of ecologically sound site design in ways that enhance provision of utility services.

CF18: Support local efforts to minimize inflow and infiltration, and reduce excessive discharge of surface water into wastewater systems.

Coordination and Public Involvement

CF19: Provide opportunities for public participation in the development or improvement of capital facilities.

CF20: Solicit and encourage citizen input in evaluating whether the City should seek to fund large communitywide capital facility improvements through voter-approved bonds.

CF21: Work with non-City service providers to make capital facility improvements where deficiencies in infrastructure and services have been identified.

CF22: Actively work with providers to address deficiencies that pose a threat to public safety or health, or impediments to meeting identified service levels.

CF23: Critically review updated capital facility plans prepared by special districts or other external service providers for consistency with the Land Use and Capital Facilities Elements of this Plan, and identify opportunities for:

- Co-location of facilities;

- Service enhancements and coordination with City facilities and services;

- Development of public and environmental enhancements; and

- Reductions to overall public costs for capital improvements.

CF24: Track technological innovations to take advantage of opportunities to enhance services or create new utilities.

Levels of Service

CF25: Evaluate and establish designated levels of service to meet the needs of existing and anticipated development.

CF26: Plan accordingly so that capital facility improvements needed to meet established level of service standards can be provided by the City or the responsible service providers.

CF27: Identify deficiencies in capital facilities based on adopted levels of service and facility life cycles, and determine the means and timing for correcting these deficiencies.

CF28: Resolve conflicts between level of service standards, capital improvement plans, and service strategies for interrelated service providers.

CF29: Encourage the adequate provision of the full range of services, such as parks, schools, municipal facilities, solid waste, telecommunications, and emergency services for new development, at service levels that are consistent throughout the city.

CF30: Work with all outside service providers to determine their ability to continue to meet service standards over the 20-year timeframe of the Comprehensive Plan.

CF31: The City establishes the following levels of service as the minimum thresholds necessary to adequately serve development, as well as the minimum thresholds to which the City will strive to provide for existing development:

City-Managed Capital Facilities and Services

Type of Capital Facility or Service:	Level of Service
Park Facilities	<p>Park Facility Classification and Service Areas:</p> <ul style="list-style-type: none"> • Regional Parks - Citywide • Large Urban Parks - Citywide • Community Parks - 1 ½ miles • Neighborhood Parks - ½ miles • Natural Areas - ½ miles • Special Use Facilities - Citywide • Street Beautification Areas – None <p>The adopted 2011-2017 Parks, Recreation, and Open Space (PROS) Plan provides an inventory of park facilities by classification and service area. The PROS Plan creates an “Amenity Driven Approach” establishing an interconnected relationship between park facilities within the overall park system. Chapter 4 of the PROS Plan analyzes the target level of service for each classification.</p>
Police	0.85 officers per 1,000 residents; and a response time of 5 minutes or less to all high priority calls, and within 30 minutes to all calls.
Transportation	As established by the Transportation Element, adopted Transportation Master Plan, and as provided in the Capital Facilities Supporting Analysis section.
Surface Water	Consistent with the level of service recommended in the most recently adopted Surface Water Master Plan.

CF32: The City establishes the following targets to guide the future delivery of community services and facilities, and to provide a measure to evaluate the adequacy of actual services:

Non-City Managed Capital Facilities and Services

Type of Capital Facility or Service:	Level of Service
Water	Consistent with fire flow rates stated in the International Fire Code. Potable water as determined by the Washington State Department of Health.
Wastewater	Collection of peak wastewater discharge, including infiltration and inflow, resulting in zero overflow events per year due to capacity and maintenance inadequacies (or consistent with current health standards).
Schools	The City of Shoreline is wholly within the boundaries of the Shoreline School District. The City neither sets nor controls the level of service standards for area schools. The Shoreline School District is charged with ensuring there is adequate facility space and equipment to accommodate existing and projected student populations. The City coordinates land use planning with the school district to ensure there is adequate capacity in place or planned.

UTILITIES

GOALS

Goal U I. Facilitate, support, and/or provide citywide utility services that are:

- Consistent, reliable, and equitable;
- Technologically innovative, environmentally sensitive, and energy efficient;
- Sited with consideration for location and aesthetics; and financially sustainable.

Goal U II. Facilitate the provision of appropriate, reliable utility services, whether through City-owned and operated services, or other providers.

Goal U III. Acquire Seattle Public Utilities water system in Shoreline.

POLICIES

U1. Coordinate with utility providers to ensure that the utility services are provided at reasonable rates citywide, and that those services meet service levels identified or recommended in the Capital Facilities Element.

U2. Pursue alternative service provision options that may be more effective at providing services to our residents, including acquiring portions of the Seattle Public Utility water system, potential assumption of Ronald Wastewater District, and examining options with regard to the expiration of the Shoreline Water District franchise (scheduled for 2027).

U3. Encourage and assist the timely provision of the full range of utilities within Shoreline in order to serve existing businesses, including home businesses, and promote economic development.

U4. Support the timely expansion, maintenance, operation, and replacement of utility infrastructure in order to meet anticipated demand for growth identified in the Land Use Element.

Consistency and Coordination

U5. Coordinate with other jurisdictions and governmental entities in the planning and implementation of multi-jurisdictional utility facility additions and improvements.

Mitigation and Efficiency

U6. Encourage the design, siting, construction, operation, and relocation or closure of all utility systems in a manner that:

- Is cost effective;
- Minimizes and mitigates impacts on adjacent land uses;
- Is environmentally sensitive; and
- Is appropriate to the location and need.

U7. Encourage the co-location or joint use of trenches, conduits, or poles so that utilities may encourage expansion, maintenance, undergrounding, and upgrading facilities with the least amount of disruption to the community or of service delivery.



Solid Waste

- U8.** Monitor solid waste collection providers for adequacy of service and compliance with service contracts.
- U9.** Support recycling and waste reduction efforts throughout the community.

Electricity

- U10.** Where found to be safe and appropriate, promote recreational use of utility corridors, such as trails, sport courts, and similar facilities.
- U11.** Work with electric utility providers to limit trimming of trees and other vegetation to that which is necessary for the safety and maintenance of transmission facilities where feasible.
- U12.** Promote the undergrounding of new and existing electric distribution lines, where physically and financially feasible, as streets are improved and/or areas are redeveloped, based on coordination with local utilities.

Telecommunications

- U13.** Minimize impacts of telecommunication facilities and towers on the community.
- U14.** Promote the undergrounding of telecommunication lines in coordination with the undergrounding of other utilities and capital facility systems.
- U15.** Support the provision of high-quality cable and satellite service throughout the community.

- U16.** Promote opportunities for distance learning and telecommuting to implement economic development and climate initiatives, such as encouraging more home-based businesses that provide jobs without increased traffic.
- U17.** Encourage and work with telecommunication providers to develop networks which employ technologies that increase interconnectivity between different networks.
- U18.** Work with utility companies and public institutions to develop a full range of community information services available to citizens and businesses through the telecommunication network.

Wireless Communications Facilities

- U19.** Facilitate access to reliable wireless communications services throughout the city, including increasing the service area on the western side of the city.
- U20.** Protect community aesthetics by planning for well-sited and well-designed wireless service facilities that fit unobtrusively with the environment.
- U21.** Manage the placement of all communication antennas, antenna support structures, buildings, and associated equipment to promote efficient service delivery and avoid unnecessary proliferation.

Natural Gas

- U22.** Coordinate with natural gas utilities for improvements and expansion throughout the community, and support the eventual provision of full coverage of natural gas services.

Comprehensive Plan Land Use Designations in Shoreline

The City of Shoreline Comprehensive Plan applies future land use designations to all parcels within the city limits. As part of the 185th Street Station Subarea Plan, the Comprehensive Plan land use designations will be amended to reflect the zoning adopted as part of the plan. The City may use some or all of the existing land use designations, and it may develop some unique designations that correspond to zoning adopted through the plan. The following land use designations may be applied to the Preferred Alternative that will be identified in the FIES.

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use 1
- Mixed Use 2
- Town Center District
- Public Facility
- Public Open Space
- Private Open Space
- Light Rail Station Areas:
 - Station Area 1
 - Station Area 2

Shoreline Municipal Code Provisions

The Shoreline Municipal Code is a continuously evolving document made up of ordinances adopted by the City Council. These ordinances set standards to maintain safety and protect quality of life in Shoreline. The Municipal Code includes various titled sections including:

- Title 1 General Provisions—describes the process of codification and amendments.
- Title 2 Administration—describes the municipal government roles of City Manager, Planning Commission, and various boards
- Title 3 Revenue and Finance—presents the financial structure of the City
- Title 4 Reserved—not used at this time
- Title 5 Business Licenses and Regulations—describes required licenses for various businesses/operations
- Title 6 Animal Control Regulations
- Title 7 Reserved—not used at this time
- Title 8 Health and Safety—consumer protection provisions and City park use rules
- Title 9 Public Peace, Morals, and Welfare—public disturbance noise, criminal code, fireworks, and other provisions
- Title 10 Vehicles and Traffic—traffic and vehicle related provisions, speed limits, restricted parking zones

- Title 11 Reserved—not used at this time
- Title 12 Streets, Sidewalks, and Public Places—sidewalk maintenance, roads and bridges, use of right-of-way, street vacation, public tree management
- Title 13 Utilities—provisions related to water and sewer systems, surface water utility, floodplain management, solid waste, electricity and communications
- Title 14 Environment—commute trip reduction plan provisions
- Title 15 Buildings and Construction—references construction and building codes, fire code, energy management code, and landmarks preservation
- Title 16 Land Use and Development—planning provisions many of which have been repealed and incorporated into other areas of the Municipal Code, Shoreline Management Plan, land use and development fee schedule
- Title 17 Subdivisions—repealed and now incorporated into Title 20, Development Code
- Title 18 Zoning—repealed and now incorporated into Title 20, Development Code
- Title 19 Reserved—not used at this time
- Title 20 Development Code—provisions related to plan requirements, zoning, special districts, and other

development requirements, including general development standards.

Development Code and Zoning Provisions

The Development Code includes requirements, standards, and guidelines for zoning and development, including private and public facilities. The Development Code regulations adopted as part of this plan would implement Comprehensive Plan goals and policies, as well as the vision and ideas presented by the residents of the City through public comment, meetings, design workshops, and visioning events. Development code provisions to support future redevelopment of the 185th Street Station Subarea Planned Action may be amended to add regulations upon completion of the FEIS. Since light rail is a new form of transit service coming to the community with unique opportunities, the Development Code revisions would include new and unique regulations to implement the City’s vision for the subarea.

Development Code amendments to support the 185th Street Station Subarea Plan would address setbacks, step-backs of buildings, building heights, design standards, allowable uses within the zones, housing types, transition standards between land uses, parking requirements, and affordable housing provisions.

The purpose of the Development Code is to:

- Promote the public health, safety, and general welfare;
- Guide the development of the city consistent with the Comprehensive Plan;
- Carry out the goals and policies of the Comprehensive Plan by the provisions specified in the Code;
- Provide regulations and standards that lessen congestion on the streets;

- Encourage high standards of development;
- Prevent the overcrowding of land;
- Provide adequate light and air;
- Avoid excessive concentration of population;
- Facilitate adequate provisions for transportation, utilities, schools, parks, and other public needs;
- Encourage productive and enjoyable harmony between humans and the environment;
- Promote efforts that will prevent or eliminate damage to the environment and biosphere;
- Protect the functions and values of ecological systems and natural resources important to the public; and
- Encourage attractive, quality construction to enhance City beautification.

Affordable Housing—Chapter 20.40.230 of the Development Code includes specific provisions for affordable housing. These are provided below for reference purposes given the importance of implementing affordable housing options as part of the 185th Street Station Subarea Plan.

- A. Density bonuses for the provision of affordable housing apply to all land use applications, except the following, which are not eligible for density bonuses: (a) the construction of one single-family dwelling on one lot that can accommodate only one dwelling based upon the underlying zoning designation, (b) provisions for accessory dwelling units, and (c) projects which are limited by the critical areas requirements.
1. Density for land subject to the provisions of this section may be increased by up to a maximum of 50 percent

above the underlying base density when each of the additional units is provided for households in these groups:

- a. Extremely low income – 30 percent of median household income;
- b. Very low income – 31 percent to 50 percent of median household income;
- c. Low income – 51 percent to 80 percent of median household income;
- d. Moderate income – 80 percent of median household income;

Median household income is the amount calculated and published by the United States Department of Housing and Urban Development each year for King County. (Fractions of 0.5 or greater are rounded up to the nearest whole number).

2. Residential Bonus Density for the Development of For-Purchase Affordable Housing. Density for land subject to the provisions of this section may be increased above the base density by the following amounts:
 - a. Up to a maximum of 50 percent above the underlying base density when each of the additional units or residential building lots are provided for households in the extremely low, very low, or low income groups.
3. A pre-application conference will be required for any land use application that includes a proposal for density bonus.

4. Residential bonus density proposals will be reviewed concurrently with the primary land use application.
 5. All land use applications for which the applicant is seeking to include the area designated as a critical area overlay district in the density calculation shall satisfy the requirements of this Code. The applicant shall enter into a third party contract with a qualified consultant and the City to address the requirements of the critical area overlay district chapter, Chapter [20.80](#) SMC, Critical Areas.
- B. The affordable units constructed under the provisions of this chapter shall be included within the parcel of land for which the density bonus is granted. Segregation of affordable housing units from market rate housing units is prohibited
 - C. Prior to the final approval of any land use application subject to the affordable housing provisions, the owner of the affected parcels shall deliver to the City a duly executed covenant running with the land, in a form approved by the City Attorney, requiring that the affordable dwellings that are created pursuant to those sections remain affordable housing for a period of 30 years from the commencement date. The commencement date for for-purchase units shall be the date of settlement between the developer and the first owner in one of the applicable income groups. The commencement date for rental units shall be the date the first lease agreement with a renter in one of the applicable income groups becomes effective. The applicant shall be responsible for the cost and recording of the covenant.
 - D. When dwelling units subject to this section will be constructed in phases, or over a period of more than 12 months, a proportional amount of affordable housing units must be completed at or prior to completion of the related market rate dwellings, or as approved by the Director
- E. If a project is to be phased, the proportion of affordable units or residential building lots to be completed with each phase shall be determined as part of the phasing plan approved by the Director.
 - F. In subdivisions where the applicant intends to sell the individual unimproved lots, it is the responsibility of the applicant to arrange for the affordable units to be built.
 - G. In single-family developments where there are two or more affordable units, side yard setbacks may be waived to allow for attached housing units for affordable units only. The placement and exterior design of the attached units must be such that the units together resemble as closely as possible a single-family dwelling.

Site Development Requirements—Chapter 20.50 of the Development Code includes specific provisions for site development, including:

- Dimensions and density for development, transition areas, lot width and lot area measurements, setbacks, and building height standards
- Single family detached residential design, site planning, front and rear yard setbacks, location of accessory structures, fences and walls, lighting
- Multi-family and single family attached residential design; thresholds; site planning; setbacks; parking requirements; storage space for collection of trash, recyclables, and compost; open space; pedestrian circulation and safety;

- building design, orientation, and scale; exterior materials; façade elements; lighting; fences and walls
- Commercial zone design; threshold/required site improvements; site design; building design
 - Tree conservation, land clearing and site grading standards
 - Parking, access, and circulation, including parking design; reductions to minimum parking requirements; nonmotorized access and circulation; bicycle facilities
 - Landscaping including screens, street frontage and interior lot line landscaping, street trees, internal landscaping or parking areas, alternative landscape design, and general standards for landscape installation and maintenance
 - Signs, including design, prohibited and nonconforming signs, monument signs, building-mounted and under-awning signs, temporary and exempt signs

City of Shoreline Historic Preservation Program

The Shoreline community has an interesting historical background, as summarized earlier in this section of the DEIS. Recognizing this history and the potential for important historical and cultural resources that warrant preservation, the City of Shoreline administers a historic preservation program.

Historic preservation in Shoreline is guided by the Community Design Element Goal CD IV and policies CD38 through CD45 in the Comprehensive Plan, as well as adopted provisions of Title 15.20 of the Shoreline Municipal Code. The preface and purposes of Title 15.20 based on City Council findings are described as follows.

- A. The protection, enhancement, perpetuation, and use of buildings, sites, districts, structures and objects of historical, cultural, architectural, engineering, geographic, ethnic and archeological significance located in the city of Shoreline are necessary for the prosperity, civic pride and general welfare of the residents of the city.
- B. Such cultural and historic resources are a significant part of the heritage, education and economic base of the city, and the economic, cultural and aesthetic well being of the city cannot be maintained or enhanced by disregarding its heritage and by allowing the unnecessary destruction or defacement of such resources.
- C. In the absence of an ordinance encouraging historic preservation and an active program to identify and protect buildings, sites and structures of historical and cultural interest, the City will be unable to insure present and future generations of residents and visitors a genuine opportunity to appreciate and enjoy the city's heritage.
- D. The purposes of this chapter (15.20 Historic Preservation of the Shoreline Municipal Code) are to:
 1. Designate, preserve, protect, enhance, and perpetuate those sites, buildings, districts, structures and objects which reflect significant elements of the city of Shoreline's, county's, state's and nation's cultural, aesthetic, social, economic, political, architectural, ethnic, archaeological, engineering, historic and other heritage;
 2. Redesignate two sites in the city of Shoreline, previously designated as historic landmarks by the King County historic preservation commission, as city of Shoreline historic landmarks (**note: because**

- neither of these two sites are in the station subarea, this provision is not applicable);**
3. Foster civic pride in the beauty and accomplishments of the past;
 4. Stabilize and improve the economic values and vitality of landmarks;
 5. Protect and enhance the city's tourist industry by promoting heritage-related tourism;
 6. Promote the continued use, exhibition and interpretation of significant sites, districts, buildings, structures, and objects for the education, inspiration and welfare of the people of the city of Shoreline;
 7. Promote and continue incentives for ownership and utilization of landmarks;
 8. Assist, encourage and provide incentives to public and private owners for preservation, restoration, rehabilitation and use of landmark buildings, sites, districts, structures and objects; and
 9. Work cooperatively with other jurisdictions to identify, evaluate, and protect historic resources in furtherance of the purposes of this chapter.

Shoreline's Historic Inventory—In review of the historic inventory compiled by the City of Shoreline in 2013, there are twelve properties noted as having the potential for eligibility for landmark designation (although not yet designated) as historic

landmarks by Shoreline, which coordinated with the King County Landmarks Preservation Program.

These twelve potentially eligible properties include single family lots with houses and structures built from the period of 1916 to 1929. The inventory identifies some of the properties but not all and of those that are identified, they include the Russell House, Jersey Summer Homes House, Taylor House, Echo Lake Garden Tracts House, and others. These properties all appear to be privately owned. About half of the potentially eligible properties are located within areas proposed to be rezoned under Alternatives 2 and 3 and the other half are located outside the proposed rezoning areas.

Properties included in the inventory that are potentially eligible for landmark designation may require historic review of alterations or demolition are proposed, but such changes are allowed to inventoried properties. More information about Shoreline history is available at the following websites/webpages:

- City of Shoreline Historic Preservation
<http://www.cityofshoreline.com/government/departments/planning-community-development/planning-projects/historic-preservation>
- Shoreline Historical Museum
<http://shorelinehistoricalmuseum.org/>
- King County Historic Preservation Program
<http://www.kingcounty.gov/property/historic-preservation.aspx>
- 4Culture
<http://www.4culture.org/>

3.1.2 Analysis of Potential Impacts

Relationship to Plans and Policies—Description of Potential Land Use Designations and Changes to the Comprehensive Plan

A description of each alternative's relationship to the existing Shoreline Comprehensive Plan and potential amendments that would be required are discussed below.

Under all alternatives, the City would retain most of the elements of its Comprehensive Plan unchanged, including existing policies. Under Alternative 2—Some Growth or Alternative 3—Most Growth the Comprehensive Plan Land Use Map would need to be amended to show the proposed land uses. Alternative 2 and 3 would better support the City's and region's adopted plans and policies for more intensive and vibrant urban development around high-capacity transit stations. The proposed redevelopment under both Alternatives 2 and 3 would be consistent with the adopted subarea plans for Town Center and North City.

Alternative 1—No Action

Under the No Action Alternative, growth would continue as guided by the City's existing Comprehensive Plan and zoning regulations. While the existing Comprehensive Plan land use designations and map would not need to be amended, there are a multitude of adopted policies throughout the Comprehensive Plan that support implementation of higher intensity land uses in the station subarea that would need to be amended. Alternative 1 also would be inconsistent with various regional, state, and federal policies that call for a greater intensity of housing and employment uses around high-capacity transit stations. It is important to note that Alternative 1—No Action also would not

achieve the stated purpose and need of the subarea plan. Following is a summary of expected results from implementation of Alternative 1.

- The current Comprehensive Plan would not require amendments to land uses or the map. However, policies and actions in the Comprehensive Plan that identify the need to intensify land uses around high-capacity transit stations would not be achieved, which would need to be addressed.
- Construction of capital improvement projects would not be prioritized in the subarea to serve future growth since it would be minimal. As such it would be expected that future public investment in the subarea would be substantially less than under Alternatives 2 or 3.
- Development would not benefit from amended zoning and design regulations that would occur under either of the two action alternatives.
- Development would not be spurred by the implementation of a Planned Action Ordinance, which allows for a streamlined environmental review for projects meeting the Planned Action thresholds in the subarea. Any development would require individual project-level SEPA review.

Alternative 2—Some Growth and Alternative 3—Most Growth

Implementation of either Alternative 2—Some Growth or Alternative 3—Most Growth would have similar results. Both alternatives are consistent with adopted plans and policies at the local, regional, state, and federal levels that call for intensifying land uses and creating vibrant, equitable transit-oriented

communities around high-capacity transit stations. Other anticipated results from implementation of either action alternative would include the following.

- The City's Comprehensive Plan land use map would need to be amended to reflect land uses consistent with the Preferred Alternative (which will be identified in the FIES) Most policies and provisions of the Comprehensive Plan could remain in their current form.

The City may use some or all of the existing land use designations and it may develop some unique designations that correspond to zoning adopted through the plan. The Land Use Map would then be amended to match the selected land use designations. Additional provisions also may be added to the Comprehensive Plan to clarify the applicability of land use designations and the relationship to the proposed zoning for the 185th Street Station Subarea Planned Action.

- Alternative 2 would support and achieve many of the City's adopted policies under various elements of the Comprehensive Plan (listed earlier in this section of the DEIS), as well as adopted policies and provisions of the Town Center and North City Subarea Plans.
- Capital project investment would be expected to increase over time to support anticipated growth, and as a result subarea residents would benefit from transportation and infrastructure improvements.
- The capital facilities element of the Comprehensive Plan also would need to be updated at the next opportunity to reflect priorities for the subarea to support the proposed growth.

- Redevelopment would be guided by amended and expanded zoning and development provisions in the Code leading to improved neighborhood character and compatibility with the neighborhood.
- Development would be able to proceed through streamlined environmental review as long as it is consistent with the Planned Action thresholds established by the subarea plan. (These will be identified in the FEIS to support the preferred alternative.)

Under Alternative 3—Most Growth, it is anticipated that there would be more capacity to meet Shoreline's growth targets over the long term, in the coming decades, and to realize a greater level of redevelopment that is consistent with local and regional plans and policies for high-capacity transit station subareas. Refer to Section 3.2 for descriptions of anticipated growth in population, housing, and employment related to each alternative.

Description of Potential Zoning Designations and Related Requirements

A description of each alternative's relationship to zoning designations and associated development requirements is summarized below. **Figures 3.1-4, 3.1-5, and 3.1-6** on pages 3-69 through 3-71 illustrate these proposed designations in map for each alternative.

Alternative 1—No Action

Existing zoning designations associated with Alternative 1—No Action, which would not change, as shown in Figure 3.1-4. The following zoning designations and related requirements would apply. Land use growth projections for the subarea are based on one of the alternatives used in the Transportation Master Plan,

called “dispersed growth,” citywide, adjusted for the period of 2014 through 2034.

In addition to assuming existing zoning would remain in place, it was also assumed that some single family properties would develop accessory dwelling units and/or increase the number of dwelling units by converting homes to duplexes or triplexes depending on the underlying lot size. Based on the current average density of 2.7 units per acre throughout the subarea, it was assumed that there would be approximately ten percent growth in density over the twenty year period, resulting in 3 units per acre on average throughout the subarea. This assumption is based on past growth trends in single family areas of Shoreline, including trends related to accessory dwelling unit construction.

If the market demand for providing housing near transit begins to rise, as would be expected after light rail transit starts operating in 2023, there could be an even higher increase in development of accessory dwelling units and conversion of homes to multiple units in the subarea under Alternative 1. Without zoning changes to require higher densities, single family home development would continue to be the focus in the subarea, including demolition of older single family homes and rebuilding of new ones.

Residential Zones

R-6 and R-8—Single Family Residential

The R-6 designation allows six units per acre and the R-8 designation allows eight units per acre. These areas are currently developed in detached single family homes throughout the subarea. One accessory dwelling unit per parcel and attached units are allowed up to the maximum density, assuming lot coverage and parking requirements are met.

R-6 allows a maximum building height of 30 feet (35 feet with pitched roof) and R-8 allows a maximum building height of 35 feet with or without a pitched roof, which could build out to approximately 3 levels depending on the slope of the lot.

R-6 is the predominant zoning that would remain in place under Alternative 1—No Action. A few parcels are currently zoned R-8 in the subarea, located along NE 175th Street in the vicinity of 5th Avenue NE and 10th Avenue NE and along the south side of N 185th Street in the vicinity between Stone Avenue N and Ashworth Avenue N.

It is important to remember that “no action” does not necessarily mean “no change.” Changes could occur to single family residential parcels zoned R-6 and R-8 over the coming decades. The current estimated density of most of the subarea is 2.7 units per acre, even though zoning of R-6 allows 6 units per acre. As such, property owners may choose to add dwelling units to their lots over time. This may include adding an accessory dwelling unit, and/or converting a home to a duplex or triplex depending on the size of the underlying parcel.

Homes also may be increased in height. Most homes are one or two stories high in the subarea. With the maximum allowable height of 35 feet, homes could be increased to three stories, with an additional story and/or unit added vertically.

R-12 and R-18—Single Family and Multi-Family Residential

The R-12 designation allows 12 units per acre and the R-18 designation allows 18 units per acre. These parcels may include clustered or attached units (duplex, four-plex, eight-plex, etc.), townhouses, and smaller apartment buildings. R-12 and R-18 allow a maximum building height of 35 feet (40 feet with pitched roof), which could build out to approximately 3-1/2 levels depending on the slope of the lot.

R-12 is limited to only a few parcels in the subarea, located along NE 175th Street in the vicinity of 5th Avenue NE, along the south side of N 185th Street in the vicinity of Stone Avenue N, and in the North City vicinity. Only one location encompassing a few parcels is zoned for R-18, located in the vicinity of North City, east of 12th Avenue NE.

R-24—Multi-family Residential

24 dwelling units per acre: townhouses and apartments are typical land uses. R-24 allows a maximum building height of 35 feet (40 feet with pitched roof), which could build out to approximately 3-1/2 levels depending on the slope of the lot. R-24 zoning is located in a few areas in the vicinity of the North City subarea under current zoning.

R-48—Multi-Family Residential

48 dwelling units per acre: townhouses and apartments are typical land uses, generally with larger buildings that are similar in height compared to R-24 zoning. R-48 allows a maximum building height of 35 feet (40 feet with pitched roof), which could build out to approximately 3-1/2 levels depending on the slope of the lot. R-48 is located in a few areas in the vicinity of the North City subarea under current zoning.

Home-Based Businesses and Conversion of Homes to Businesses in the Subarea

A specific list of home-based businesses are currently allowed in all residential zones in the city as long as additional criteria are met. Businesses without a residential component are not currently allowed in residential zones, so conversion of homes to solely business use is not possible.

Non-Residential Zones**NB—Neighborhood Business**

The purpose of the Neighborhood Business (NB) zone is to allow for low intensity office, business, and service uses located on or with convenient access to arterial streets. In addition, these zones serve to accommodate medium and higher density residential, townhouse, and mixed use types of development, while serving as a buffer between higher intensity uses and strictly residential zones. Maximum height of 50 feet assumes active/commercial ground floor with 3 levels above. Three parcels are currently zoned NB in the subarea; two located in the vicinity of the NE 185th Street intersections with 9th and 10th Avenues NE and one located in the North City vicinity at the corner of NE 175th Street and 12th Avenue NE.

CB—Community Business

The purpose of the Community Business zone (CB) is to provide a location for a wide variety of business activities, such as convenience stores, retail, personal services for the local community, and to allow for apartments and higher intensity mixed use developments. Maximum height of 60 feet assumes active ground floor with 4 levels above. The CB zoning under Alternative 1 is concentrated in the North City business district, a subarea of the Comprehensive Plan.

MB—Mixed Business

The purpose of the existing Mixed Business zone (MB) is to encourage the development of vertical and/or horizontal mixed-use buildings or developments along the Aurora Avenue N and Ballinger Way corridors. The maximum height limit of 65 feet assumes an active ground floor level with 4 to 5 levels above. Only one parcel is currently zoned MB and would be retained in this zone under Alternative 1, located on the north side of NE 185th Street, approaching Aurora Avenue N/Town Center.

TC-Town Center 1-4

The purpose of the Town Center zones (TC) are to provide for a central location that connects the major east-west and north-south arterials in the city with a district that has the highest intensity of land uses, civic developments, and transportation-oriented design. TC-2 and TC-4 designations exist at the west end of the subarea, along N 185th Street, approaching Aurora Avenue N. The allowed maximum height under TC-4 zoning is 35 feet (with flat or pitched roof/approximately 3 levels high), while TC-1, TC-2, and TC-3 have a height limit of 70 feet.

Alternative 2—Some Growth

To implement Alternative 2—Some Growth, zoning designations would be changed. This would accommodate upzoning of areas within the 185th Street Station Subarea, focused along the N and NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor between Aurora Avenue N (Town Center) and 15th Avenue NE (North City).

The pace of growth for both Alternatives 2 and 3 would be expected to be similar and gradual, at an average annual rate of approximately 1.5 to 2.5 percent per year, although Alternative 3 may grow at a slightly higher pace than Alternative 2, and ultimately, after many decades, would result in more overall development and change than Alternative 2. See Section 3.2 for more information.

The amended zoning would use existing zoning designations already in use by the City as well as a new designation, Multi-Residential (MUR—see later discussion for more information). The following zoning designations and related requirements would apply to Alternative 2. Refer to Figure 3.1-5 for the configuration of these zoning designations. Height requirements of each zoning designation are described below, and these were referenced in calculating build-out square footages for the

subarea, which were converted to residential and employment populations. (Note: *Denotes a new zoning category to be developed in the descriptions that follow.)

Residential Zones**R-6 and R-8—Single Family Residential**

Zoning provisions for R-6 and R-8 (six and eight units per acre) would be the same as described under Alternative 1, and would continue to exist in portions of the subarea not subject to rezoning (primarily to the north and south), beyond the rezoned NE 185th Street corridor.

R-12 and R-18—Single Family and Multi-Family Residential

Zoning provisions for R-12 and R-18 (12 and 18 dwelling units per acre respectively) would be the same as described under Alternative 1. R-12 zoning under Alternative 2 would continue to be limited to where it exists today (in the vicinity of North City and along NE 175th Street) and would remain unchanged. R-18, however, would expand to several locations in the subarea and function as a linear buffer/transition zone between higher density zones (such as R-24 and MUR) and lower density single family zones.

R-24—Multi-family Residential

R-24 zoning provisions (24 units per acre) would be the same as described under Alternative 1. This zoning designation would expand throughout the subarea under Alternative 2, aligning along the frontage of NE 185th Street, 10th Avenue NE, and NE 180th Street. It also would be located west of 10th Avenue NE, between NE 188th Street and NE 190th Street. The configuration and width of the of R-24 zoning along these frontages has been specifically sized to allow internal site circulation from side and rear access options. There would be more R-24 zoning than any other type of land use under Alternative 2—Some Growth.

R-48—Multi-Family Residential

R-48 (48 units per acre) would have the same provisions as described under Alternative 1. Under Alternative 2, R-48 zoning would occur in the vicinity of the North City subarea in three locations (retaining the existing zoning already in place there). The City is examining how this zoning designations and its provisions may need to be amended to support the Preferred Alternative of the 185th Street Station Subarea Plan. For example, provisions would need to be added to allow neighborhood-supporting retail/commercial and professional office along key street corridors in the subarea at the street level.

Home-Based Businesses and Conversion of Homes to Businesses in the Subarea

Alternative 2 would amend and expand the provisions related to home-based businesses to allow a longer list of business types and to allow conversion of homes to solely business use if desired by the property owner. This could be a defined overlay or other mechanism within the subarea that permits conversions of existing homes to businesses and offices. This provision would allow residential homeowners in any of the residential zoning categories to convert their homes for business and office use if located along the N and NE 185th Street/10th Avenue NE/NE 180th Street corridor with rear or side access only, and could be permitted outright, or as conditional or special use, depending upon location.

Non-Residential Zones**NB—Neighborhood Business**

Only one of the currently zoned NB parcels would be retained under Alternative 2, the one located in the North City vicinity at the corner of NE 175th Street and 12th Avenue NE. Provisions of this zoning designation would be the same as described under Alternative 1.

CB—Community Business (Existing Zoning Designation

Under Alternative 2, CB zoning would be expanded to the Shoreline Center site, allowing the site the opportunity to redevelop to uses consistent with the CB zone at some point in the future. Current locations of CB zoning in the North City subarea would be retained under Alternative 2. The provisions of CB zoning would remain as described under Alternative 1.

MB—Mixed Business

No MB zoning is proposed under Alternative 2. The parcel on the north side of NE 185th Street, approaching Aurora Avenue N/Town Center, that is currently zoned MB would be zoned TC-3 under Alternative 2.

TC-Town Center 1-4

Town Center zoning designations would continue to have the same provisions as described under Alternative 1. At the west end of the NE 185th Street corridor, two parcels would be zoned TC: one on the north side to be zoned TC-3 (previously designated as MB) and one on the south side zoned TC-4, which is already currently zoned TC-4.

MUR*—Multi-Residential

The Multi-Residential (MUR) would be a new zoning designation that allows mixed use, transit-oriented development (TOD) in the area near the light rail station. A proposed maximum height of 85 feet assumes active/commercial ground floor with 5 to 6 levels above. This category is intended to be similar to MB, minus allowable uses like manufacturing and warehousing. An active ground floor use with residential and/or offices uses in the upper floors would be allowed. The City may elect to revise the MB zoning instead of creating a new zone. While this is under evaluation, Alternatives 2 and 3 assume the built form described above for the purposes of the DEIS analysis. The proposed maximum height of 85 feet would optimize TOD potential and is

consistent with building code requirements and common construction approaches in TOD throughout the region and the US.

Alternative 3—Most Growth

Under Alternative 3—Most Growth, a greater level of change to zoning would occur than under Alternative 2 for upzoning within the subarea. The proposed change would cover a broader geographic extent and allow more intensive and higher density uses than under Alternative 2, while still being generally focused on the N and NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor.

The pace of growth for both Alternatives 2 and 3 would be expected to be similar and gradual, at an average annual rate of approximately 1.5 to 2.5 percent per year, although Alternative 3 may grow at a slightly higher pace than Alternative 2, and ultimately, after many decades, would result in more overall development and change than Alternative 2. See Section 3.2 for more information.

The amended zoning for Alternative 3 would use a combination of existing zoning designations already in use by the City, as well as new zoning designations of Multi-Residential (MUR) and Master Use Permit (MUP). See additional discussion later in this section for more detail.

The following zoning designations are proposed under Alternative 3—Most Growth, as shown in **Figure 3.1-6**. Height requirements of each zoning designation are described below, and these were referenced in calculating build-out square footages for the subarea, which were converted to residential and employment populations. (Note: *Denotes a new zoning category to be developed in the descriptions that follow.)

Residential Zones

R-6 and R-8—Single Family Residential

Zoning provisions for R-6 and R-8 (six and eight units per acre, respectively) would be the same as described under Alternative 1, and would continue to exist in portions of the subarea not subject to rezoning (primarily in the northwest corner of the subarea and in areas south of N 180th Street and north of NE 175th Street, separated by a segment of R-18 and R-48 zoning along 8th Avenue NE. There would be less R-6 zoned area remaining under Alternative 3 than under Alternative 2.

R-12 and R-18—Single Family and Multi-Family Residential

Zoning provisions for R-12 and R-18 (12 and 18 dwelling units per acre respectively) would be the same as described under Alternative 1. R-12 zoning under Alternative 3 would be limited to one location, where existing zoning would be retained (at the northwest corner of NE 175th Street and 5th Avenue NE). R-18 zoning would be expanded throughout the subarea, often used as a buffer/transition zone between multi-family zoning of R-48 and R-6 single family. R-18 is also used as a buffer/transition zone between Multi-Residential (MUR) and R-6 single family.

R-24—Multi-family Residential

R-24 zoning provisions (24 units per acre) would be the same as described under Alternative 1. In Alternative 3, this zoning designation would occur as a buffer/transitional zone between R-48 and R-18 north of NE 185th Street, between Meridian Avenue N and 1st Avenue N. It also continue to be located in the vicinity of the North City subarea (where existing zoning would be retained).

R-48—Multi-Family Residential

R-48 (48 units per acre) would have the same provisions as described under Alternative 1. Under Alternative 3, R-48 zoning be expanded throughout the subarea, primarily along the N/NE

185th Street/10th Avenue NE/NE 180th Street connecting corridor between Town Center and North City. For areas fronting along N and NE 185th Street/10th Avenue N/NE 180th Street corridor, a mixed-use overlay would be applied within the subarea, allowing active uses along the ground level of mixed use redevelopment with rear and side access. The configuration and width of the of R-48 zoning along these frontages has been specifically sized to allow internal site circulation from side and rear access options.

Home-Based Businesses and Conversion of Homes to Businesses in the Subarea

Alternative 3, like Alternative 2, also would amend and expand the provisions related to home-based businesses to allow a longer list of business types and to allow conversion of homes to solely business use. This could be a defined overlay or other mechanism within the subarea that permits conversions of existing homes to businesses and offices. This provision would allow residential homeowners in any of the residential zoning categories to convert their homes for business and office use if located along the N and NE 185th Street/10th Avenue NE/NE 180th Street corridor with rear or side access only, and could be permitted outright, or as conditional or special use, depending upon location.

Non-Residential Zones

NB—Neighborhood Business

Under Alternative 3, new areas of NB would be designated along the N 185th Street corridor in the vicinity of intersections with 1st Avenue N, 2nd Avenue N, and 3rd Avenue N. Provisions of this zoning designation would be the same as described under Alternative 1.

CB—Community Business

Under Alternative 3, CB would be expanded in the North City vicinity to encompass the full block between NE 180th Street and NE 175th Street (between 12th Avenue NE and 15th Avenue NE). The CB designation would be focused in the North City subarea and would not occur elsewhere in the 185th Street Station Subarea.

TC-Town Center 1-4

Town Center zoning designations would continue to have the same provisions as described under Alternative 1, but would be expanded to encompass more parcels with TC-3 designation at the west end of the NE 185th Street corridor than under Alternative 2.

MUR*—Multi-Residential

As under Alternative 2, under Alternative 3 Multi-Residential (MUR) would be a new zoning designation that allows traditional mixed use and transit-oriented development in the area near the light rail station. The proposed maximum height of 85 feet assumes active/commercial ground floor with 5 to 6 levels above. This category is intended to be similar to MB, minus allowable uses like manufacturing and warehousing. An active ground floor use with primarily residential uses in the upper floors would be allowed. (Some office use could be accommodate as well if the market demand were to increase for such.) The City may elect to revise the MB zoning instead of creating a new zone. While this is under evaluation, Alternative 3 assumes the built form described above for the purposes of the DEIS analysis.

MUP*—Master Use Permit

This would be a new zoning designation that only applies to Alternative 3. This designation would allow flexibility for development standards on large sites and would apply bonus

height and density based on the variety and amount of community amenities and spaces offered by the developer.

The Shoreline School District properties, identified as “opportunity sites” that could be redeveloped in the future in the station subarea planning process, are designated MUP. With further evaluation and consideration, this designation could extend to other sites in the subarea meeting a minimum size threshold and within a maximum defined level of development overall within the subarea.

The built form criteria for the Master Use Permit zoning designation would allow up to a 140-foot maximum height limit on the Shoreline Center site only. This level of density is being tested solely at the Shoreline Center site because it is anticipated that the site is large enough to accommodate this intensity of redevelopment with step downs in building form (wedding cake style) along the 1st Avenue NE right-of-way. Also this would maximize the redevelopment potential of the site in the future. (The Shoreline School District has no plans for redevelopment at this time.)

This would allow for taller buildings than may be built anywhere else in the city, and would accommodate growth beyond that anticipated in current population projections. Although the market study indicated that there may be minimal demand for this product in the foreseeable future, zoning would preserve a broader range of possibilities for the site over the long term. Also, in considering the costs of various types of building construction, buildings that are between 6 levels and 12 levels are more challenging to finance due to construction types and costs. This factor and review of other transit-oriented zoning being considered throughout the region influenced the proposed building height limit of 140 feet for the site.

All other sites designated MUP would be subject to a maximum height of 85 feet (same as under MUR). The MUP would differ from the MUR designation in that it would still be processed through a flexible master use permit approach that would allow the City and developer to work together toward innovative solutions for the benefit of the community.

Land Use Patterns

Under all alternatives, it is anticipated that the subarea would experience growth and change. The differences in this growth and change related to each alternative are summarized below.

Alternative 1—No Action

Under Alternative 1—No Action, redevelopment likely would be focused in the North City and Town Center subareas where existing zoning allows for redevelopment. Although some change to single family neighborhoods would be expected, such as redevelopment of existing homesites with larger single family homes, as well as the addition of accessory dwelling units. Also, property owners may convert their homes to attached single family dwellings (duplexes), allowed under the existing R-6 and R-8 zoning, which could result in more density than currently exists in the subarea even without upzoning.

Opportunities envisioned for the redevelopment of the Shoreline Center and other sites (such as church parcels) would not be realized under this alternative as the existing R-6 zoning would remain in place.

Alternative 2—Some Growth and Alternative 3—Most Growth

Under Alternative 2—Some Growth and Alternative 3—Most Growth, changes to land use patterns would occur gradually, over many decades, with introduction of multi-story, mixed-use

development in the subarea. While these two alternatives differ in the level of intensity and location of this development, the level of change over time would be expected to occur at a similar gradual pace, between 1.5 and 2.5 percent per year, although Alternative 3 may grow at more the upper end of this rate.

Land Use Compatibility

All alternatives could be subject to changes over time, but the two action alternatives would be more likely to impact land use compatibility if not mitigated than Alternative 1-No Action.

Alternative 1—No Action

Alternative 1 would not result in dramatic changes in land use types. If changes in multi-family, commercial, and mixed use development were to occur, these would occur where existing zoning would allow for them, in the North City and Town Center subareas. Elsewhere throughout the subarea, parcels zoned for primarily single family use would not be changed, and although some owners may add accessory dwelling units or convert their homes to multiple units, the overall allowed density would still remain as single family, R-6 with some R-8.

Alternative 2—Some Growth and Alternative 3—Most Growth

Under the two action alternatives, the subarea would be anticipated to experience more change in land use. Under Alternative 2—Some Growth and Alternative 3—Most Growth, the range of types and quantity of residential uses would increase as part of new multi-family and mixed-use development. Therefore land use compatibility would become an important issue to be addressed through zoning and development regulations.

Mitigation measures presented later in this section address needs related to buffering existing single family residential areas from adjacent new development through transitions in zoning, as well as design of building form, setbacks, landscaping, and other treatments.

Potential Built Form and Neighborhood Character

Photographic examples showing various densities of residential and mixed use developments are provided on pages 3-72 through 3-77. These photographic examples of built form (housing and development) are color coded to the zoning categories described above for the alternatives.

Illustrations on pages 3-78 through 3-83 show a simulated 3-D SketchUp model for each alternative. These models conceptually illustrate the potential building form that would occur full build-out of each alternative using a SketchUp model technique. The colors shown in the model graphics represent the various zoning designations described above.

Renderings on pages 3-84 through 3-90 show possible redevelopment concepts for various locations in the study area. It should be noted that these illustrations are conceptual and represent a point in time of phased development that could occur over many decades in the future.

Alternative 1—No Action

Under Alternative 1—No Action, there would be minimal change to built form and neighborhood character. Streets and roadways, public spaces, and single family sites would remain similar in character over the long term to today's conditions, although traffic congestion station subarea could become a growing problem due to a lack of roadway and intersection improvements. Investments in capital improvements

are proposed under Alternative 2 and Alternative 3.

Alternative 2—Some Growth and Alternative 3—Most Growth

With public investment in the station subarea to support private sector redevelopment, it is anticipated that over time, streets and infrastructure would be improved. With redevelopment projects streetscapes and frontage improvements would occur along with on-site architectural improvements.

Allowable building heights in most areas would increase by approximately 10 to 40 feet compared to that allowed under existing zoning. At the Shoreline Center site, in the immediate vicinity of the light rail station, and in Town Center and North City, building heights would increase to between 15 and 50 feet higher under both Alternative 2 and Alternative 3. Under Alternative 3 at the Shoreline Center site, a maximum height limit of 140 feet is proposed to maximize long term redevelopment opportunities for the Shoreline School District property. It is envisioned that maximum height levels would be achieved through a flexible system of development provisions that allows credit of additional floor levels for provisions of elements such as affordable housing, public open space, green building features, and other amenities. In summary, the maximum building heights under existing and proposed zones in the subarea would be:

- R-48 40 feet
- R-24 40 feet
- R-18 40 feet
- NB 50 feet
- CB 60 feet
- MUR 85 feet (under Alternatives 2 and 3)
- MUP 140 feet at the Shoreline Center site and 85 feet elsewhere (under Alternative 3)

Of the two action alternatives, Alternative 3—Most Growth would pose the most change to the subarea, from predominantly single family residential to a mix of housing types and neighborhood-serving retail and uses, as well as major redevelopment of the Shoreline Center site. While this would be a substantial change, the growth and related change would be expected to occur very gradually, over many decades. Each phase of redevelopment would be evident as it occurs, but the overall level of change would be less perceptible than if it were to occur within a shorter timeframe. In addition, mitigation measures including transitional zoning provisions are proposed to buffer existing land uses from new redevelopment in the subarea.

3.1.3 Mitigation Measures

Applicable Plans, Policies, and Regulations

As described earlier in this section of the DEIS, there are extensive policies and regulations already adopted by the City of Shoreline that would be applicable to the subarea plan, regardless of which action alternative is implemented. Policies within the Shoreline Comprehensive Plan; Transportation Master Plan; Parks, Recreation, and Open Space Plan; Town City Subarea Plan; North City Subarea Plan; and other adopted plans would not only apply to the redevelopment of the subarea, but also would be reinforced and furthered through implementation of the subarea plan.

Development regulations within the Shoreline Municipal Code, including the Development Code, summarized previously in this section of the DEIS would be applicable to redevelopment activities in the subarea and would serve to mitigate impacts related to changes in land use patterns, as well as construction.

Alternative 1—No Action

As discussed above, the No Action Alternative is not consistent with the community's vision and adopted plans and policies for the station subarea, nor does it support the purpose and need for the 185th Street Station Subarea Plan. If no action became the course pursued in the station subarea, the City would need to revise the Comprehensive Plan, making extensive changes to existing policies. However, this would not mitigate for impacts resulting from non-implementation of a plan that supports transit-oriented development in the station subarea.

Alternative 2—Some Growth and Alternative 3— Most Growth

Implementation of either of these action alternatives would require the City to amend its Comprehensive Plan, primarily designated land uses and the Land Use Map, but also the Capital Facilities Element at the next update opportunity.

Neighborhood Character and Land Use Compatibility

Retaining and enhancing neighborhood character is important to residents in the station subarea and required by City of Shoreline Comprehensive Plan policies and Municipal Code provisions. It will be important that new higher density residential and mixed use land uses in the station subarea provide buffering and transitioning when located adjacent to single family uses. Some of the transitions would be accomplished through the proposed zoning frameworks of Alternative 2 and Alternative 3, which call for R-18 residential zoning as a transitional zone between higher density uses and single family use. In addition, the City will explore other amendments that may be needed to the

Development Code to reinforce transitioning and buffering between land uses, including but not limited to:

- Building form design that includes step-backs/“wedding cake style” in buildings, with higher levels set back from the street right-of-way more than lower levels when adjacent to lower density residential areas;
- Positioning of buildings and height limitations within sites;
- Building façade and architectural treatments;
- Setback distances from adjacent land uses;
- Landscaping requirements between land uses;
- Street frontage streetscape and landscape requirements; and
- Other design standards that will enhance neighborhood character.

Land Use and Transportation Integration—The City will explore a variety of design regulations, including tools for integrating land use and transportation so as to reduce traffic and parking impacts in the subarea. These would include access management treatments along arterial thoroughfares (requiring side and rear access for redevelopment parcels), shared parking and parking management actions, increased multi-modal transportation improvements to encourage less trips by automobile and other methods. Refer to Section 3.3 Transportation for more information.

Sustainable Design and Green Building—Sustainable site design and green building practices are encouraged by policies at the local level, as well as those of the region, state, and federal jurisdictions. There is also increasing market demand for

sustainable neighborhoods and housing choices. Shoreline will continue to encourage low impact development, sustainable neighborhood design, and green building practices. As part of the 185th Street Station Subarea Plan, the City will evaluate how such practices could be better integrated into the Development Code and encouraged as part of redevelopment projects through incentives and bonuses, as well as design standards and requirements.

Historic Preservation—While no formally designated historic landmarks exist in the subarea, there are twelve parcels listed in the City’s inventory that are potentially eligible. The mitigation for these potential historic resources would involve a review of historic and cultural resources as part of redevelopment affecting those parcels and prescriptive measures to mitigate potential impacts to be developed by the City.

Community Amenities, Heritage Commemoration, Cultural Opportunities, and Public Art—As the neighborhood grows and changes gradually over time, there will be an increased demand for community amenities, such as public gathering spaces for events, farmers markets, community gardens, interpretation and heritage projects that commemorate Shoreline’s history, public art, and other cultural opportunities and events. These experiences for citizens and visitors are encouraged by City of Shoreline policies, and in addition, the City will consider potential regulatory provisions that incentivize and/or require provision of cultural amenities, historic interpretation, public art, and other features as part of public and private development in the subarea. Please note: mitigation measures for parks, recreation, open space are provided in

Section 3.4 of the DEIS. Also, see Section 3.2 for mitigation measures related to Housing Choice and Affordability.

3.1.4 Significant Unavoidable Adverse Impacts

With application of the land use-related mitigation noted above, no significant unavoidable land use impacts would be anticipated in conjunction with either of the two action alternatives. Proposed redevelopment within the 185th Street Station Subarea would result in an intensification of development, additional housing and employment opportunities, and increased population in the subarea. While the intensity of redevelopment in this area would be substantially greater than the amount of existing development, such redevelopment would be consistent with the Shoreline Comprehensive Plan, and other local, regional, state, and federal plans and policies.

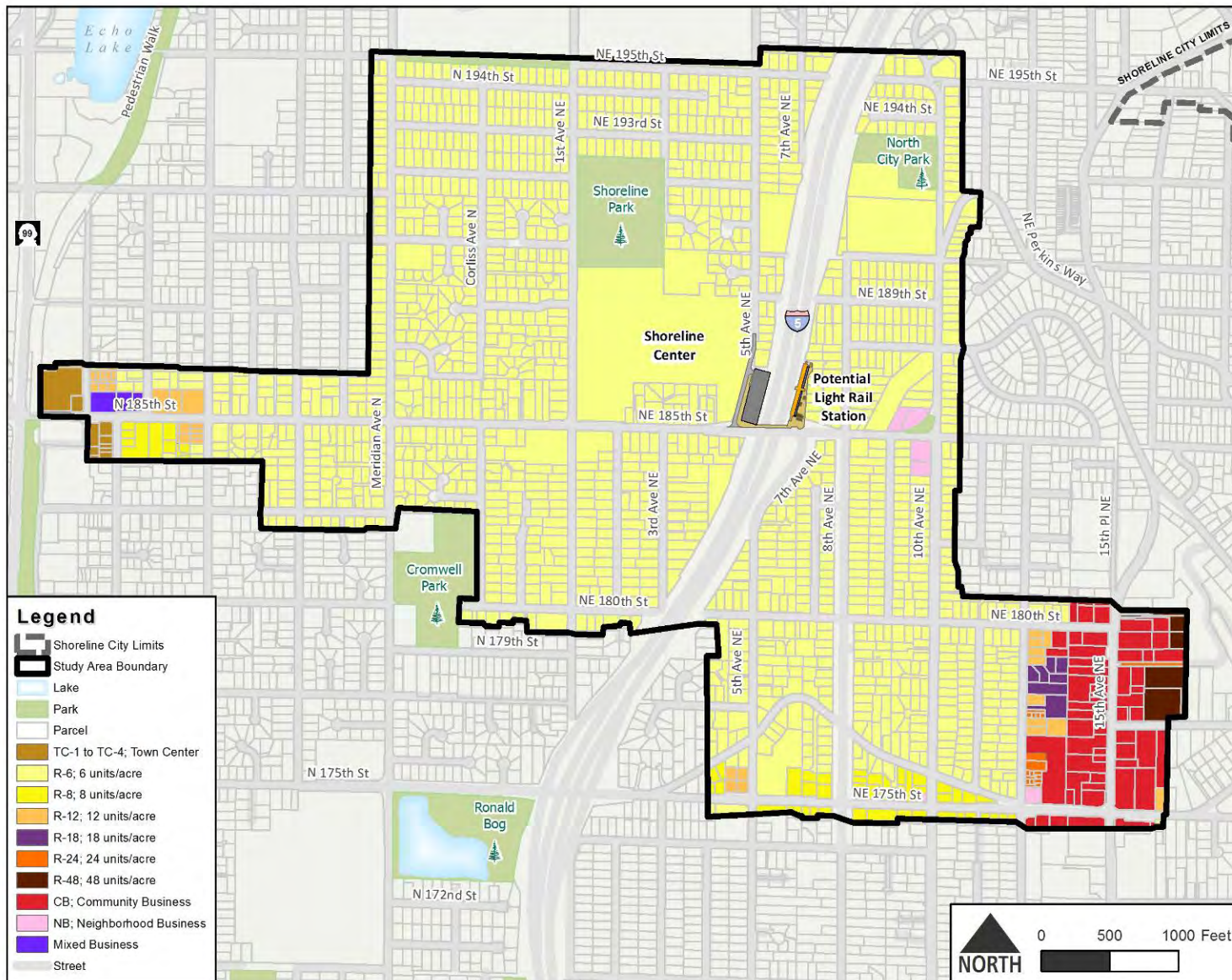


Figure 3.1-4 Alternative 1—No Action, Existing Zoning Map

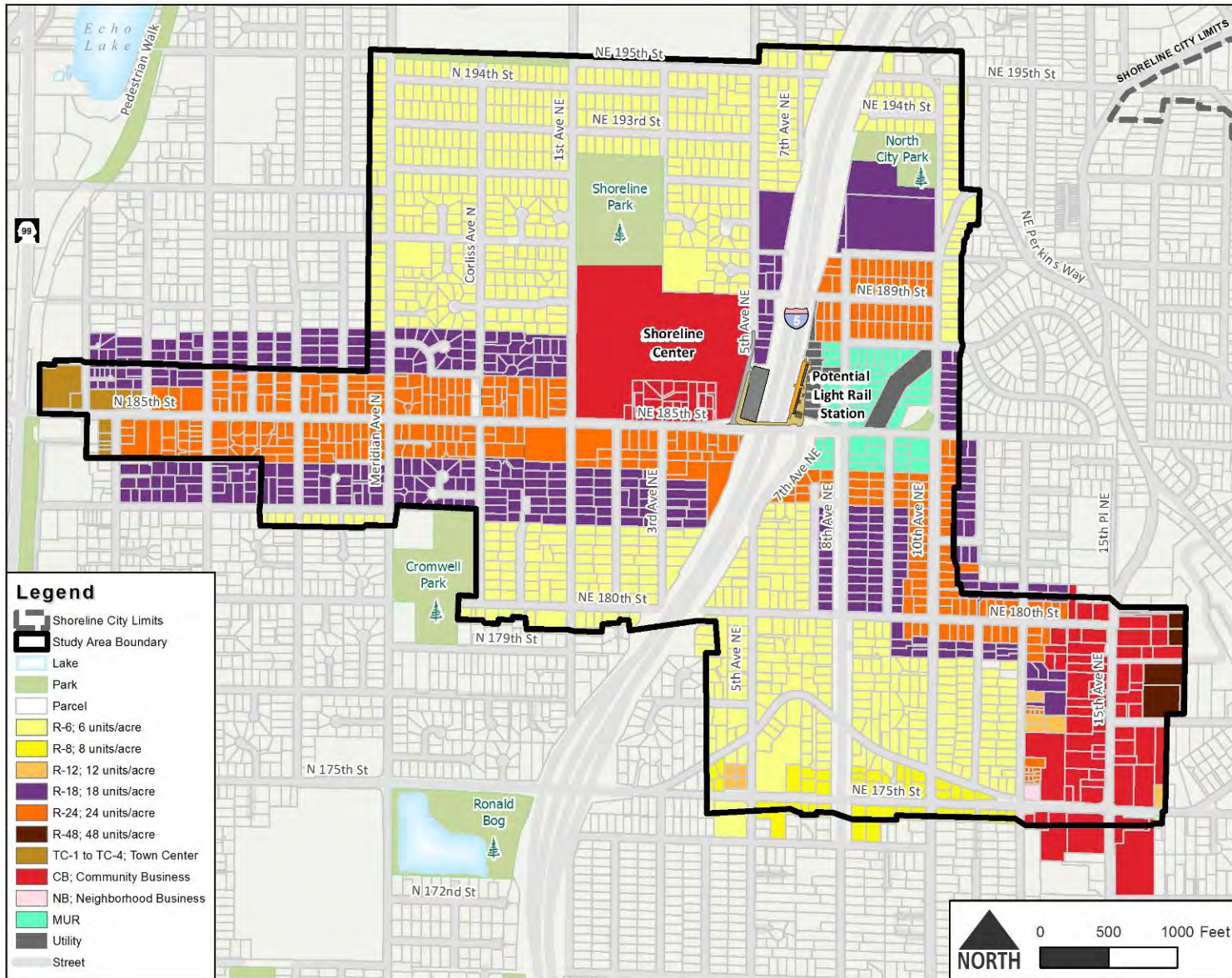


Figure 3.1-5 Alternative 2—Some Growth, Proposed Zoning Map

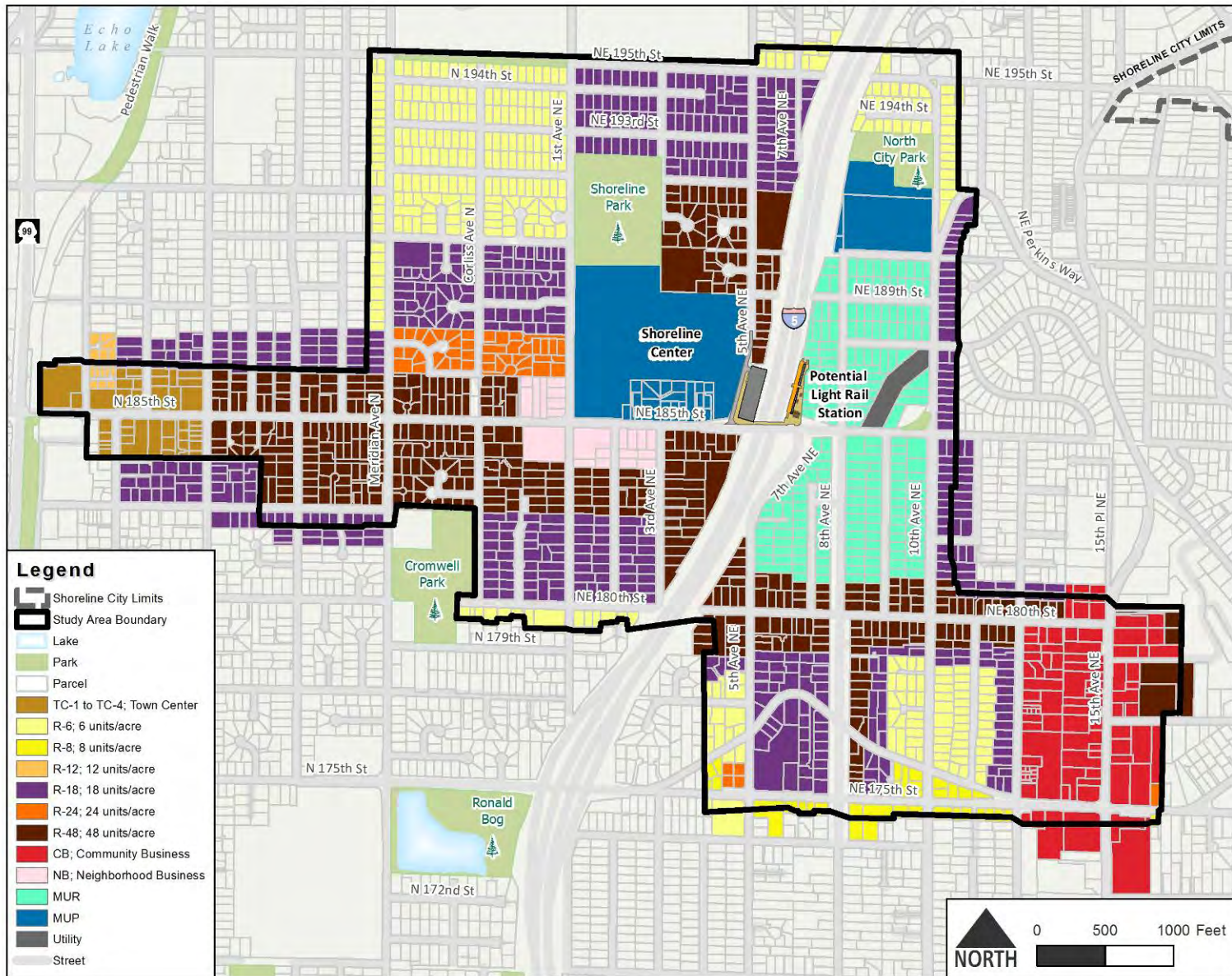


Figure 3.1-6 Alternative 3—Most Growth, Proposed Zoning Map

Up to 12 units/acre

10 units/acre



11 unit/acre



12 units/acre



12 units/acre



Photographic Examples of Zoning Categories, Up to 12 Units per Acre (R-12)

Up to 18 units/acre

14 units/acre



Retail and office



17 unit/acre



18 units/acre



Photographic Examples of Zoning Categories, Up to 18 Units per Acre (R-18)

Up to 24 units/acre

19 unit/acre



24 units/acre and retail/office



23 units/acre



24 units/acre with retail



Photographic Examples of Zoning Categories, Up to 24 Units per Acre (R-24)



Photographic Examples of Zoning Categories, Up to 48 Units per Acre (R-48)

Up to 100 units/acre

53 units/acre



65 units/acre



67 units/acre



94 units/acre



Photographic Examples of Zoning Categories, Up to 100 Units per Acre (CB, MUR, MUP)

More than 100 units/acre

100 units/acre with retail



140 units/acre with retail



185 units/acre with retail



310 units/acre and retail/office



Photographic Examples of Zoning Categories, More than 100 Units per Acre (CB, MUR, MUP)



Sketch-Up Model View for Alternative 1—No Action, Looking Eastward toward the Potential Light Rail Station



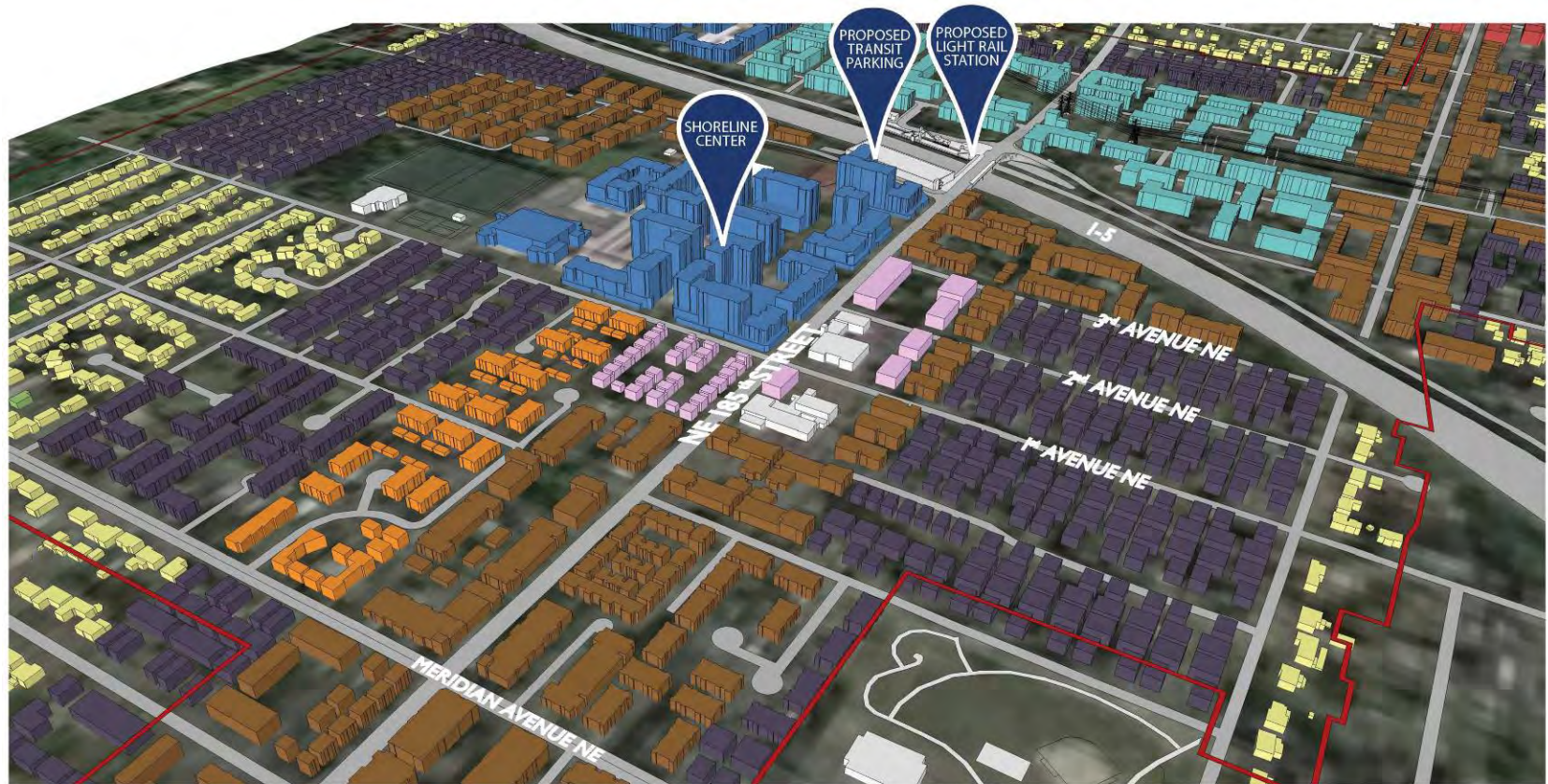
Sketch-Up Model View for Alternative 1—No Action, Looking Westward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 2—Some Growth, Looking Eastward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 2—Some Growth, Looking Westward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 3—Most Growth, Looking Eastward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 3—Most Growth, Looking Westward toward the Potential Light Rail Station



Conceptual possibility for N/NE 185th Street multi-modal improvements, looking west (Alternative 2—Some Growth, at partial build-out)



Conceptual possibility for the N 185th Street overpass, looking eastward, with solar panels and green roofs on the canopies (Alternative 3—Most Growth, at full build-out)



Conceptual possibility for sheltered crossing area at the N 185th Street overpass, looking eastward (Alternative 3—Most Growth, at full build-out)



Conceptual possibility for the 8th Avenue NE right-of-way, looking southwest, with shared use path, community gardens, and public spaces (Alternative 3—Most Growth, at full build-out)



Conceptual possibility for transit-oriented development on the east side of the proposed light rail station, looking northwest, with the power transmission lines at center of the block in open space use (Alternative 3—Most Growth, at full build-out)



Conceptual possibility for the NE 180th Street, looking southeast, public art commemorates the nearby NE 185th Street “Motorcycle Hill” history (Alternative 3—Most Growth, at full build-out)



Conceptual possibility showing mixed use redevelopment on a portion of the Shoreline Center site, looking southward, farmers market could occur on an extension of N 190th Street as a shared use community “festival street” (Alternative 2—Some Growth, at partial build-out)

3.2 Population, Housing, and Employment

This section describes the affected environment, analyzes potential impacts, and provides recommendations for mitigation measures for population, housing, and employment.

3.2.1 Affected Environment

Shoreline has been traditionally known as a great place to live in the central Puget Sound region, based on the strong sense of community, good schools, and many parks and recreation opportunities provided throughout the city.

Existing Population and Trends

Shoreline's overall estimated population in 2013 was 54,790 based on information recently released by the US Census Bureau. An estimated 7,944 people live in the 185th Street Station Subarea, approximately 14.5 percent of the city's population. (Note: population is based on subarea boundaries that extend to the outer boundaries of the Traffic Analysis Zones of the subarea. See discussion on page 3-94.)

Shoreline's population increased in the 1980s and 1990s but remained fairly stable between 2000 and 2010. Although the total population of Shoreline did not increase substantially up to 2010, the city has grown an average of slightly over 1 percent per year since 2010 based on US Census Bureau estimations.

In review of the demographic composition of the population, two trends are occurring, including greater race/ethnic diversity and aging of Shoreline's population. The largest minority population is Asian-American, composed of several subgroups, which

collectively made up 15 percent of the population as of the 2010 Census. The African-American population, comprising 2,652 people, had the largest percentage increase, at 45 percent between 2000 and 2010, followed by people of two or more races, at 15 percent. Hispanics may be of any race, and this demographic increased 41 percent to 3,493. Additionally, foreign born residents of Shoreline increased from 17 percent of the population to an estimated 19 percent by 2010, as measured by the American Community Survey.

The median age of community residents increased from 39 in 2000 to 42 in 2010. "Baby Boomers", those born between 1946 and 1964, comprise approximately 30 percent of the population. Shoreline has the second largest percent of people 65 and older among King County cities, at 15 percent. Among older adults, the fastest growing segment is people 85 and older, up one-third from 2000.

Families (two or more people related by birth, marriage, or adoption) declined from 65 percent to 61 percent of all households in Shoreline between 2000 and 2010. Non-family households increased from 35 percent to 39 percent of households. The number of people living in group quarters, such as nursing homes, adult family homes, and Fircrest increased by 9 percent between 2000 and 2010 based on the 2010 Census.

Forecasted Growth

The central Puget Sound region is one of the fastest growing metropolitan areas in America. Seattle, Shoreline's neighboring city to the south, grew faster than any other major American city in 2013, according to the US Census Bureau, with approximately 18,000 people moving to the city in the one-year period. Seattle is the 21st largest city in the US. Seattle's growth rate from July 1,

2012 to July 1, 2013 was 2.8 percent, the highest rate among the 50 most populous US cities, bringing the total 2013 population to 652,405.

Washington State's overall population is currently 6,951,785 and is forecasted to grow by just above 1 percent per year through 2025 and then at less than 1 percent per year through 2040 according to the Washington State Office of Financial Management.

In looking at growth rates of regional cities, most communities in the Puget Sound region have grown at various rates, between less than 1 percent, to about 3 percent annually between 2010 and 2013.

Based on recent information released by the US Census Bureau, the 15 fastest growing cities in America with populations of 50,000 and larger (similar to Shoreline's size) grew between 3.8 percent (Pearland, Texas) and 8 percent (San Marcos, Texas) between 2012 and 2013.

While Shoreline's population was stable with little growth up to 2010, the population of the community is expected to continue to grow as more housing and employment opportunities are developed. Seattle and other regional cities are also forecasted to continue to grow over the next couple of decades.

Growth Targets

The King County Countywide Planning Policies (CPPs), adopted to implement the Growth Management Act (GMA), establish household growth targets for each jurisdiction within the county. Each target is the amount of growth to be accommodated during the 2006-2031 planning period. Shoreline's growth target for this

period is 5,000 additional households; projected to 5,800 households by 2035 (200 households per year).

Applying Shoreline's current average household size of 2.4 people per residence, 5,800 new households equates to 13,920 new residents by 2035. Another recent target set by Puget Sound Regional Council (PSRC) calls for Shoreline to gain more than 7,200 new jobs by 2035, improving its jobs-to-housing ratio to 0.91. (Note: jobs-to-housing ratio and balance are discussed and defined later in this section.)

The City is required to plan for its assigned growth target and demonstrate that its Comprehensive Plan is able to accommodate the growth targets for households and employment. Sufficient land (zoning capacity) and strategies must be in place to show that there will be available housing and services for the projected population. The City of Shoreline has met these requirements through its Comprehensive Plan, which shows that growth targets can be met through citywide increases in housing and employment. Although the city has capacity to meet these growth targets with or without upzoning the station subarea, intensifying densities in proximity to the light rail station is smart growth, consistent with regional goals and policies, as well as those adopted by the City.

With more people living and working near high-capacity transit, Shoreline can better achieve the objectives of the Climate Action Plan and better meet the policies and provisions of the Comprehensive Plan and Transportation Master Plan. Adopted policies related to expanding housing and transportation choices and enhancing quality of life through better connectivity in the station subarea also can be realized.

The proposed zoning and proximity to high-capacity transit also could help to catalyze redevelopment and encourage higher rates

of growth in the subarea than are currently being experienced citywide and regionally. A review of growth rates over the last ten years shows that the City has only recently been barely keeping pace with the growth target of 200 households per year within the last couple of years and is not yet meeting the jobs/employment growth target range.

Allowing for more dense growth near transit would take the pressure off single-family neighborhoods to accept additional households. New housing in the subarea would and should include transit-supportive densities. This would be accomplished through various types of multifamily and transit-oriented development (mixed use buildings, condominiums, apartments, townhomes, etc.). Attached single-family homes, cottage housing, accessory dwelling units, duplexes, triplexes, and other multi-plexes would be expected to develop as a result of the proposed R-18 zoning, and this area of zoning would serve as a transition between the more intensive density in the station vicinity and the traditional detached single family neighborhoods in outer areas. See Section 3.1 for a more detailed explanation of expected urban form and neighborhood character.

Population Study Area for Purposes of the DEIS

While the subarea plan is focused on the study areas shown in Figures 1-1 and 1-2 in Chapter 1, for purposes of population and employment projection calculations the limits of Traffic Analysis Zones (TAZ) boundaries are assumed as the study area. In some cases, these boundaries extend beyond the land use and mobility study area boundaries designated for the subarea, and overall the area covers a broader geography. TAZs are the common methodology for analyzing demographics regionally in planning. TAZs for the study area are depicted in **Figure 3.2-1**. It is

important to note that the population figures throughout this DEIS (existing and forecasted) relate to the areas shown in this TAZ map, beyond the land use and mobility (multi-modal transportation) study area boundaries. The existing estimated population within the 185th Street Station Subarea, including the TAZs associated with the subarea is 7,944. Population within these TAZs has been a key factor in calculating potential impacts and demand for transportation, public services, utilities in this DEIS.

Recent plans for the Point Wells area have been presented by Snohomish County, which is going through a separate environmental impact analysis process to assess redevelopment opportunities. While potential population growth for Point Wells would occur outside the 185th Street Station Subarea, projected traffic in the subarea as a result of Point Wells development is assumed in this DEIS, as described and analyzed in Section 3.3 Multi-Modal Transportation.

Estimated Annual Population Growth Rate for Subarea Planning Purposes

Based on population trends and forecasts, and for the purposes of estimating annual population growth rates for the action alternatives in this DEIS (Alternative 2—Some Growth and Alternative 3—Most Growth), an estimated annual growth rate of between 1.5 percent and 2.5 percent is used. Given that the current average annual growth rate in Shoreline between 2010 and 2013 was just over 1 percent, it is anticipated that growth would increase to a higher annual percentage once zoning changes are adopted that allow redevelopment of higher densities. As such, 1.5 percent would appear to be a realistic lower-end estimate for annual growth in the subarea with the proposed zoning changes (either under Alternative 2—Some

Growth or Alternative 3—Most Growth). Given recent growth rates for the City of Seattle (2013) and other cities in the region and nationally, 2.5 would appear to be a realistic upper-end estimate of annual growth potential for the subarea with the proposed zoning changes.

Redevelopment Potential and Timing

The potential for growth and timing of redevelopment will be influenced by various factors in the subarea, including development market factors and individual property owner decisions on the use of their properties. The largest site for redevelopment opportunity being the Shoreline Center. Although the Shoreline School District has no current plans for redevelopment of the site, proposed upzoning under Alternative 2—Some Growth or Alternative 3—Most Growth would maximize opportunities for future redevelopment.

The North City school site is another opportunity site in the subarea. The School District has no plans for redevelopment of the site. The site currently houses preschool and homeschooling facilities. As stated in Section 3.4—Public Services, and consistent with the District’s policies, the current site functions are valuable to the neighborhood and the potential need for a future neighborhood school to serve increased population/households reinforces the importance of this site as a long term place of education.

There are several church parcels of larger size that would be suitable for additional growth in the near term, if property owners are interested in redeveloping and incorporating additional uses and development onto their site, or are willing to sell to an interested developer.

Most other properties within the subarea are smaller sized single family residential lots and would need to be aggregated into

larger parcels to create an overall size suitable for redevelopment to the proposed zoning. As such, throughout the DEIS analysis, it is stated that growth in the subarea would be anticipated to occur very gradually over many decades. As an example, even if the higher annual growth rate of 2.5 percent were to occur, it would take at least 60 years to reach full build-out of Alternative 3—Most Growth, and it would take at least 100 years to reach full build-out at a 1.5 percent annual growth rate.

Capacity Building for the Future and Focus of the Planned Action

Given the considerations discussed above, it is important to recognize that the 185th Street Station Subarea Plan will be a long-range plan to be achieved over generations. It will be a plan that creates capacity and opportunity for redevelopment over the long term for current and future generations of residents in the subarea. Proposed rezoning allows flexibility for redevelopment to occur in a variety of locations in the subarea based on property owners’ interests and development market influences. While the 185th Street Station Subarea Plan will set the vision for what could occur over the long term, it also will define capital improvement and project priorities to support potential redevelopment over the next 20 years, which is the established planning horizon. The plan will address anticipated phasing and locations of redevelopment and make specific recommendations for public investment in the subarea to support this first stage of growth.

In order to align the Planned Action with the 20-year planning horizon of 2035, 20-year growth targets will be set for the alternative that is selected (Preferred Alternative), and these will be presented in the FEIS with the description of that alternative. Potential impacts associated with the Preferred Alternative identified in the FEIS also will be analyzed to the horizon year of 2035 for comparison purposes, which will require an assumption of a percentage of growth by 2035 for the analysis and phasing

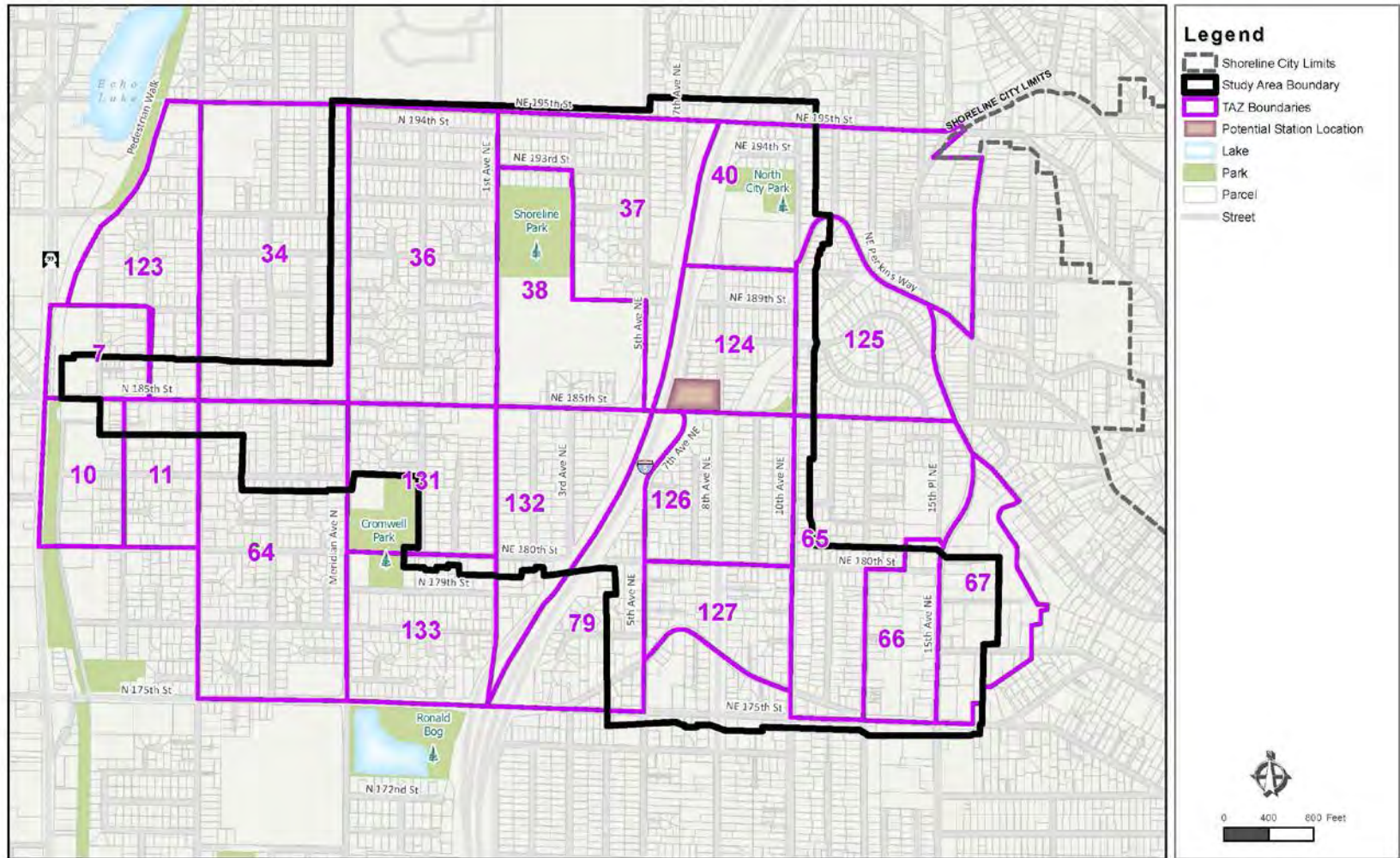


Figure 3.2-1 Traffic Analysis Zones (TAZs) in Proximity to 185th Street Station Subarea, Referenced for Population Calculations

assumptions. The FEIS will include specific impacts analysis and recommended mitigation measures, including capital improvements and updated regulations to support the Preferred Alternative.

Existing and Planned Housing and Household Characteristics

Planning for expected growth requires an understanding of current housing and household characteristics, as well as economic and market trends and demographics. A summary of the market assessment and economic trends was provided in Section 3.1. Below is a summary of current housing and household characteristics in Shoreline including conditions related to affordability. Much of the information presented is based on the supporting analysis in the 2012 Comprehensive Plan for the City of Shoreline.

Comprehensive Housing Strategy

The demand analysis and housing inventory developed to support the Housing Element of the 2012 Comprehensive Plan meets the requirements of the Growth Management Act (GMA) and Countywide Planning Policies (CPPs) and complements past planning efforts, including the City's Comprehensive Housing Strategy, adopted by Council in February 2008.

The Comprehensive Housing Strategy was the culmination of work by a Citizen Advisory Committee formed in 2006 to address the city's housing needs. The strategy contains recommendations for expanding housing choice and affordability while defining and retaining important elements of neighborhood character, educating residents about the importance and community benefit of increasing local choice and affordability, and developing standards to integrate a variety of new or different housing styles within neighborhoods.

Shoreline and Subarea Housing Inventory

Shoreline can be classified as a historically suburban community that is maturing into a more self-sustaining urban environment. Almost 60 percent of the current housing stock was built before 1970, with 1965 being the median year of home construction. Only 7 percent of homes (both single and multi-family) were constructed after 1999.

Over the last decade, new housing was created through infill construction of new single-family homes and townhouses, with limited new apartments in mixed-use areas adjacent to existing neighborhoods. Many existing homes were remodeled to meet the needs of their owners, contributing to the generally good condition of Shoreline's housing stock.

The characteristics of the 185th Street Station Subarea are consistent with those described for Shoreline overall, although the subarea has seen less infill construction and redevelopment activity than other areas of the city.

Quantity of Housing Units, Types, and Sizes

Single-family homes are the predominant type of existing housing and encompass a wide range of options, which span from older homes built prior to WWII to new homes that are certified through the Leadership in Energy and Environmental Design (LEED) program. Styles range from expansive homes on large view lots to modest homes on lots less than a 1/4 acre in size. In the station subarea, the predominant single family lot size is 8,000 to 10,000 square feet, and although much of the existing zoning in the subarea is Residential, six units per acre (R-6), the current built density of the subarea is approximately 2.7 units per acre.

According to the 2010 Census, there were 21,561 housing units within the City of Shoreline, an increase of 845 since 2000. About 73 percent of these housing units are single-family homes.

Compared to King County as a whole, Shoreline has a higher percentage of its housing stock in single-family homes. See **Table 3.2-1**. In the 185th Street Station Subarea, including the TAZs associated with the subarea, it is estimated that there are currently 3,310 households.

While there are an increasing number of households in Shoreline each year, population levels indicate a potential trend toward decrease in household size. This is consistent with national trends. However, overall in King County, household size has remained stable since 1990 (see **Table 3.2-2**). Shoreline's average household size is currently 2.4 people per dwelling unit.

In Shoreline, the average number of bedrooms per unit is 2.8. Only 16 percent of housing units have less than 2 bedrooms. This compares with 21 percent of housing units with less than 2 bedrooms in King County. With larger housing units and a stable population, overcrowding has not been a problem in Shoreline.

The US Census reported only 1.6 percent of housing units with an average of more than one occupant per room, and no units that averaged more than 1.5 occupants per room (American Community Survey 2008-2010).

Definition and Measure of Housing Affordability

The generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing. When discussing levels of affordability, households are characterized by their income as a percent of the Area Median Income (AMI). The box at right highlights information pertaining to affordable housing metrics in Shoreline. **Figure 3.2-2** shows wage/income levels for various professions.

Affordable Housing Metrics for Shoreline

To understand affordability metrics, percentages of Area Median Income (AMI) are calculated. For example, The 2011 AMI for Shoreline was \$66,476. Therefore, a household with that income would be making 100 percent of median; a household that made 50 percent of that amount (\$33,238) would be classified at 50 percent AMI; a family making 30 percent of that amount (\$19,943) would be classified at 30 percent AMI.

Families that pay more than 30 percent of their income for housing are considered "cost-burdened" and may have difficulty affording necessities such as food, clothing, transportation, and medical care.

Special Needs Housing and Homelessness

Group Quarters

Group quarters, such as nursing homes, correctional institutions, or living quarters for people who are disabled, homeless, or in recovery from addictions are not included in the count of housing units reported above. According to the 2010 Census, about 2.6 percent of Shoreline's population, or 1,415 people, live in group quarters. This is a slightly higher percentage than the 1.9 percent of King County residents living in group quarters.

Table 3.2-1 Number of Dwelling Units for Each Housing Type

Type of Housing	Shoreline (units)	Shoreline (percent)	King County (units)	King County (percent)
Single-family	16,295	72.5%	504,083	59.3%
Duplex	258	1.1%	16,727	2.0%
Triplex/4-plex	516	2.3%	37,876	4.5%
Multifamily (5+ units)	5,218	23.2%	269,949	31.9%
Mobile Homes	134	0.6%	17,385	2.1%
Other (boat, RV, van, etc.)	49	.02%	753	0.1%

Source: American Community Survey 2008-2010

Table 3.2-2 Average Household Size

	1980	1990	2000	2010
Shoreline	2.7	2.5	2.5	2.4
King County	2.5	2.4	2.4	2.4

Source: 1980 Census, 1990 Census, 2000 Census, 2010 Census

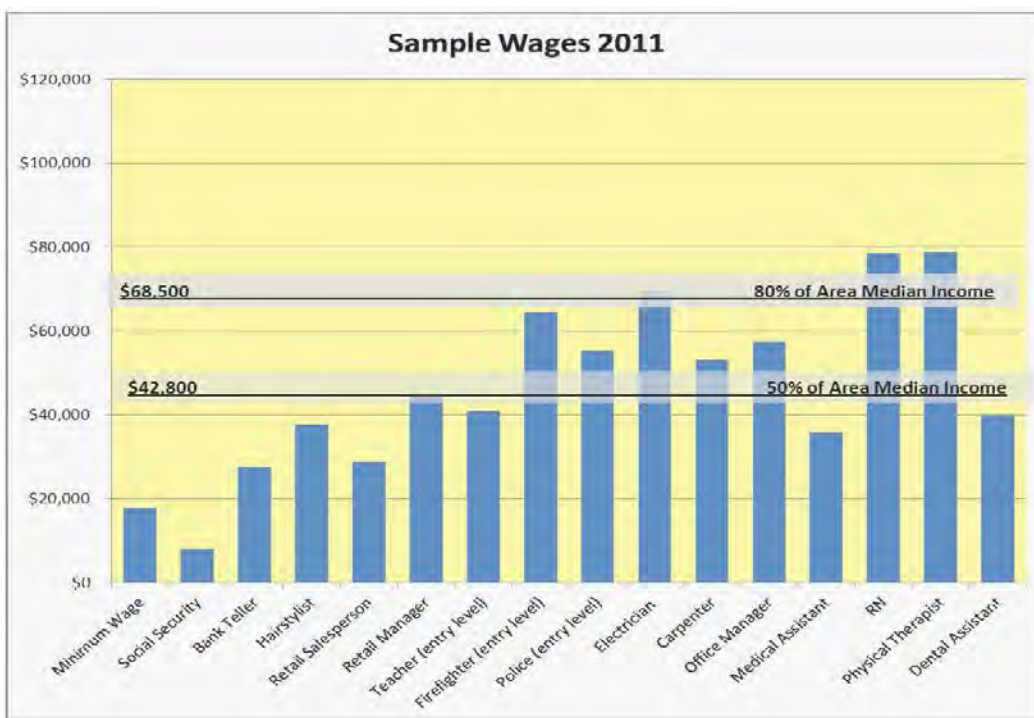


Figure 3.2-2 Income Levels/Wages of Various Professions

Table 3.2-3 Assisted Household Inventory

Provider	Units
King County Authority	669
HUD Subsidized Units	80
Tax Credit Properties **	272
Total	1,021

Source: City of Shoreline Office of Human Services, 2012

**The Low Income Housing Tax Credit program was created by Congress through passage of the Emergency Low-Income Housing Preservation Act in 1987. When the tax credits expire, these properties may be converted to market rate housing.



Fircrest in Shoreline, one of five state residential habilitation centers for people with developmental disabilities, provides medical care and supportive services for residents and their families. In 2011, Fircrest had about 200 residents. This reflects a decline from more than 1,000 residents 20 years ago, as many residents moved into smaller types of supported housing, such as adult family or group homes.

Financially Assisted Housing

As shown in **Table 3.2-3** financially assisted housing units for low- and moderate-income individuals and families exist in the City of Shoreline.

In addition to this permanent housing, King County Housing Authority provided 566 vouchers to Shoreline residents through the Section 8 federal housing program, which provides housing assistance to low income renters (City of Shoreline Office of Human Services, 2012).

Homelessness

According to the Shoreline School District, 123 students experienced homelessness during the 2010-2011 school year. According to the 2012 King County One Night Count of homeless individuals, 31 people were found living on the streets in the north end of King County.

Emergency and Transitional Housing Inventory

Five emergency and transitional housing facilities provide temporary shelter for their current maximum capacity of 49 people in the City of Shoreline. These facilities focus on providing emergency and transitional housing for single men, families, female-headed households, veterans, and victims of domestic violence. These facilities are listed in **Table 3.2-4**.

Housing Tenure and Vacancy

Historically, Shoreline has been a community dominated by single-family, owner-occupied housing. More recently, homeownership rates have been declining. Up to 1980, nearly 80 percent of housing units located within the original incorporation boundaries were owner-occupied.

In the 1980s and 1990s a shift began in the ownership rate. The actual number of owner-occupied units remained relatively constant, while the number of renter-occupied units increased to 32 percent of the city's occupied housing units in 2000, and nearly 35 percent in 2010. This shift was mainly due to an increase in the number of multi-family rental units in the community. Refer to **Table 3.2-5**.

A substantial increase in vacancies from 2000 to 2010 may partially be explained by apartment complexes, such as Echo Lake, that had been built but not yet occupied during the census count, or by household upheaval caused by the mortgage crisis. More recent data indicates that vacancies are declining (see discussion later in this section).

Housing Demand and Affordability

Housing demand is largely driven by economic conditions and demographics. Economic and market conditions have been assessed for the station subarea, and these are summarized in Section 3.1. Demographic characteristics influence market demand with regard to number of households; household size, make-up, and tenure (owner vs. renter); and preference for styles and amenities. For instance, young singles and retired people may prefer smaller units with goods, services, and transit within walking distance as opposed to a home on a large lot that would

require additional maintenance and car ownership. It is important for Shoreline to have a variety of housing styles to accommodate the needs of a diverse population.

In 2010, about 61 percent of households were family households (defined as two or more related people), down from 65 percent in 2000. Approximately 30 percent were individuals living alone, an increase from 26 percent in 2000. The remaining 9 percent were in nonfamily households where unrelated individuals share living quarters. Households with children decreased from 33 percent of households in 2000 to 28 percent of households in 2010. Single-parent families also decreased from 7.4 percent to 6.9 percent of households, reversing the previous trend of increasing single-parent families. Shoreline now has a lower percentage of households with children than King County as a whole, where households with children account for about 29 percent of all households, down from 30 percent in 2000. **Table 3.2-6** summarizes the changing characteristics of Shoreline's households.

A Changing Community

In addition to the changes noted above, Shoreline's population is becoming more ethnically and racially diverse. In 2000, 75 percent of the population was white (not Hispanic or Latino). By 2010, this percentage dropped to 68 percent.

Shoreline's changing demographic characteristics may impact future housing demand. Newer residents may have different cultural expectations, such as extended families living together in shared housing. The increase in the number of singles and older adults in the community suggests that there is a need for homes with a variety of price points designed for smaller households, including accessory dwelling units or manufactured housing.

Demographic changes may also increase demand for multi-family housing. Such housing could be provided in single-use buildings (townhouses, apartments, and condominiums), or in mixed-use buildings. The need for housing in neighborhood centers, including for low and moderate income households is expected to increase. Mixed-use developments in central areas close to public transit will allow for easier access to neighborhood amenities and services, and could make residents less dependent on private automobiles.

The Need for Affordable Housing

The GMA requires CPPs to address the distribution of affordable housing, including housing for all income groups. The CPPs establish low and moderate income household targets for each jurisdiction within the county to provide a regional approach to housing issues, and to ensure that affordable housing opportunities are provided for lower and moderate income groups. These affordable housing targets are established based on a percent of the City's growth target. The CPPs more specifically state an affordability target for moderate income households (earning between 50 percent and 80 percent AMI) and low-income households (earning below 50 percent AMI). The moderate-income target is 16 percent of the total household growth target, or 800 units. The low income target is 22.5 percent of the growth target, or 1,125 units. Of the current housing stock in Shoreline, 37 percent is affordable to moderate-income households and 14 percent is affordable to low income households (King County Comprehensive Plan, Technical Appendix B).

Assessing affordable housing needs requires an understanding of the economic conditions of Shoreline households and the current stock of affordable housing. Estimated percentage of households at each income level is presented in **Table 3.2-7**.

Table 3.2-4 Emergency and Transitional Housing Inventory

	# Occupants	Focus
Caesar Chavez	6	Single Men
Wellspring Project Permanency	14	Families
Home Step (Church Council of Greater Seattle)	4	Female Head-of-Household
Shoreline Veterans Center	25	Veterans
Confidential Domestic Violence Shelter	6	Victims of Domestic Violence

Source: City of Shoreline Office of Human Services, 2012.

Table 3.2-5 Housing Inventory and Tenure

	2000	2010	Change 2000-2010
Total Housing Units	21,338	22,787	+1,449
Occupied Housing Units	20,716	21,561	+845
Owner-Occupied Units	14,097 68.0% of occupied	14,072 65.3% of occupied	-25 0.2% decrease
Renter-Occupied Units	6,619 32.0% occupied	7,489 34.7% of occupied	+870 13.1% increase
Vacant Units	622 2.9% of total	1,226 5.4% of total	+612 99.7% increase

Source: 2000 Census; 2010 Census

Table 3.2-6 Changing Household Characteristics in Shoreline

	2000	2010	Change 2000-2010
Total Households	20,716	21,561	+845
Households with Children	6,775 32.7% of total	6,015 27.9% of total	-760 11.2% decrease
Single-person Households	5,459 26.5% of total	6,410 29.7% of total	+951 17.4% increase
Households with an Individual over 65	4,937 23.8% of total	5,509 25.6% of total	+572 11.6% increase

Source: 2000 Census; 2010 Census

Table 3.2-7 Households by Income Level in Shoreline and King County

	Shoreline	King County
Very Low Income (<30% AMI)	3,154 (15%)	53,784 (13%)
Low Income (30%-50% AMI)	2,580 (12%)	52,112 (11%)
Moderate Income (50%-80%AMI)	3665 (17%)	76,279 (16%)
80%-120% AMI	4,443 (21%)	97,116 (19%)
>120% AMI	7,520 (35%)	216,821 (41%)

Source: 2008-2010 American Community Survey; King County Comprehensive Plan

Affordability Gap

The “affordability gap” is the difference between the percentage of city residents at a particular income level and the percentage of the city’s housing stock that is affordable to households at that income level. A larger gap indicates a greater housing need. **Table 3.2-8** depicts the affordability gap.

Where affordability gaps exist, households must take on a cost burden in order to pay for housing. Cost-burdened households paying more than 30 percent of household income for housing costs comprise 39 percent of homeowners and 48 percent of renters in Shoreline. Very low income cost-burdened households are at greatest risk of homelessness and may be unable to afford other basic necessities, such as food and clothing. The substantial affordability gap at this income level suggests that the housing needs of many of Shoreline’s most vulnerable citizens are not being met by the current housing stock. Closing this gap will require the use of innovative strategies to provide additional new affordable units and the preservation/ rehabilitation of existing affordable housing.

In order to assess the relative status of housing affordability in the city, comparison cities in King County were selected based on number of households and housing tenure. Two cities (Sammamish and Mercer Island) with few renters were selected for comparison, along with two cities (Kirkland and Renton) with a higher proportion of renting households. To compare Shoreline to these cities and to King County, the number of households in each income group countywide was compared to the number of housing units affordable at each income level. **Table 3.2-9** shows the comparison of affordability gaps in these communities to Shoreline’s.

Figure 3.2-3 shows Affordable Housing Units by Income Group in a map that shows multiple factors related to housing affordability in various Shoreline neighborhoods, and this complexity warrants a description that is not included with other maps. The map shows average household income levels of various neighborhoods, by census tract. For each neighborhood, there is also a list that begins with the name of the neighborhood, and displays the number of houses whose assessed value would be considered affordable to various income groups. Recall that to be affordable, a mortgage and expenses, such as property tax, should not exceed 30 percent of the annual household income. The price range for housing that would be affordable for each income group is listed in the legend.

To provide an example, in the Meridian Park Neighborhood, one of the neighborhoods of the station subarea, the average household income in 2010 was \$82,148. Within that neighborhood, there were 3 homes appraised below \$99,720, which is the price a very low income household would be able to afford without exceeding 30 percent of their income. There are 735 homes appraised between \$99,720 and \$265,999, which is the price a low income household would be able to afford without exceeding 30 percent of their income.

Falling Home Values

As in much of the rest of the country, home prices in Shoreline fell during the Great Recession years, but have recently started to rise again. After increasing rapidly for over a decade, median sales price reached a peak in June 2007 at \$375,300. The median sales price in December 2011 was \$262,600, a decrease of 30 percent. (See **Figures 3.2-4 and 3.2-5**). While decreasing prices lower the affordability gap for prospective buyers, they can also increase risk of deferred maintenance, vacancy, and

Table 3.2-8 Affordability Gap

	Percent of Units Affordable to Income Group	Affordability Gap
Very Low Income (<30% AMI)	825 (3.9%)	11%
Low Income (30%-50% AMI)	2,116 (10%)	2%
Moderate Income (50%-80% AMI)	4,886 (23%)	N/A
80%-120% AMI	6,367 (30%)	N/A

Source: King County Comprehensive Plan

* Vacant units are not included in the analysis, since the affordability of vacant units is unknown.

Table 3.2-9 Comparison of Affordability Gap

	Very Low Income Affordability	Low Income Affordability Gap	Moderate Income Affordability Gap	80%-120% AMI Affordability Gap
Sammamish	12.1%	9.6%	10.1%	2.1%
Mercer Island	10.1%	8.9%	6.0%	6.7%
Shoreline	8.6%	1.2%	N/A	N/A
Kirkland	9.9%	4.9%	N/A	N/A
Renton	8.8%	N/A	N/A	N/A
King County	8.4%	N/A	N/A	N/A

Source: King County Comprehensive Plan

* Discrepancy with Table H-8 results from use of Countywide household data for comparison with other cities and King County

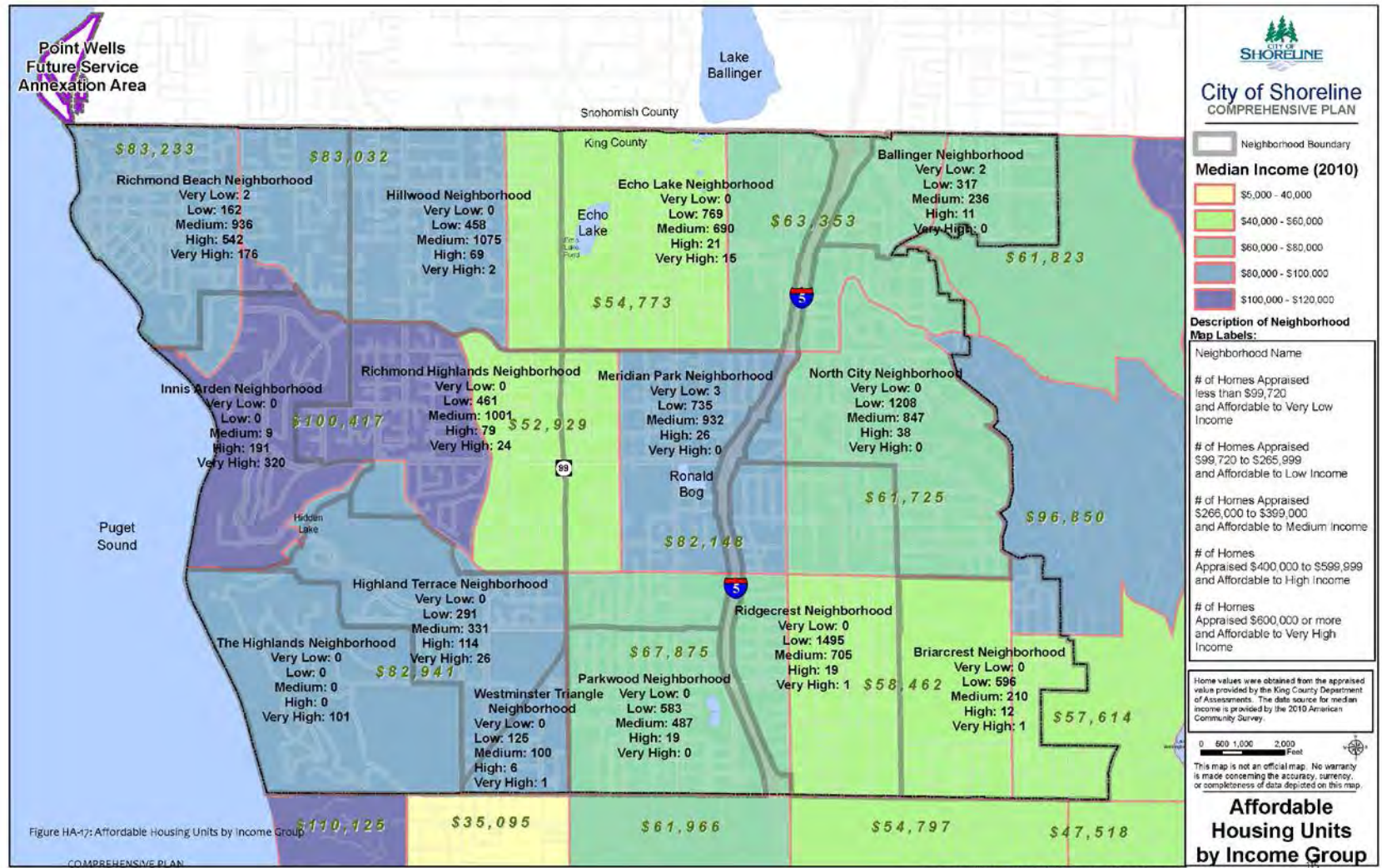


Figure 3.2-3 Affordable Housing Units by Income Group in Shoreline

abandonment. Although home and property prices are now increasing again, they have yet to reach peak levels of 2007.

A Segmented Market

While home prices have decreased citywide since 2007 and recently have started to rise again, there is a large discrepancy in the value of homes in the city's various neighborhoods. **Table 3.2-10** presents data extracted from home sales records used by the King County Assessor to assess the value of homes in various sub-markets within the city (the Assessor excludes sales that are not indicative of fair market value). Citywide data suggests that home values have continued to decline since 2010, though regional trends suggest the rate of decline is now slowing.

Rising Rents

In contrast to the single-family market, apartment rents in Shoreline have stabilized near highs reached in 2009, and are likely to continue trending upward as vacancies decline. According to the most recent data available, the average rent increased from \$859 in September 2007 to \$966 in March 2012. Year-over-year trends in the Shoreline area rental market (which includes the cities of Shoreline and Lake Forest Park) are included in **Table 3.2-11** for 2008-2012. The increasing price of rental options may be limiting the city's attractiveness to new families, and the ability to provide affordable housing options for younger or fixed-income citizens and smaller households.

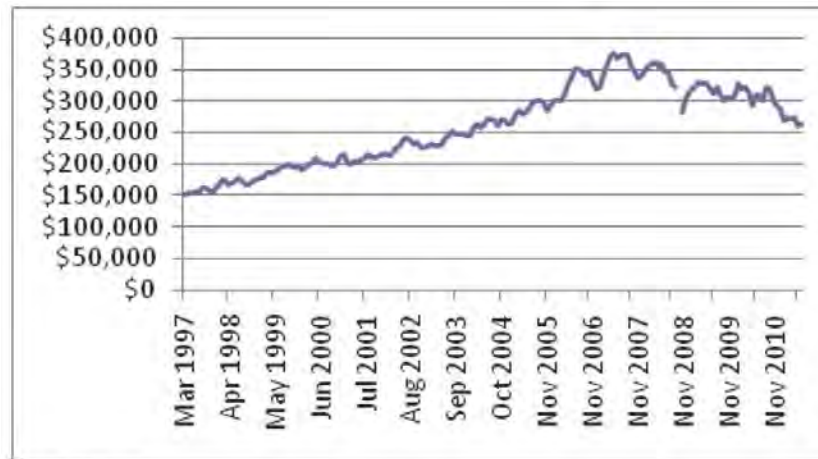
Neighborhood Quality and Housing Choice

Neighborhood quality and the availability of diverse housing choices to fit various income levels have a direct relationship to greater housing demand. The Citizen Advisory Committee of the Comprehensive Housing Strategy stressed the need to define and retain important elements of neighborhood character, while also providing housing choice. Some members of the community have

expressed concern about density and design of infill developments and the impacts of these developments on existing neighborhoods. Some members of the community support additional density and infill development, either to preserve undeveloped land in rural areas, support transit, encourage business and economic development, increase affordability, and for other reasons. Regulations that implement policy recommendations in the Housing Element and Strategy should strive to balance these concerns and opportunities.

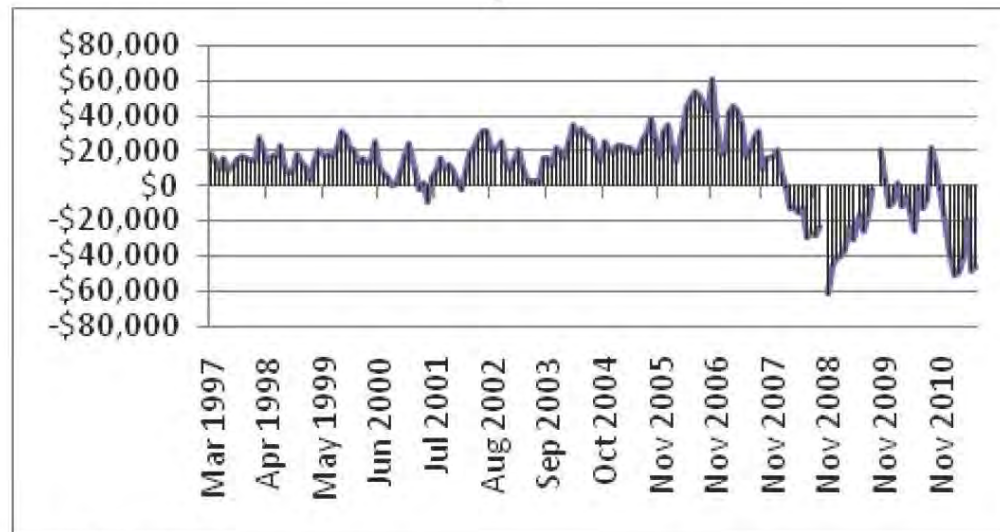
Housing choice refers to the ability of households in the city to live in the neighborhood and housing type of their own choosing. Housing choice is supported by providing a variety of housing that allows older adults to age in place and new families to be welcomed into existing neighborhoods. While Shoreline's single-family housing is in generally good condition and highly desirable for many, new housing close to neighborhood centers and high-capacity transit may be equally desirable to older adults, small households, or special-needs households with financial or mobility limitations. Other benefits of locating housing in neighborhood center sand in close proximity to high-capacity transit include:

- Transportation cost savings;
- Improved fitness and health through increased walking;
- Lower costs for roads, utilities, and emergency services;
- Reduced road and parking costs;
- Reduced regional congestion;
- Energy conservation;
- Reduced emissions; and
- Preservation of open space.



Source: Zillow.com

Figure 3.2-4 Median Sales Price of Homes in Shoreline



Source: Zillow.com

Figure 3.2-5 Year-Over-Year Change in Median Sales Price

Table 3.2-10 Single Family Housing Prices

Neighborhood Area	Median Sale Price, 2010	Affordable Income Level*	Average Change in Assessed Value, 2010-2011
West Shoreline	\$500,00	>120% of AMI	-2.8%
West Central	\$341,500	115% of AMI	-6.0%
East Central	\$305,000	100% of AMI	-6.9%
East Shoreline	\$290,000	100% of AMI	-5.2%

Sources: King County Assessor 2011 Area Reports, 2011 HUD Income Levels

*Figures given are the percent of 2011 typical family Area Median Income required to purchase a home at the 2010 median price. Affordable Housing Costs are based on 30% of monthly income. Figures are approximate. Additional assumptions were made in the affordability calculation.

Table 3.2-11 Shoreline Area Rental Market Rents & Vacancy Rates

	2008	2009	2010	2011	2012
Average Rent	\$897	\$977	\$949	\$934	\$966
Market Vacancy*	2.7%	4.6%	7.1%	5.0%	4.0%

Source: Dupre+Scott, The Apartment Vacancy Report

*Market Vacancy excludes units in lease-up and those undergoing renovation



GMA and Regional Policies Supporting Affordable Housing

The City of Shoreline's policies related to housing and relevant to potential development in the station subarea are summarized in Section 3.1. It is also important to consider state and regional policies as guidance for subarea planning. The GMA specifically states that its housing goal is to:

“Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock.”

King County CPPs also encourage affordable housing and the use of innovative techniques to meet the housing needs of all economic segments of the population, and require that the City provide opportunities for a range of housing types.

The City's Comprehensive Housing Strategy, adopted in 2008, recommended increasing affordability and choice within local housing stock in order to accommodate the needs of a diverse population. Demographic shifts, such as aging “Baby Boomers” and increasing numbers of single-parent or childless households create a market demand for housing styles other than a single-family home on a large lot.

Puget Sound Regional Council (PSRC) administers the Growing Transit Communities Partnership (GTC). In accordance with the goals of the PSRC and GTC, high-capacity station areas should consider adopting the affordable housing policies and provisions stated in PSRC's VISION 2040. A few are included below, for the full list, read their report, available at:

<http://www.psrc.org/growth/growing-transit-communities/growing-communities-strategy/read-the-full-growing-transit-communities-strategy/>

MPP-H-1 *Provide a range of housing types and choices to meet the housing needs of all income levels and demographic groups within the region.*

MPP-H-2 *Achieve and sustain — through preservation, rehabilitation, and new development — a sufficient supply of housing to meet the needs of low income, moderate-income, middle-income, and special needs individuals and households that is equitably and rationally distributed throughout the region.*

MPP-H-3 *Promote homeownership opportunities for low-income, moderate income, and middle-income families and individuals.*

Employment in Shoreline and the Subarea

In 2012, approximately 16,409 jobs existed in the City of Shoreline. Of these jobs, approximately 46 percent were service related; 17 percent were government; 16 percent were retail; 13 percent were education; 3 percent were construction; 3 percent were finance, insurance, and real estate; 1 percent was wholesale trade, transportation, and utilities; and 1 percent was manufacturing (PSRC Employment Database).

Most of these jobs were located along Aurora Avenue N. However, other employment clusters include the Shoreline Community College, and neighborhood business centers in North City, Richmond Beach Shopping Center, 5th Avenue NE and NE 165th Street, and 15th Avenue NE and NE 145th Street. Less obvious places of employment include home occupations (people working out of their homes).

Major employers within the community include (listed in alphabetical order):

- CRISTA Ministries

- Costco
- Fircrest Residential Habilitation Center
- Fred Meyer
- Goldie’s Casino
- Home Depot
- Northwest Security
- Shoreline, City of
- Shoreline School District
- Shoreline Community College
- State Department of Transportation

In the 185th Street Station Subarea and nearby areas within the TAZ boundaries, there are currently 1,448 jobs, including jobs along Aurora Avenue N/Town Center Subarea and in the North City Subarea, which are anchors to the station subarea. This is an estimated level of employment, which was also assumed in the City’s Transportation Master Plan.

Employment Growth Trends and Targets

Employment within the city is a measure of the current economic activity. The following employment growth characteristics were summarized in the Economic Development Supporting Analysis to the City’s 2012 Comprehensive Plan.

- Non-government employment in Shoreline is predominantly oriented toward services and retail. These two sectors comprised 62 percent of total employment as of 2010.
- Employment growth has been concentrated in services, which was the fastest growing sector between 2000 and 2010.

- The other non-government sectors in which employment grew in the last decade were manufacturing and construction/resources. Despite growth, the two sectors together accounted for only 4.4 percent of the total employment as of 2010.
- Total employment in Shoreline continued to grow over the past decade, though at a much slower pace than in the previous five years.

Encouraging employment growth within the city would improve Shoreline’s jobs-to-housing ratio/balance. Jobs and housing are “balanced” at approximately 1.5 jobs per household. Jobs-to-housing ratio or balance is “a means to address travel demand by improving accessibility to jobs, as well as to goods, services, and amenities” (PSRC, Vision 2040). The creation of new jobs through economic development can help alleviate a mismatch between jobs and housing, reducing commute times and creating more opportunities for residents to work and shop within their own community.

Shoreline’s jobs-to-housing ratio was 0.72 in 2010 compared to the desirable ratio of 1.5, highlighting the need for job growth and employment-supporting development.

The City conducted an analysis that compared its employment characteristics to other cities in the region and found that jobs-housing balance varies considerably throughout the region.

Ratios of comparative cities in 2010 were:

- Lynnwood 1.53
- Tukwila 5.56
- Marysville 0.51
- Kirkland 1.27

King County’s overall ratio was 1.29 and Snohomish County’s was 0.82.



In comparing Shoreline's median household income, unemployment rate, and poverty rate to these same peer cities, Shoreline had the second highest median income (only Kirkland was higher); the second lowest unemployment rate (Kirkland was lower); and the second lowest poverty rate (Kirkland was lower).

The King County Countywide Planning Policies, adopted to implement the GMA, establish employment growth targets for each of the jurisdictions within the county. The employment target is the amount of job growth the jurisdiction should plan to accommodate during the 2006-2031 planning period. Shoreline's growth target for this period is 5,000 additional jobs, projected to 5,800 by 2035. This employment growth target was also adopted by the City.

A more recent target set by PSRC calls for Shoreline to gain more than 7,200 new jobs by 2035, improving its jobs-to-housing ratio to 0.91.

Several factors constrain substantial commercial development (and resultant job growth) in Shoreline, including the limited number of large tracts of developable land available for commercial or industrial uses.

In the past, Shoreline was considered a "bedroom community" from which residents travelled elsewhere for higher-wage jobs and more complete shopping opportunities. Recognizing new and innovative ways to support the local economy will assist efforts to plan for the addition of new jobs. The quality of Shoreline's economy is affected by reliable public services, the area's natural and built attractiveness, good schools, strong neighborhoods, efficient transportation options, and healthy businesses that provide goods and services. Maintaining the community's quality of life requires a strong and sustainable economic climate.

Other Economic Conditions Pertinent to Growth and Economic Development Opportunities

Revenue Base—Sales Tax and Property Tax

The revenue base of the City is another measure of the strength of the local economy. A strong revenue base supports necessary public facilities and services for an attractive place to live and work. Two major elements of the revenue base are taxable retail sales and the assessed valuation for property taxes. A review of Shoreline's taxable sales and assessed valuation compared with other cities yielded the following observations.

- Compared to the peer cities and King County, Shoreline has a relatively low revenue base. Among peer cities, Shoreline had the second lowest per capita taxable sales and second lowest per capita assessed valuation in 2010.
- Growth in assessed valuation has been moderate over the past decade, averaging a 6.7 percent annual increase. This could be due to a relative lack of new construction in comparison to a younger community, such as Marysville.
- Retail sales growth has averaged 1.5 percent annually. This is the second highest rate of increase among the peer cities and higher than King County as a whole.

Other Revenue Sources

Other sources of revenue for the City include the gambling tax, utility tax, permit fees, and other fees. Gambling taxes are collected at a rate of 10 percent of gross receipts for card rooms in the city. Projected gambling tax revenue for 2012 equals 6 percent of the total forecasted general fund operating revenues. Thirteen percent of total forecasted general operating revenues are expected to come from the utility tax, and 8 percent from

license and permit fees. This compares to 32 percent from property taxes, and 20 percent from sales taxes. The remaining revenue comes from contract payments, state and federal grants, and other sources.

Real Estate Market Conditions—Retail

Retail development meets two important economic development objectives. It provides the goods and services needed by residents and businesses, and it provides a major source of tax revenue.

Retail sales in Shoreline have grown over the past decade, yet they are still lower than sales in the peer cities used for comparison. While Shoreline is home to many retail establishments, there is a significant amount of sales “leakage” in some retail categories. Leakage refers to a deficit in sales made in the city compared with the amount of spending on retail goods by Shoreline residents. This leakage suggests that there are major retail opportunities in several areas, as shown below.

Percentage of Shoreline Resident Retail Dollars Spent Elsewhere (Leakage):

- Health and Personal Care Stores: 41.2 percent
- Clothing and Clothing Accessories Stores: 90.5 percent
- General Merchandise Stores: 71.2 percent
- Food Service and Drinking Places: 36.5 percent

Real Estate Market Conditions—Office

Shoreline has few large office concentrations or multi-tenant office buildings. New office development could provide locations for various service providers, as well as the management and support facilities for businesses with multiple outlets. The office vacancy rate for buildings listed on Officespace.com is approximately 25 percent. However, there is little or no new Class A office space in the city available to prospective tenants.

The Shoreline Center site in the station subarea is of a size that could support major redevelopment of a mix of uses, including office, residential, retail, community, and recreational uses. The office community, and recreational uses on the site today could be housed in newer more compact facilities, opening a large portion of the site to redevelopment potential. As previously discussed in Section 3.1, the City is interested in potentially redeveloping its adjacent pool site and possibly integrating the use with a multi-purpose recreation center, and as part of this evaluation, partnering with the School District to example potential for redevelopment of the Spartan Center.

Real Estate Market Conditions—Residential

New residential development in Shoreline provides housing for the local workforce and creates new opportunities for families to live in the city. Permit activity for new residential development has been increasing since 2010. The Countywide Planning Policies (CPPs) for King County set a target for the City of Shoreline to grow by about 200 households per year. A faster pace of new residential development will be needed in Shoreline to achieve this goal, and to achieve the overall target of 5,800 additional households by 2035 (with the starting year of 2006). Market analysis completed for the subarea show a demand for residential use (see Section 3.1 for more information).

2012-2017 Economic Development Strategic Plan

After a year-long collaborative process, the City of Shoreline’s Office of Economic Development adopted the 2012-2017 Economic Development Strategic Plan. The Strategic Plan seeks to achieve sustainable economic growth by supporting “placemaking” projects that realize six Council Guidelines for Sustainable Economic Growth:

- Multiple areas – improvements and events throughout the city that attract investment;

- Revenue – growing revenue sources that support City programs;
- Jobs – employers and business starts that create more and better jobs;
- Vertical growth – sustainable multi-story buildings that efficiently enhance neighborhoods;
- Exports – vibrant activities and businesses that bring money into Shoreline; and
- Collaboration – broad-based partnerships that benefit all participants.

Shoreline’s Economic Development Strategic Plan identified significant projects that can dramatically affect the economic vitality of Shoreline. These city-shaping placemaking projects are:

- Creating a dynamic Aurora Corridor neighborhood – unleashing the potential created by the City’s tremendous infrastructure investment;
- Reinventing Aurora Square – catalyzing a master-planned, sustainable lifestyle destination;
- Unlocking the Fircrest Surplus Property – establishing a new campus for hundreds of living-wage jobs; and
- ***Planning Light Rail Station Areas – two imminent and crucial opportunities to create connectivity for appropriate growth.***

3.2.2 Analysis of Potential Impacts

Population, Housing, and Employment Forecasts for Each Alternative

Under all alternatives, employment and housing would increase, but much more substantially under Alternative 2—Some Growth and Alternative 3—Most Growth, than under Alternative 1—No Action. Both of the action alternatives (Alternative 2—Some Growth and Alternative 3—Most Growth) would assist the City in meeting household and employment growth targets and would be consistent with goals, policies, and objectives of adopted plans (Climate Action Plan, Comprehensive Plan, Transportation Master Plan and others).

Forecasted growth in population, housing, and employment for each of the alternatives is summarized below and depicted in **Table 3.2-11** on page 3-117.

Alternative 1—No Action

Under Alternative 1, based on recent population and employment growth forecasts studied in the development of the City’s Transportation Master Plan (dispersed option for growth), population in the subarea would grow to approximately 8,734 people. Assuming an average of 2.4 people per household, there would be 3,639 households and 1,736 jobs within the station subarea by 2035. This compares to a current levels of 3,310 households and 1,448 jobs in the station subarea. As such, under Alternative 1—No Action, an additional 329 households and 288 jobs would occur in the subarea by 2035 approximately. Current population in the subarea is estimated at 7,944 people, so under Alternative 1—No Action, it is estimated that there would be an additional 790 people by 2035.

The anticipated growth in employment would not be effective in helping to address Shoreline’s target range of between 5,800 and 7,200 jobs by 2035 and achieving a better jobs-to-housing balance. Most growth in employment would need to occur elsewhere in the city. A review of citywide zoning confirms that the city does have the capacity elsewhere to accommodate the employment target range.

Alternative 2—Some Growth

Under Alternative 2, the population would increase to 17,510 total at full build-out of the proposed zoning, including a portion of the Town Center Subarea and all of the North City Subarea. Approximately 7,296 households and 9,750 jobs could be accommodated within the station subarea. This also assumes that the Shoreline Center site would be completely redeveloped to the zoned density.

Applying an estimated annual growth rate of between 1.5 percent and 2.5 percent, it is anticipated that full build-out of Alternative 2—Some Growth would take approximately 30 to 50 years (2045 to 2065) to be realized. This alternative would add potentially 3,986 households and 8,302 jobs to the subarea and would increase population by 9,566 people above the current levels.

By 2035, applying the same estimated annual growth rate of 1.5 percent to 2.5 percent, the total population of the subarea would be between 10,860 and 12,040. There would be an estimated 4,525 to 5,017 households and approximately 1,979 to 2,195 jobs. This would be a net increase over current levels of 2,916 to 4,096 additional people, 1,215 to 1,707 additional households, and 531 to 747 additional jobs in the TAZ zones of the station subarea.

Implementation of Alternative 2—Some Growth would expand housing choices and jobs in the subarea to a much greater level

than under Alternative 1—No Action, but to lesser extent than under Alternative 3—Most Growth. Adoption of the 185th Street Station Subarea Plan and supporting Planned Action Ordinance would be expected to spur more redevelopment in conjunction with planned capital improvement projects that will be prioritized for the subarea.

The forecasted increase in jobs help to address Shoreline’s need for a better jobs-to-housing balance by achieving a portion of the region’s projections for employment growth in Shoreline (5,800 to 7,200 jobs by 2035). (Although as noted above, the city does have the capacity to meet the target range elsewhere.) Remembering that the build-out estimate for Alternative 2 is 30 to 50 years (2045 to 2065), only a portion of the 9,750 total jobs would be in place by 2035 to meet the target of 5,800 to 7,200 jobs.

Alternative 3—Most Growth

Under Alternative 3, the population would increase to 37,315, and approximately 15,548 households and 27,050 jobs could be accommodated in the station subarea at full-build out of proposed zoning, including a portion of the Town Center Subarea, all of the North City Subarea, and the Shoreline Center. It is anticipated that full build-out would take approximately 60 to 100 years (2075 to 2115) to be realized at an estimated annual rate of growth between 1.5 percent and 2.5 percent. This alternative would add potentially 12,238 households and 25,602 jobs in the station subarea and would increase the population by 29,371 people above the current levels.

By 2035, Alternative 3 would be anticipated to achieve the same growth in population, households, and jobs as Alternative 2, applying the estimated annual growth rate of 1.5 percent to 2.5 percent. Because of the higher densities allowed and the higher capacity for change, Alternative 3 could potentially build-out at a

faster rate than Alternative 3, but this would still occur many decades into the future. It is important to consider that growth may not happen at a steady, even pace year-to-year. As larger redevelopment projects are implemented, there may be higher growth rates in those years. For example if the Shoreline Center site were to redevelop at some point in the future, the addition of households and employment opportunities there would cause a spike in growth in the subarea during the year of full occupation.

**Table 3.2-12
Population, Housing, and Employment Projections
for the DEIS Alternatives**

	Current Levels	Alternative 1 No Action by 2035	Alternative 2 Some Growth by 2045+	Alternative 3 Most Growth by 2075+
Population	7,944	8,734	17,510	37,315
Households	3,310	3,639	7,296	15,548
Employment/ Jobs	1,448	1,736	9,750	27,050
Net Increases Based on TAZ Boundaries		+700 People +328 Households +288 Jobs	+ 9,566 People +3,986 Households +8,302 Jobs	+29,371 People +12,238 Households +26,602 Jobs

The addition of jobs in the subarea would help to achieve a balanced jobs-to-housing ratio in Shoreline over time and in meeting the region’s projections for employment growth in Shoreline (5,800 to 7,200 jobs by 2035). Given the build-out

estimate for Alternative 3 is 60 to 100 years (2075 to 2115), only a portion of the 27,050 total jobs would be in place by 2035 to meet the target range. As mentioned above, the city has the capacity elsewhere to meet the job growth target range.

Consistency with Housing and Employment Policies and Housing Choice Opportunities

In considering adopted policies at the local, regional, and state levels that pertain to housing and employment, Alternatives 2 and 3 better support these policies than Alternative 1. This is due primarily to the added variety of households and employment opportunities that the zoning changes would accommodate over time. Under Alternative 1—No Action, there would be only a minimal increase of housing, which would be primarily single family. Alternatives 2 and 3 propose zoning categories that would allow a wider variety of housing types (multifamily and single family) and increase the number households to much higher levels than under Alternative 1. The range of housing types would be affordable to a wider diversity of income levels under Alternatives 2 and 3.

Neighborhood Quality and Character

Considering aspects such as street and infrastructure improvements (street upgrades, intersection and crossing treatments, better drainage, utility upgrades, etc.), overall neighborhood quality would be better under Alternative 2—Some Growth and Alternative 3—Most Growth than under Alternative 1—No Action. Alternative 1 would not include the extent of capital investment and improvements that would occur under Alternatives 2 and 3.

Because the rate of growth under Alternatives 2 and 3 would be expected to be similar, the rate of neighborhood improvements

would also be similar over time. As such, both Alternatives 2 and 3 would have similar positive effects on the quality of the neighborhood.

In terms of neighborhood character, Alternative 1 would result in the least change to neighborhood character related to housing type and land use, but also would not bring about changes related to enhanced identity, streetscape and green street enhancements, wayfinding public art, public open space, and other treatments that would occur under Alternatives 2 and 3.

Alternative 3 would create the greatest amount of change over time in the urban form character of the neighborhood, with higher buildings and densities than under Alternative 2. Both Alternatives 2 and 3 would change single family uses to multifamily and mixed uses along the N and NE 185th Street/10th Avenue NE/NE 180th Street corridor and within walking distance to the transit station.

Economic Development Opportunities

Under Alternative 1, economic development growth brought about by increases in population and job opportunities would be more minimal compared to Alternatives 2 and 3. As discussed above, the increased population base and households will support funding for capital improvements and new development will provide jobs for residents of the neighborhood, Shoreline, and the region.

3.2.3 Mitigation Measures

No adverse impacts would be expected related to population, housing, and employment as a result of implementing Alternative 2—Some Growth or Alternative 3—Most Growth. While Alternative 3 would best meet a variety of adopted state, regional, and City of Shoreline goals, policies, and objectives,

Alternative 1 would not be consistent with these in that the intensity of population, households, and jobs in the station subarea would not be significantly increased.

Housing Choice and Affordability— While no adverse impacts would be expected as a result of implementing either of the two action alternatives, it will be important to consider how to regulate and encourage affordable housing choices and options in the subarea. Providing a range of housing choices, particularly the provision of affordable housing options, is strongly encouraged for high-capacity station areas by local, regional, state, and federal policies. In addition to existing policies and provisions related to affordable housing under the current Comprehensive Plan and the Shoreline Municipal Code (including the Development Code), Shoreline will explore other innovative approaches to maximize affordable housing and housing choices, such as:

- Incentives and bonuses;
- Inclusionary zoning and requirements;
- Reduced and shared parking requirements for affordable housing projects;
- Property tax exemption programs;
- Micro-housing and other innovative solutions; and
- Other methods to encourage housing choice and affordability.

3.2.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would be anticipated with the implementation of mitigation measures described in this section and in Section 3.1 related to population, housing, and employment under Alternative 2—Some Growth or Alternative 3—Most Growth. The concern with implementing Alternative 1—No Action would be that it is not consistent with adopted goals, policies, and objectives at the state, regional, and local levels to support growth management and integrated land use and transportation planning in high-capacity station areas.

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3.3 Multimodal Transportation

This section describes the affected environment, analyzes potential impacts, and provides recommendations for mitigation measures for multimodal transportation, including motor vehicle traffic, transit, bicycle, and pedestrian modes. Parking conditions are also analyzed.

3.3.1 Affected Environment

Introduction

Existing conditions of the multimodal transportation network are described and illustrated on the following pages, along with planned conditions for the future, based on transportation plans. It includes an assessment of the current infrastructure and operating conditions for all transportation modes. Additionally, in this section, impacts on transportation from proposed land use alternatives will be assessed to determine applicable mitigation measures to accommodate the changes. In order to provide relevant details and constructive analysis, the project team conducted field visits and reviewed relevant plans for the area, including:

- 2013 Sound Transit Draft Environmental Impact Statement (DEIS) for the Lynnwood Link Extension
- 2011 Shoreline Transportation Master Plan (TMP)
- 2012 Shoreline Comprehensive Plan (CP)
- City of Shoreline Vision 2029 Plan
- 2013 PSRC Growing Transit Communities Report (GTC)

- King County Metro Strategic Plan 2012
- Community Transit Long Range Plan 2011
- Sound Transit Long Range Plan 2005
- 2013-2018 Capital Improvement Plan (CIP)
- 2014-2019 Capital Improvement Plan (CIP)
- Point Wells Expanded Traffic Impact Analysis Report 2011

Existing Street Network

Regional Access

I-5 is a limited access freeway classified as a highway of statewide significance. It provides access from the study area south to Northgate, the University District, Capitol Hill and Downtown Seattle and beyond as well as to Mountlake Terrace, Lynnwood and points north. Additionally, I-5 serves as the key corridor for express regional bus service in the area. The nearest access points between the study area and I-5 are the NE 145th Street, NE 175th Street and NE 205th Street interchanges.

Subarea Street Network

SR-99/Aurora Avenue N is also classified as a highway of statewide significance and serves as a principal arterial in Shoreline. It lies directly west of the study area, providing north-south mobility and business access along the corridor.

The principal arterials in the study area are N/NE 175th Street and 15th Avenue NE, which form the southern and eastern edges.

Minor arterials within the area include Meridian Ave N, N/NE 185th Street and the portion of 5th Avenue NE south of NE 185th Street. **Figure 3.3-1** highlights the street classification of the network within the study area. Additionally, the proposed light rail station location is identified on the map along with the proposed parking lot to the west of I-5 and the realigned 5th Avenue NE segment adjacent to the parking lot.

Existing Roadway Operations

Concurrency Management System

The Growth Management Act (GMA) includes a transportation concurrency requirement. This means that jurisdictions must provide adequate public facilities and services to keep pace with a community's growth over time to maintain the Level of Service (LOS) goals stated in a community's comprehensive plan. The improvements can include capital improvements, such as intersection modifications, or other strategies such as transit service expansion or transportation demand management. As part of the process, a jurisdiction evaluates the operations of roadway segments or intersections in order to determine the relative impact from new development on the transportation network. Through its Transportation Master Plan process, the City of Shoreline developed a concurrency framework as a means to balance growth, congestion and capital investment.

Level of Service Criteria for Intersections

The key metric to evaluate intersection operations is average seconds of delay per vehicle, which can be translated into a grade for Level of Service (LOS) as shown in **Table 3.3-1**. An additional metric is the evaluation of a roadway segment via the volume-to-capacity (V/C) ratio, which compares a roadway's expected

vehicle demand against the theoretical capacity of that segment. These V/C ratios can also be translated into a LOS grades as shown in the table. The LOS concept is used to describe traffic operations by assigning a letter grade of A through F, where A represents free-flow conditions and F represents highly congested conditions. The City has adopted LOS D for signalized intersections on arterials and unsignalized intersecting arterials and roadway segments on Principal and Minor Arterials¹.

Traffic Volumes

The existing conditions analysis uses data where available from the 2011 update to the TMP to describe current traffic operations, and supplements that information with more recent vehicle counts. As shown in **Figure 3.3-2** and detailed in **Table 3.3-2**, traffic volumes and congestion on streets bordering the proposed station are low, with V/C ratios below 0.8 for the PM peak period. The current LOS standard for a V/C ratio on Principal

¹ While average delay at signalized intersections is based on all vehicles that approach the intersection, average delay for unsignalized intersections is based on the delay experienced by vehicles at the stop-controlled approaches.

and Minor arterials within the City of Shoreline is 0.9. Additionally, 5th Avenue NE, to the north and south of NE 185th Street has fewer than 5,000 average daily traffic (ADT) volumes and experiences low levels of congestion. The corridors most congested include NE 175th Street and Meridian Avenue N, with V/C ratios between 0.8 and 0.9. N 175th Street carries the highest volumes, with over 30,000 ADT on the segment west of I-5 while it is substantially less east of I-5 with 18,000 ADT. For reference, during the PM peak period, a street with an ADT of roughly 20,000 would translate into a vehicle passing every one to two seconds whereas a street with an ADT of 5,000 would see a vehicle pass every seven to eight seconds.

Intersection Evaluation

While standard traffic analysis techniques² indicate that all intersections currently operate within the City's adopted LOS standard, there are certain areas where congestion is noticeably higher, such as the intersections of Meridian Avenue N and N 175th Street and Meridian Avenue N and N 185th Street as shown in Figure 3.3-3. Visual inspection of these intersections in the field suggests a higher level of peaking and long queues (10 to 30 vehicles) at certain times of the day.

Collision History

As shown in the **Figure 3.3 4**, the area has a relatively low number of vehicle collisions, with all intersections experiencing a crash rate below 1.0 per million entering vehicles (MEV). Intersections that experience a crash rate above 1.0 per MEV are deemed "High Accident Locations" based on standards specified in the

Sound Transit DEIS. The only intersection with a crash rate near that threshold is at N 175th Street and Meridian Avenue N, with a value of .81. That intersection had a yearly average of 4.80 accidents with property damage only and 4.00 accidents with injuries. No accidents with fatalities occurred within the study area for the time period of 2008 to 2011. All other intersections in the study area averaged below a combined 5.00 accidents per year. During this period, the only recorded pedestrian accident occurred at NE 175th Street and 5th Avenue NE while bicycle accidents occurred in the study area at the intersections of NE 175th Street and 5th Avenue NE, North 175th Street at Meridian Avenue N and N 185th Street at Meridian Avenue N³.

² Using the HCM 2010 methodology

³ Information provided by Sound Transit DEIS for the Lynnwood Link Extension

Table 3.3-1 Level of Service Criteria For Intersection And Roadway Analysis

Level of Service (LOS)	Signalized Intersection Delay per Vehicle (seconds)	Unsignalized Intersection Delay per Vehicle (seconds)	Roadway Segment Volume-to-Capacity ratio (V/C)
A	< 10	< 10	<.60
B	> 10 to 20	> 10 to 15	.60 - .70
C	> 20 to 35	> 15 to 25	.70-.80
D	> 35 to 55	> 25 to 35	.80 - .90
E	> 55 to 80	> 35 to 50	.90 – 1.0
F	> 80	> 50	> 1.0

Source: 2010 Highway Capacity Manual and the 2011 Transportation Master Plan

Table 3.3-2 Average Daily Traffic and PM Peak Hour Congestion For Existing Conditions

Street	Segment	Average Daily Traffic	PM Peak Hour Volume ⁴	Volume-to-Capacity Ratio
East-West Corridors				
N 175th Street	West of I-5	30,770	1,135	.86
NE 175th Street	East of I-5	18,010	742	.56
N 185th Street	West of I-5	9,700	497	.64
NE 185th Street	East of I-5	7,130	380	.48
North-South Corridors				
5th Avenue NE	South of N 185 th Street	3,360	159	.23
15th Avenue NE	North of N 175th Street	15,040	1,068	.56
Meridian Avenue N	North of N 175 th Street	12,070	745	.85

Source: 2011 Transportation Master Plan and updated traffic counts from 2013

⁴ One-directional volume only, signifying the direction with the highest volume



Figure 3.3-1 Street Classifications in the Study Area

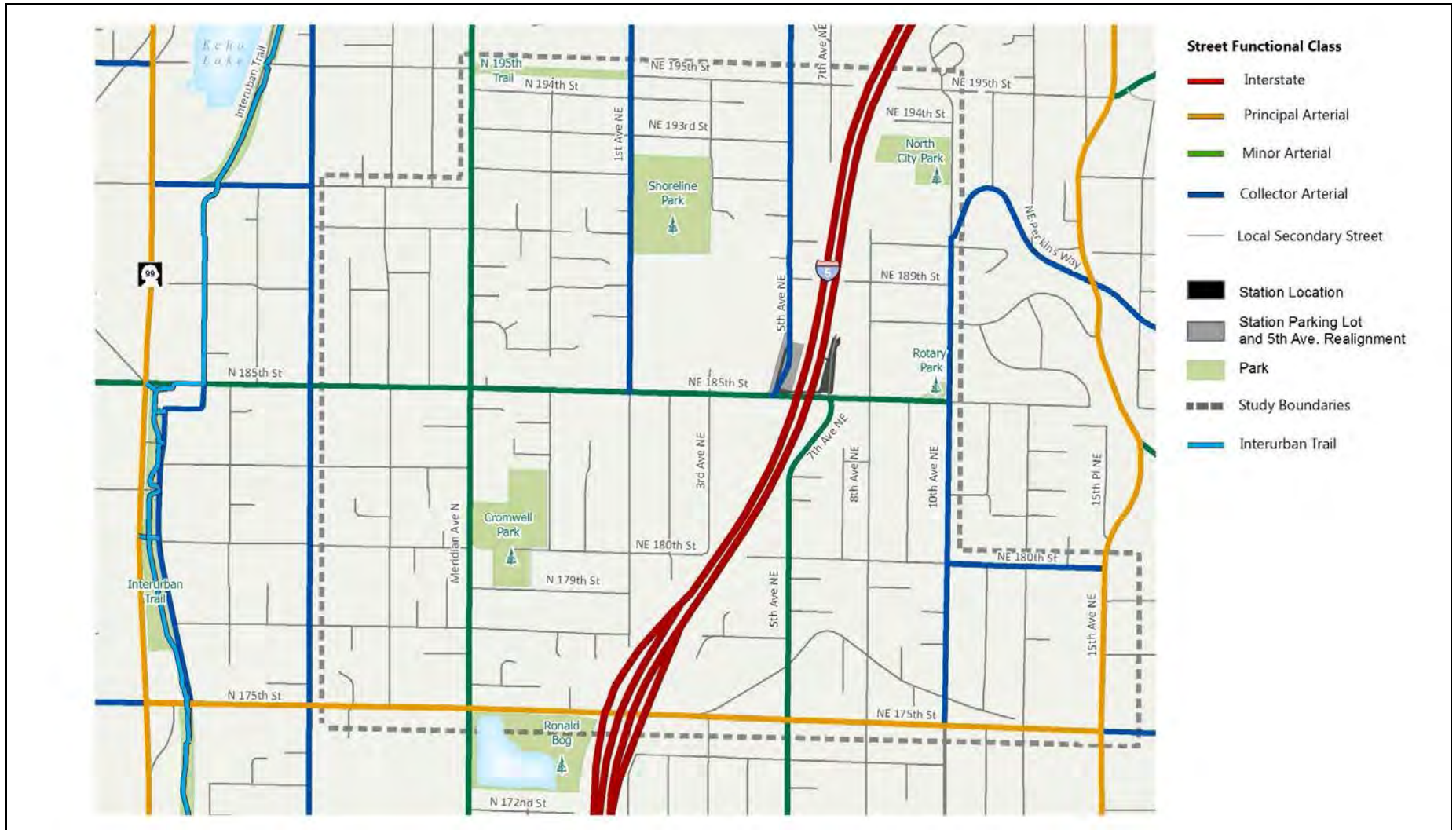


Figure 3.3-2 Average Daily Traffic and PM Peak Congestion (Existing Conditions)

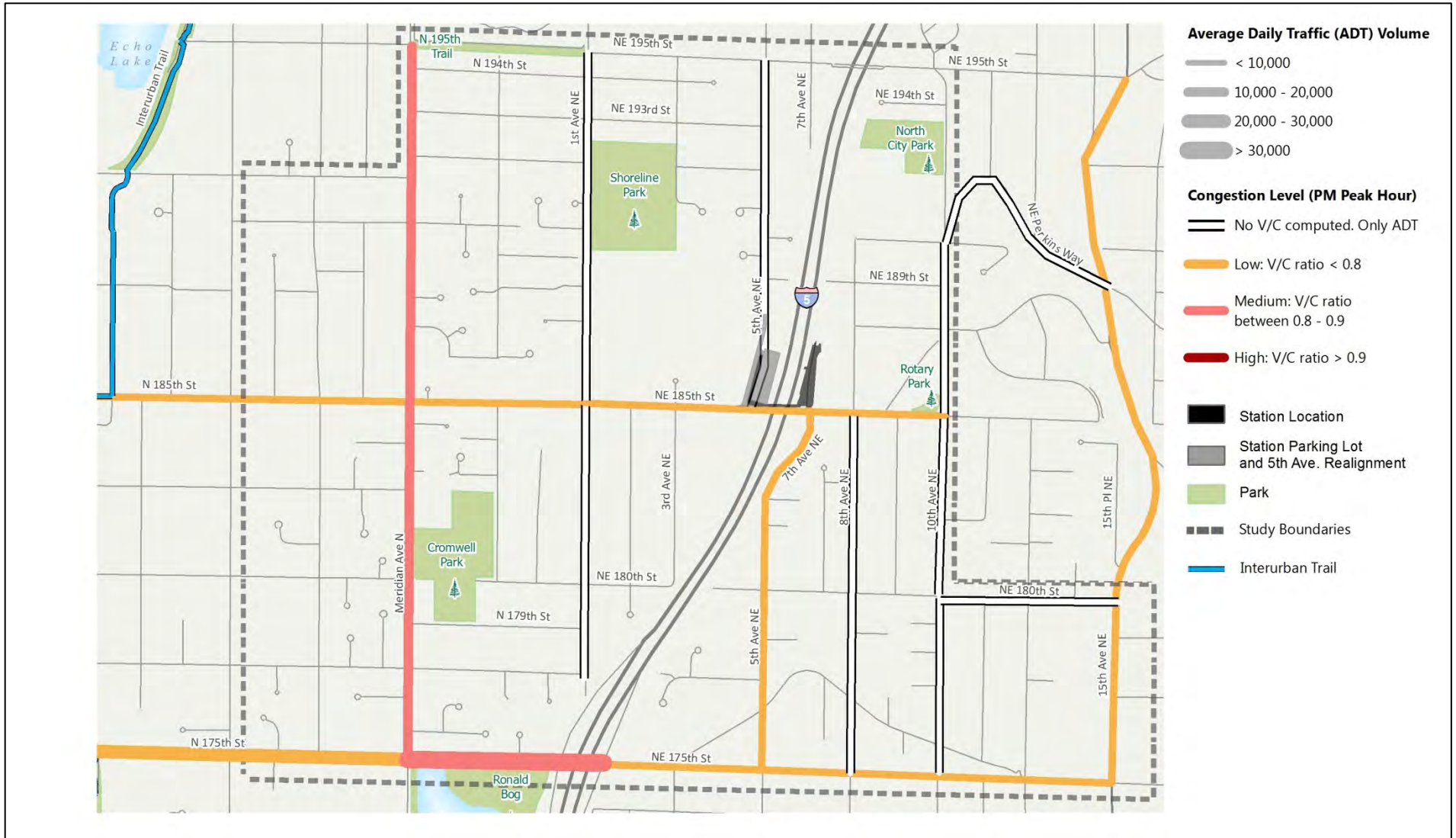


Figure 3.3-3 Intersection Level of Service (Existing Conditions)

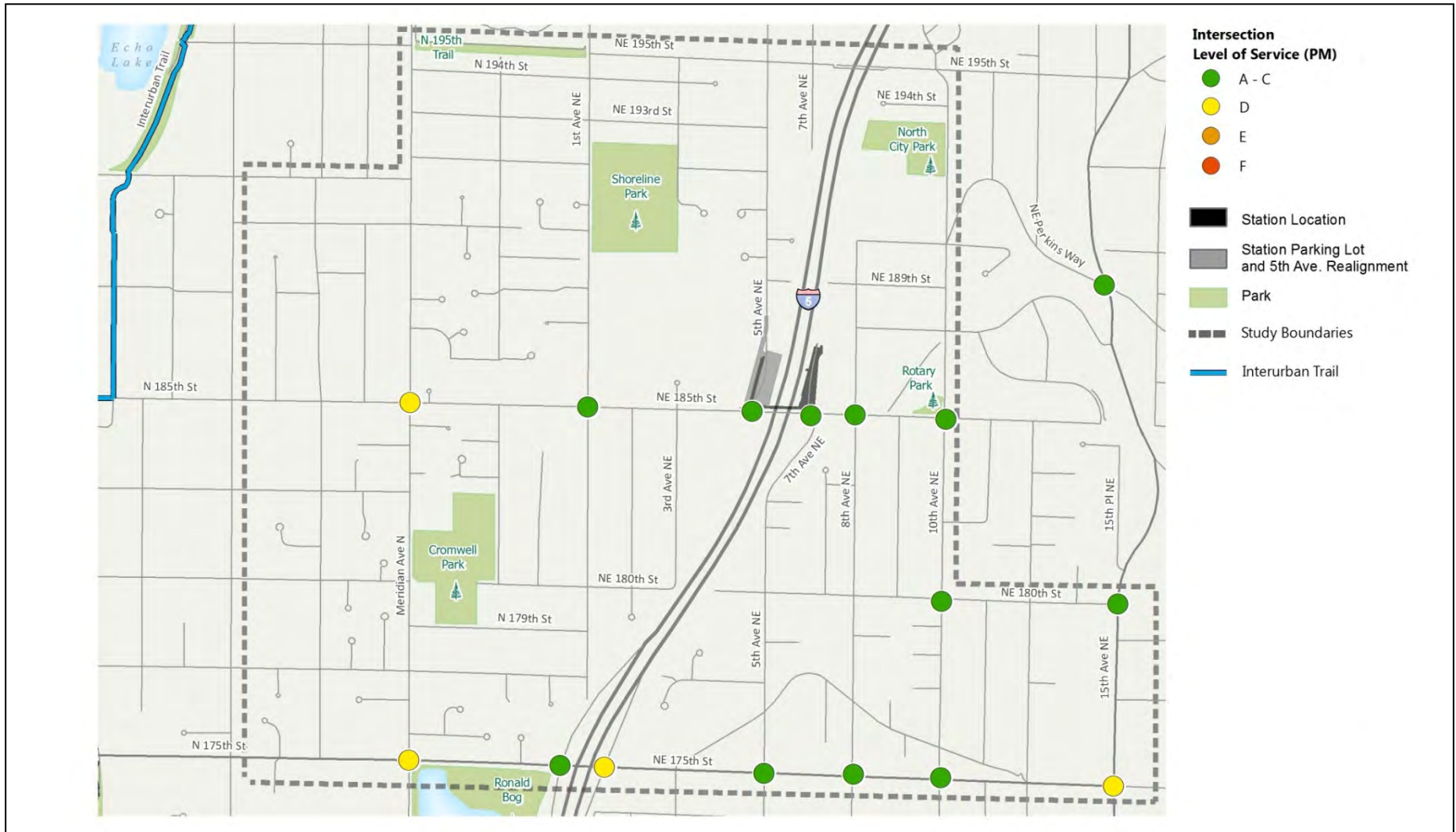
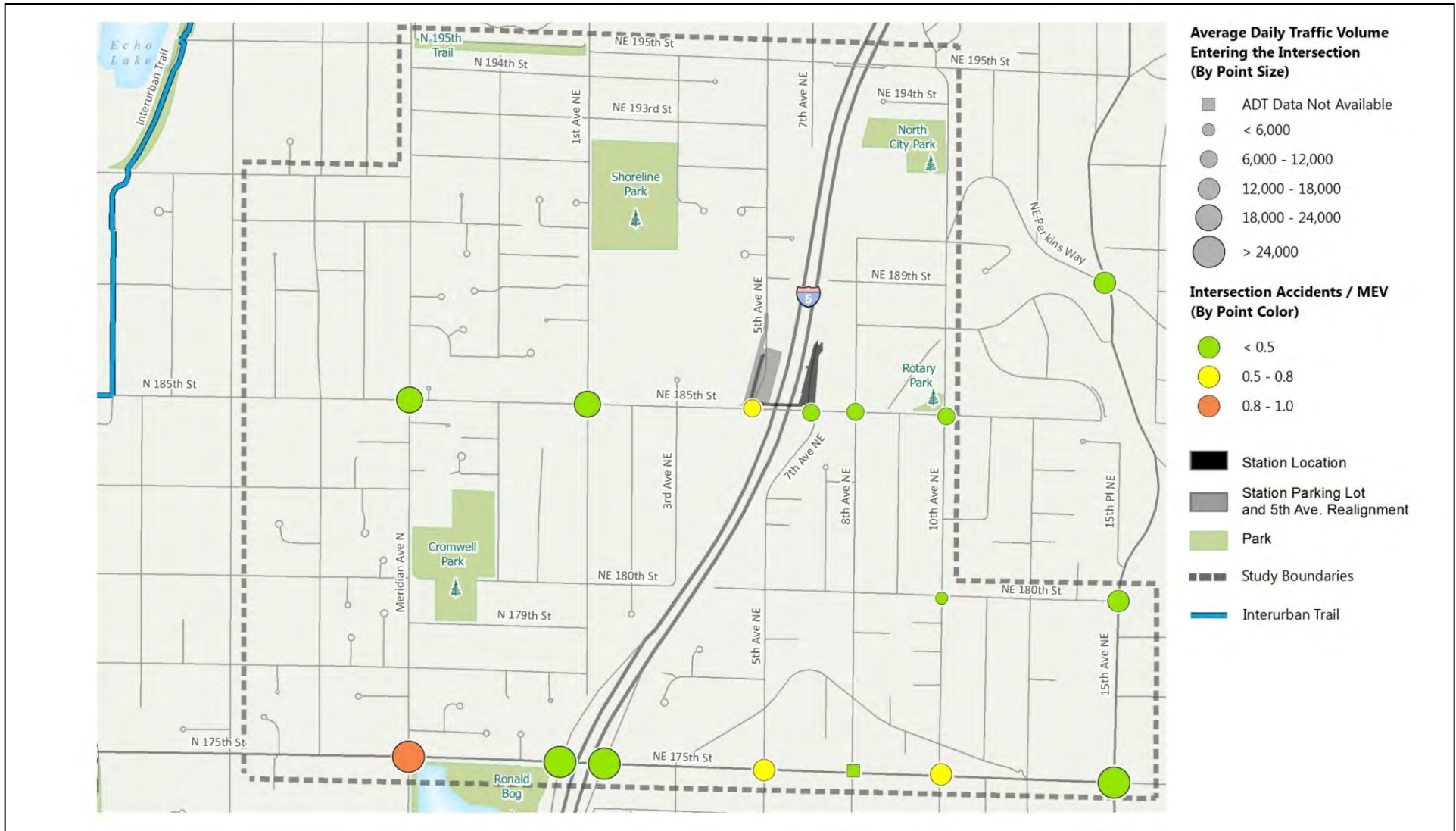


Figure 3.3-4 Accident Rate (Existing Conditions)



Transit Service Provision

Existing Conditions

The transit coverage within the study area is provided by King County Metro. **Table 3.3-3** details the current headways and destinations serviced by routes that traverse near the proposed station while **Figure 3.3-5** highlights the location of the routes. Note that the service provision described below include any proposed changes to service that King County Metro has planned as part of the future cuts.

Overall, the transit agency provides adequate geographic coverage during the peak period with most of the area within a quarter to a half-mile walk from a transit stop. Future direct service to the light rail station location is provided by Route 348, with 30 minute headways during the peak and midday periods. There is a gap in east-west service during the off-peak periods, in part due to the low residential densities in the area, limited east-west arterials and lack of I-5 crossings, with the only service provided along N/NE 185th Street. While the North City area along 15th Avenue NE is serviced by 30 minute peak and midday headways, the combined frequency at the corner of NE 175th Street and 15th Avenue NE is improved due to multiple routes serving that location.

Planned Transit Service

While the City of Shoreline does not have direct control over the transit service within its boundaries, a number of conceptual modifications with light rail deployment are identified in the TMP. This includes a potential diversion of existing routes to focus service on east-west connections to the station. As part of this

process, the City will be engaged with Community Transit, King County Metro and Sound Transit over the next two years as part of the development of a Transit Service Integration Plan. Community Transit is considering the future 185th station as a potential route terminus for the Swift Bus Rapid Transit line with service to Everett along SR-99. The Sound Transit DEIS analysis assumed that five King County Metro routes along with Swift would service the 185th Street station with 15 minute peak headways and 15-30 minute off-peak headways. While funding availability is a current issue for King County Metro, the issue of long-term transit funding may impact how bus service can be restructured.

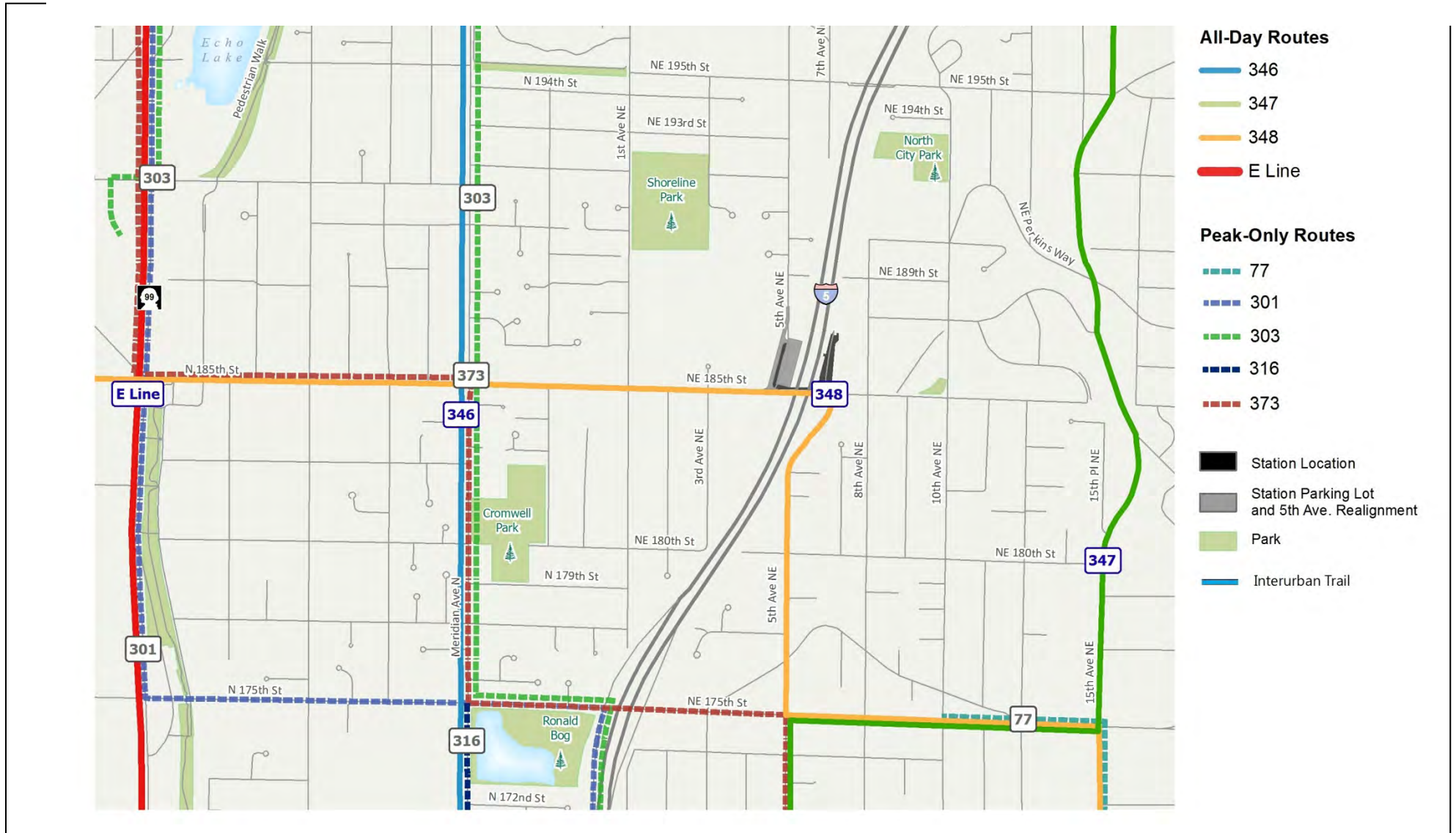
Table 3.3-3 Existing Transit Service

Route	Weekday Headways (in minutes)				Destinations Served
	AM Peak (6-9am)	Midday	PM Peak (3-6pm)	Evening	
All-day Routes					
346	30	30	30	60	Aurora Village, Northgate
347	30	30	30	60	Northgate, Ridgecrest, Mountlake Terrace
348	30	30	30	60	Richmond Beach, North City, Northgate
E Line	5-12	12	5-12	12-20	Downtown Seattle, Aurora Village Transit Center
Peak Period Routes					
77	15-25	-	15-30	-	North City, Maple Leaf, Downtown Seattle
301	15	-	15	-	NW Shoreline, Downtown Seattle
303	15	-	15	60*	Shoreline Park and Ride, Aurora Village Transit Center, Meridian Park, Northgate, Downtown Seattle, First Hill
316	15-20	-	15-25	-	Meridian Park, Bitter Lake, Green Lake, Downtown Seattle
373	15	-	15	60*	Aurora Village Transit Center, Shoreline Park and Ride, Meridian Park, University District, Maple Leaf

Source: King County Metro, 2014

*One outbound trip to Shoreline after 6 pm

Figure 3.3-5 Existing Transit Service



Existing Parking Conditions

Existing On-Street Parking Conditions

A substantial portion of the study area is residential in character and has no on-street parking restrictions. A survey conducted for the Sound Transit DEIS evaluated parking supply and utilization for an area within a quarter-mile of the proposed station⁵. The study determined that there were 700 unrestricted on-street spaces and 300 off-street spaces in total with a utilization rate of 11 percent for the on-street spaces and 43 percent for the off-street locations. However, due to the limitations of the midday evaluation and the geographic area covered, a qualitative assessment was conducted for this DEIS during the periods in which residential on-street parking utilization is typically higher, such as evenings and weekends. Within the entire study area, there are approximately 5,900 on-street spaces available. Utilization was observed to be between approximately 10 percent and 20 percent for a majority of the local streets, with higher utilization observed near the North City area⁶.

Park-and-Ride Facilities

Currently there are a number of smaller lots leased by King County Metro for park-and-ride facilities located at the southern edge of the study area. This includes the 116 space lot at 1900 N 175th Street and the 25 space lot at 17920 Meridian Ave N. They are typically filled between 96 percent to over 100 percent of

⁵ Data were collected mid-week in May 2012. Utilization was counted between 9 am and 11 am and between 1 pm and 4 pm.

⁶ Observations were conducted in May 2014 on a Sunday between 7 am and 8 am.



An example of low on-street parking utilization along residential streets in the station area

capacity on weekdays⁷. As part of the Lynnwood Link Extension Preferred Alternative, a 500 parking space facility would be located on the western edge of I-5 just north of NE 185th Street in the Washington State Department of Transportation right-of-way. This would include a realignment of the existing 5th Avenue NE to accommodate the garage with access to 5th Avenue NE and NE 185th Street. The Sound Transit DEIS assumed that the garage would be fully utilized during the daytime hours. During the PM peak hour, the DEIS estimated that 180 vehicles would exit the garage and 45 would enter. During the AM peak hour, it was

⁷ King County Metro Park and Ride utilization report First Quarter 2014

estimated that 200 vehicles would enter the garage and 50 would exit.

Existing Pedestrian and Bicycle Facilities

Existing Conditions

The study area includes a variety of bicycle facility types, including sharrows, bike lanes and paths. **Figure 3.3-6** details the current sidewalk and bicycle infrastructure while highlighting some gaps in connectivity within the station area. Currently, the North City area along 15th Avenue NE and areas south of NE 175th Street lack a dedicated non-motorized connection to the proposed station. Additionally, many of the local streets lack sidewalk coverage (although, it should be noted that traffic volumes tend to be low; so lacking sidewalk coverage may not be perceived as an issue).

Because subarea neighborhoods were primarily developed from the 1940s through the 1970s, when the area was part of unincorporated King County, street standards did not require sidewalks, and as such, most of the local streets today do not have sidewalks or bike lanes. When the City of Shoreline, incorporated in 1995, it assumed jurisdiction of this area. The City works with the community to prioritize capital transportation and infrastructure improvements throughout the City. Although some improvements have been made in the subarea in recent years, budget constraints have limited the level of street and utility improvements completed to date.

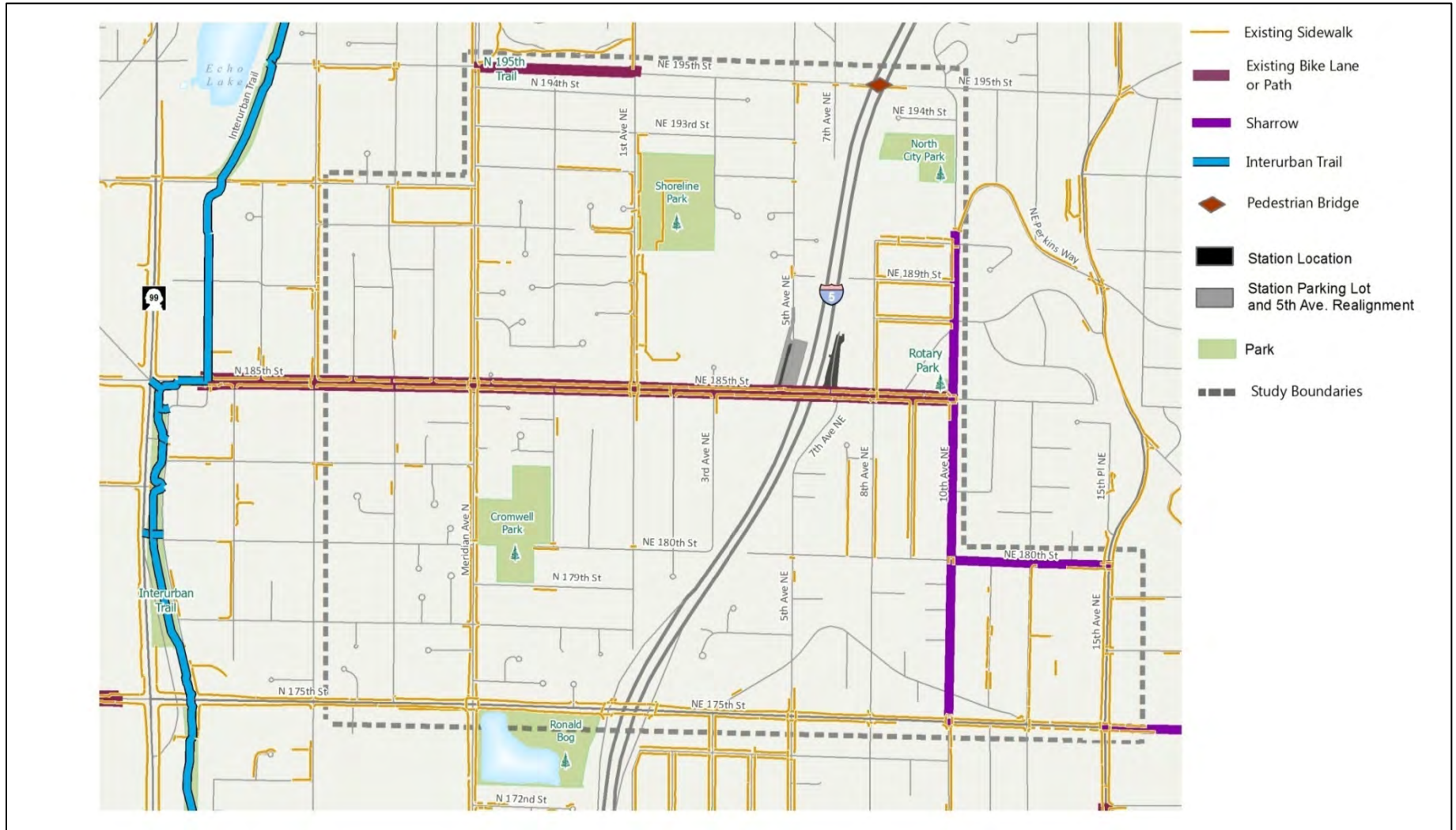


Current pedestrian facilities approaching the NE 185th Street bridge from the west



Recently completed bicycle lanes along NE 185th Street

Figure 3.3-6 Existing Pedestrian and Bicycle Facilities



Planned Multimodal Transportation Improvements

Pedestrian and Bicycle Improvements

The 2011 TMP identified a number of improvements to address these issues, some of which have recently been completed or are currently funded. Completion of the Interurban-Burke Gilman Connector on N/NE 195th Street, 10th Avenue NE and NE Perkins Way is currently funded as shown in **Figure 3.3-7**. This connector is a combination of off-street trails and signage to assist cyclists in navigating between the two major regional trails. Sound Transit will need to reconstruct the NE 195th Street pedestrian and bicycle bridge that crosses Interstate 5, as construction of the light rail alignment will necessitate its removal. **Figure 3.3-8** details the City’s Pedestrian System Plan, contained within the TMP, including dedicated north-south connections along 5th Avenue NE and Meridian Avenue N. Additionally, future sidewalk construction would provide a connection to the North City neighborhood through NE 180th Street and 10th Avenue NE. Note that this plan identifies both street improvements and streets that already have adequate sidewalk coverage. The Lynnwood Link Extension Preferred Alternative includes pedestrian improvements to the NE 185th Street bridge in order to provide a more comfortable environment and connect the parking garage with the station.

Vehicle Traffic Improvements

Figure 3.3-9 highlights projects identified in the TMP in order to accommodate future planned growth. The two intersections of N 175th Street and N 185th Street along Meridian Avenue N have been identified for improvements such as extended turn pockets,

lane rechannelization and signal coordination. Plans also call for the reconfiguration of Meridian Avenue N to allow for a two-way left turn lane from N 145th Street to N 205th Street while N 175th Street would have a similar treatment from Stone Avenue N to Meridian Avenue N. The TMP also identifies re-channelization of NE 185th Street with a two-way left turn lane from 1st Avenue NE to 10th Avenue NE to accommodate future traffic growth. Additionally, Sound Transit has listed in the Lynnwood Link DEIS the following potential traffic improvements, some of which are consistent with the City’s TMP planned projects.

Traffic Improvements Listed in Lynnwood Link DEIS, by Sound Transit

Intersection	Potential Mitigation
N 185th Street / Meridian Avenue N	Add protected permissive phasing to the northbound and southbound left-turns
NE 185th Street / 5th Avenue NE (west of I-5)	Add a two-way left-turn lane or refuge area on 185th Street
NE 185th Street / 5th Avenue NE (east of I-5)	Add a two-way left-turn lane or refuge area on 185th Street
NE 185th Street / 8th Avenue NE	Add a two-way left-turn lane or refuge area on NE 185th Street
NE 185th Street / 10th Avenue NE	Add a right-turn pocket to the eastbound approach

Figure 3.3-7 Bicycle System Plan from the TMP

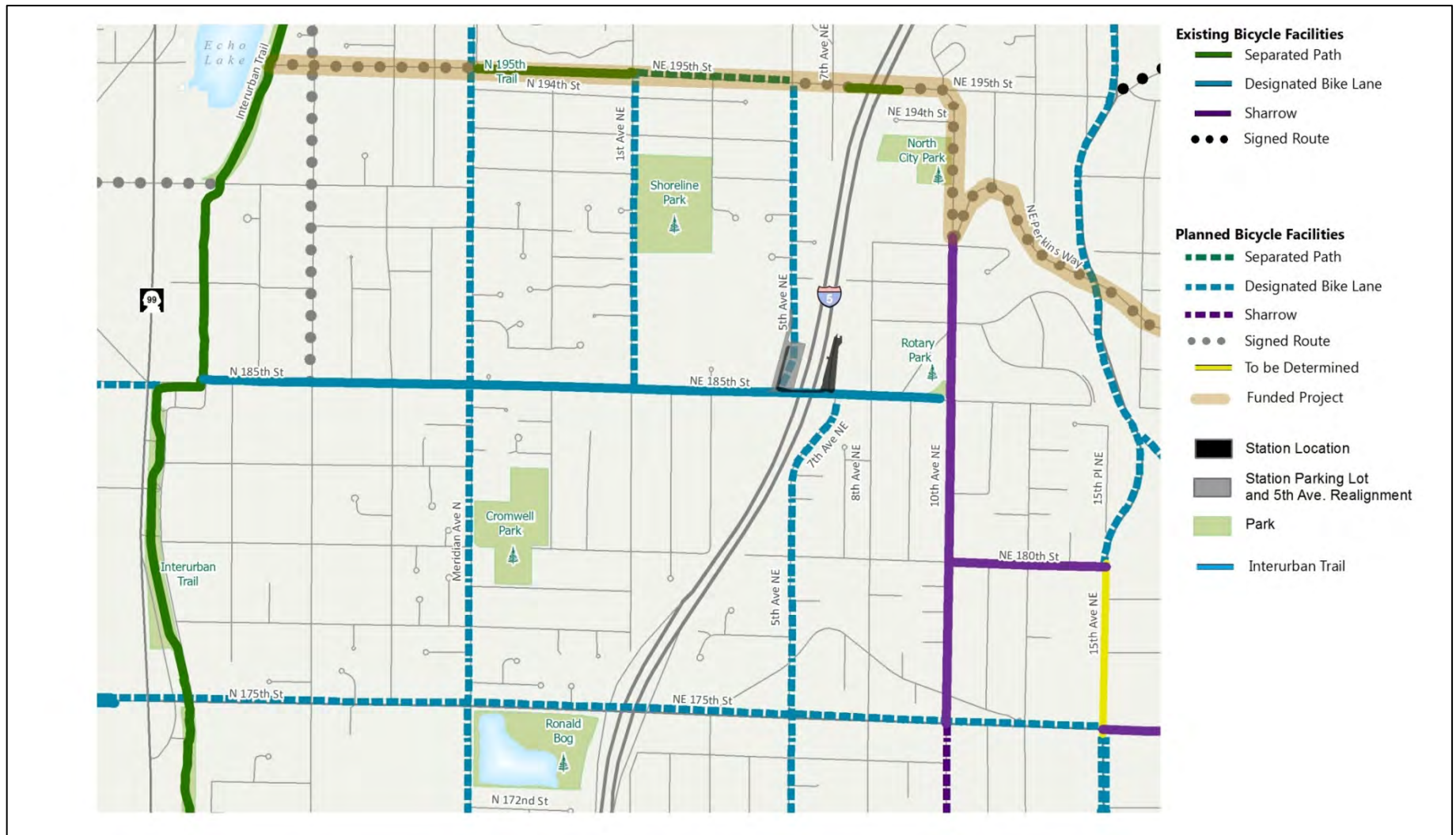


Figure 3.3-7 Pedestrian System Plan from the TMP

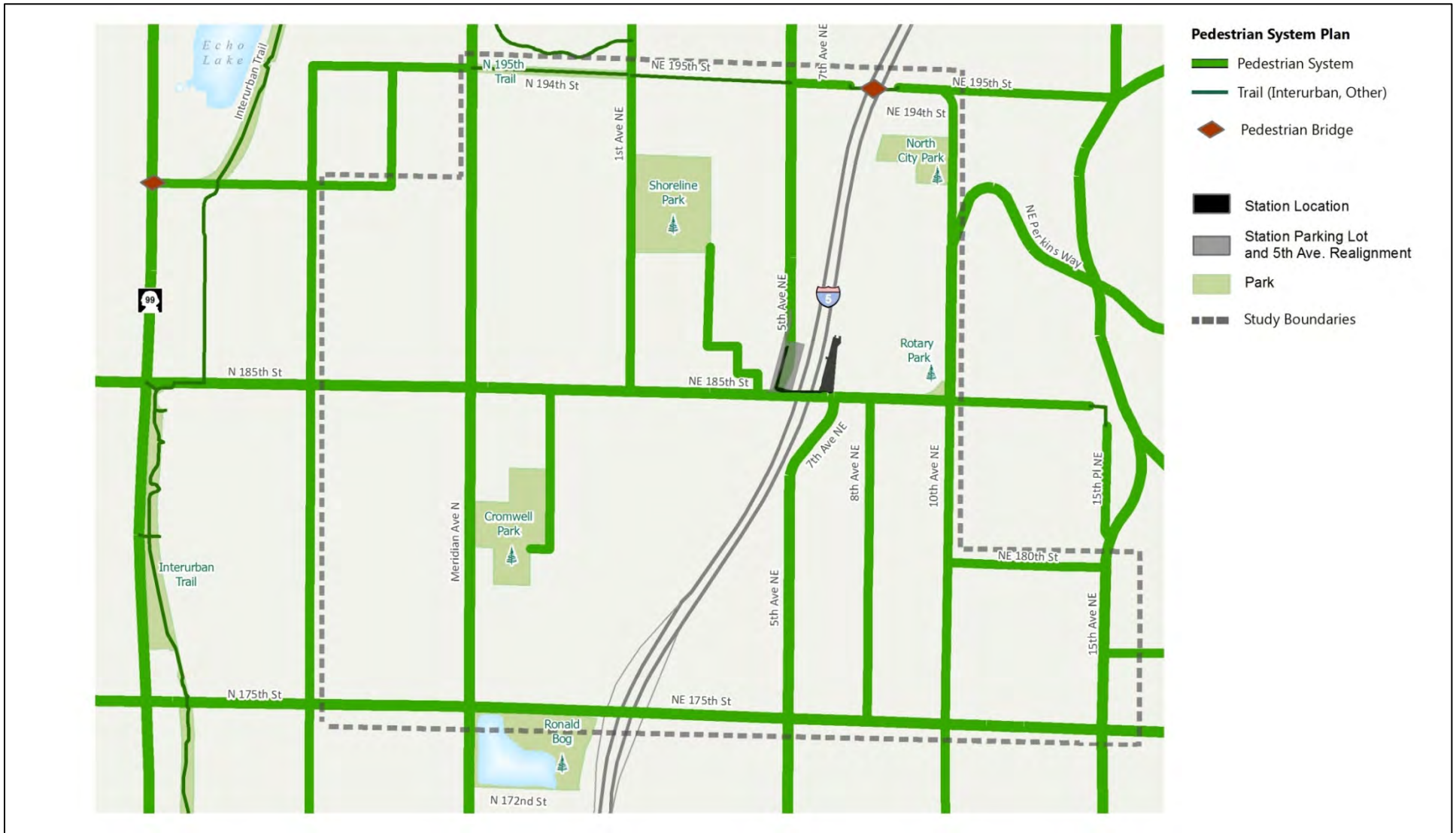
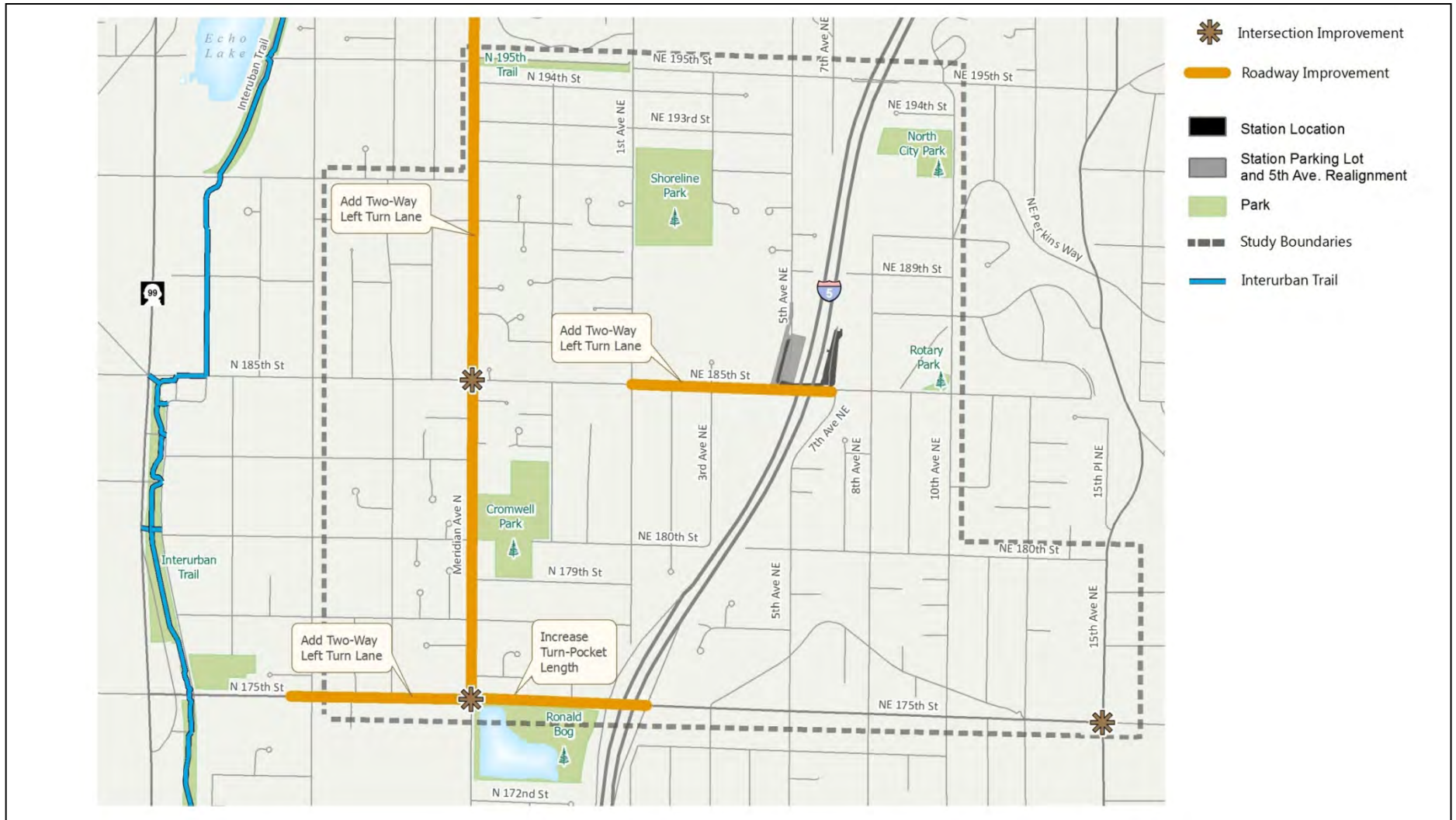


Figure 3.3-8 Roadway Improvements to Accommodate Growth Identified in the Transportation Master Plan



3.3.2 Analysis of Potential Impacts

Introduction

This section describes potential impacts as a result of changes in land use development within the study area. It includes a description of the forecast methodology as well as a detailed account of the results of the transportation impact analysis. The three alternatives evaluated during this process included:

- **Alternative 1—No Action**, which assumed that there would be minimal growth within the subarea based upon existing zoning designations with the total forecast of 3,639 households and 1,736 by 2035 in the subarea.
- **Alternative 2—Some Growth**, which estimated an additional 3,986 households and 8,302 jobs in the subarea above Alternative 1—No Action, building out in 30 to 50 years or more.
- **Alternative 3—Most Growth**, which envisioned an additional 12,238 households and 25,602 jobs in the subarea above Alternative 1—No Action, building out in 60 to 100 years or more.

Forecasts

Baseline Forecasts

In order to determine the transportation-related impacts of the various land use alternatives, traffic volumes were forecast based on changes in development intensity within the study area. The 2011 TMP update included forecasts of year 2030 traffic volumes; however these forecasts were based on a transit-oriented land

use scenario in which much of the city's future housing and employment growth was directed to transit nodes within the city, including the 185th Street Station subarea.

In order to reflect a true “no action” alternative as a baseline for analyzing the potential impacts of the proposed land use changes in the subarea, the travel model was re-run utilizing a “Dispersed” land use scenario, which directed future growth more evenly throughout the city based on existing zoning and observed development patterns. Because the travel model provided forecast traffic volumes for year 2030, the traffic volumes were increased by 0.5 percent to reflect estimated 2035 volumes, in order to be consistent with the land use horizon year. In addition, the future year forecasts were adjusted to account for vehicle trips associated with the Point Wells planned development. Trips forecast in the Point Wells Expanded Traffic Impact Analysis were added on top of the No Action, Some Growth and Most Growth Alternatives.

To analyze how the three alternatives would result in different travel patterns due to their mix of land uses and connectivity, the project team used an innovative trip generation analysis

The MXD analysis is a method for vehicle trip forecasting that more accurately reflects the number of trips that can be completed within a given subarea due to complementary land uses such as residential and retail.

technique known as the mixed-use development (MXD) model. The MXD model is based on a growing body of research, which focuses on the relationship between travel and the built environment. This method supplements conventional trip generation methods to capture effects related to built environment variables (known as the Ds) like **d**ensity, **d**iversity of

land uses, destinations (accessibility), development scale, pedestrian and bicycle design, distance to transit services, and demographics. The proposed height and density alternatives in the 185th Street Station Subarea incorporate changes in a number of these variables that, in turn, would influence the neighborhood's travel characteristics. In short, projects with higher densities, a rich variety of land uses close to one another, and high quality pedestrian, bicycle, and transit environments have a lower vehicle trip generation rate. People have more choices in terms of both the travel mode as well as how far they must travel to reach various destinations. The MXD method provides a more reasonable picture of how travel characteristics change over time by avoiding overestimating the number of vehicle trips that infill projects generate.

The MXD method was applied to the station subarea to calculate the number of pedestrian, transit and automobile trips generated from new development. **Table 3.3-4** highlights the mode split of the PM peak hour trips generated by the full development area. As the table shows, the proposal to increase land use intensity for the Some Growth and Most Growth Alternatives results in a higher proportion of short distance trips that could be made via walking, biking and transit.

To evaluate how streets and intersections in the study area would operate under each of the alternatives, traffic volume estimates were developed with the following methodology. Note that distribution of trips was based on existing travel patterns and expected shifts as a result of regional traffic growth⁸.

⁸ With adjustments for the extra five years of traffic growth and potential development at Point Wells

1. No Action – Traffic volumes were generated from the “Dispersed” land-use model
2. Some Growth – No Action traffic volumes plus the additional auto trips related to the land use changes under this alternative
3. Most Growth – No Action traffic volumes plus the additional auto trips related to the land use changes

Roadway Improvement Assumptions

The TMP planned transportation projects and the projects from the Lynnwood Link DEIS outlined in the previous section were considered in all of the future year scenarios. These improvements included:

- N/NE 185th St: Two-way left-turn lane
- Meridian Ave N: Two-way left-turn lane
- N 185th St / Meridian Ave N: 500 foot northbound and southbound add/drop lanes including a second through lane and receiving lane. 50 foot eastbound right-turn pocket
- Expanded turn pocket lengths for Meridian and N 175th Street intersection
- Expanded turn pocket lengths for 15th Avenue NE and NE 175th Street intersection

Table 3.3-4 Percentage of Trips by Mode

Alternative	External Walk/Bike Trips	External Transit Trips	Internal Trips	External Auto Trips	Total Trips Generated	External Auto Trips Generated
No Action	4%	4%	25%	66%	5,350	3,530
Some Growth	6%	8%	31%	56%	12,310	6,890
Most Growth	9%	11%	34%	46%	20,370	9,390
Dispersed Land-Use with Most Growth Population and Employment totals	4%	4%	25%	66%	20,370	13,480

Table 3.3-5 PM Peak Period Intersection Level of Service for 2035 Alternative 1—No Action

Signal Type	Intersection	Existing LOS	No Action LOS
Signalized	185th St / Meridian Ave	D	D
Signalized	185th St / 1st Ave	A	B
Unsignalized	185th St / 5 th Ave	B	F
Unsignalized	185th St / 7 th Ave	B	E
Unsignalized	185th St / 8th Ave	A	C*
Unsignalized	185th St / 10th Ave	A	C
Signalized	15th Ave / Perkins Way	C	D
Unsignalized	180th St / 10th Ave	A	C
Signalized	180th St / 15th Ave	A	C
Signalized	175th St / Meridian Ave	D	D
Signalized	175th St / I-5 SB Ramps	C	E
Signalized	175th St / I-5 NB Ramps	D	F
Signalized	175th St / 5th Ave	C	C
Unsignalized	175th St / 8th Ave	A	E*
Signalized	175th St / 10th Ave	A	B
Signalized	175th St / 15th Ave	D	D

* Intersections not subject to the City's concurrency standard

Alternative 1—No Action

Street Access and Circulation

With no change in land use zoning, the current street access and circulation network would remain for Alternative 1—No Action. The area is composed of a gridded network, with notable gaps across I-5, with the only east-west connections located along N/NE 175th Street, N/NE 185th Street and N/NE195th Street.

Traffic Impact Analysis

Under Alternative 1—No Action, some signalized intersections would fail the City's LOS standard as shown in **Figure 3.3-10** and **Table 3.3-5**. The intersections along N 175th Street would experience the greatest increase in delay as a result of growth in overall traffic volumes. Delays at the intersection of 7th Avenue NE and NE 185th Street and at 5th Avenue NE and NE 185th Street are also expected to exceed the City's standard due to its configuration (side-street stop control) and demands from the northbound left-turn movement from 7th Avenue NE and the southbound left-turn movement from 5th Avenue NE. Those intersections may require signalization depending on actual traffic volumes once the station is in place.

Average Daily Traffic Volumes on Major Corridors

As shown in **Table 3.3-6** and **Figure 3.3-11**, average daily traffic volumes and congestion under Alternative 1—No Action are expected to grow along major roadway segments compared to today. The segment of Meridian Avenue N between N 175th Street and N 185th Street would operate at a V/C ratio of .94, while N/NE 175th Street between I-5 and Meridian Avenue N would have a V/C ratio of .97. Both of these segments would have

congestion levels above the threshold of .90 established in the TMP.

Vehicle-Miles-Traveled and Greenhouse Gas Emissions

Based on the land use forecasts, the total vehicle-miles-traveled (VMT) generated from development within the subarea would amount to roughly 170,000 miles per day. This is based on a continuation of existing land-use patterns and current zoning. The suburban nature of development constrains the amount of trips that can be completed via non-auto modes such as walking, bicycling or transit. In total, future land uses within the subarea would generate roughly 150 metric tons of carbon dioxide (CO₂) per day. In comparison, a similar amount of housing and retail with a density proposed in the Some Growth Alternative would generate approximately 35,000 fewer daily VMT and 100 fewer metric tons of CO₂ per day.

Transit Service and Mobility

Under the Alternative 1—No Action, transit service would likely remain at current levels. With a lower density, the area would not support increases in transit service frequency. While the future light rail station would provide regional mobility, local bus service would primarily function to transport passengers to and from outside of the station subarea. The increased traffic along N 185th Street and Meridian Avenue may have an impact on overall transit reliability without any mitigating measures, such as transit signal priority or other intersection treatments.

Parking Conditions

Based on current supply and the expected limited growth in demand in the study area, parking conditions would remain

similar to existing conditions. Peak demand is forecast to be approximately 6,000 spaces for the entire area. The parking minimums articulated in City code specify that any new development of single-family residential uses would be built with two spaces per unit. Any new development in retail or other commercial-related land use would require one space per 300 to 400 feet of leasable space. With little development of complimentary uses, the amount of parking that could be shared would be limited.

Pedestrian and Bicycle Mobility

Under the Alternative 1—No Action, the pedestrian and bicycle environment would improve with the planned improvements specified in the TMP. Any new development within the area would include upgrades to the pedestrian facilities adjacent to

the property.

Bicyclists traveling from the Interurban Trail could utilize low stress routes via 1st Avenue NE and 5th Avenue NE in order to connect to the station. However, increased traffic volumes along N/NE 185th Street may justify a more separated facility such as a cycle track. Additionally, with higher traffic volumes projected along NE 180th Street and 10th Avenue N, the bicycling stress may increase without a separated facility in place, such as a buffered bike lane.

Table 3.3-6 Average Daily Traffic Volumes and PM Peak Period Congestion for 2035 Alternative 1—No Action

Street	Segment	Existing ADT	No Action 2035 ADT	No Action PM Peak Hour Volume ⁹	No Action V/C Ratio
East-West Corridors					
175th Street	West of I-5	30,770	39,490	1,515	0.97
175th Street	East of I-5	18,010	21,180	922	0.59
185th Street	West of I-5	9,700	17,180	896	0.89
185th Street	East of I-5	7,130	11,360	646	0.65
North-South Corridors					
5th Avenue NE	South of NE 185 th Street	3,360	5,700	244	0.35
15th Avenue NE	North of NE 175 th Street	15,040	20,340	1,403	0.76
Meridian Avenue N	North of N 175 th Street	12,070	15,140	920	0.94

⁹ One-directional volume only, signifying the direction with the highest volume

Figure 3.3-10 Intersection Level of Service (Alternative 1—No Action)

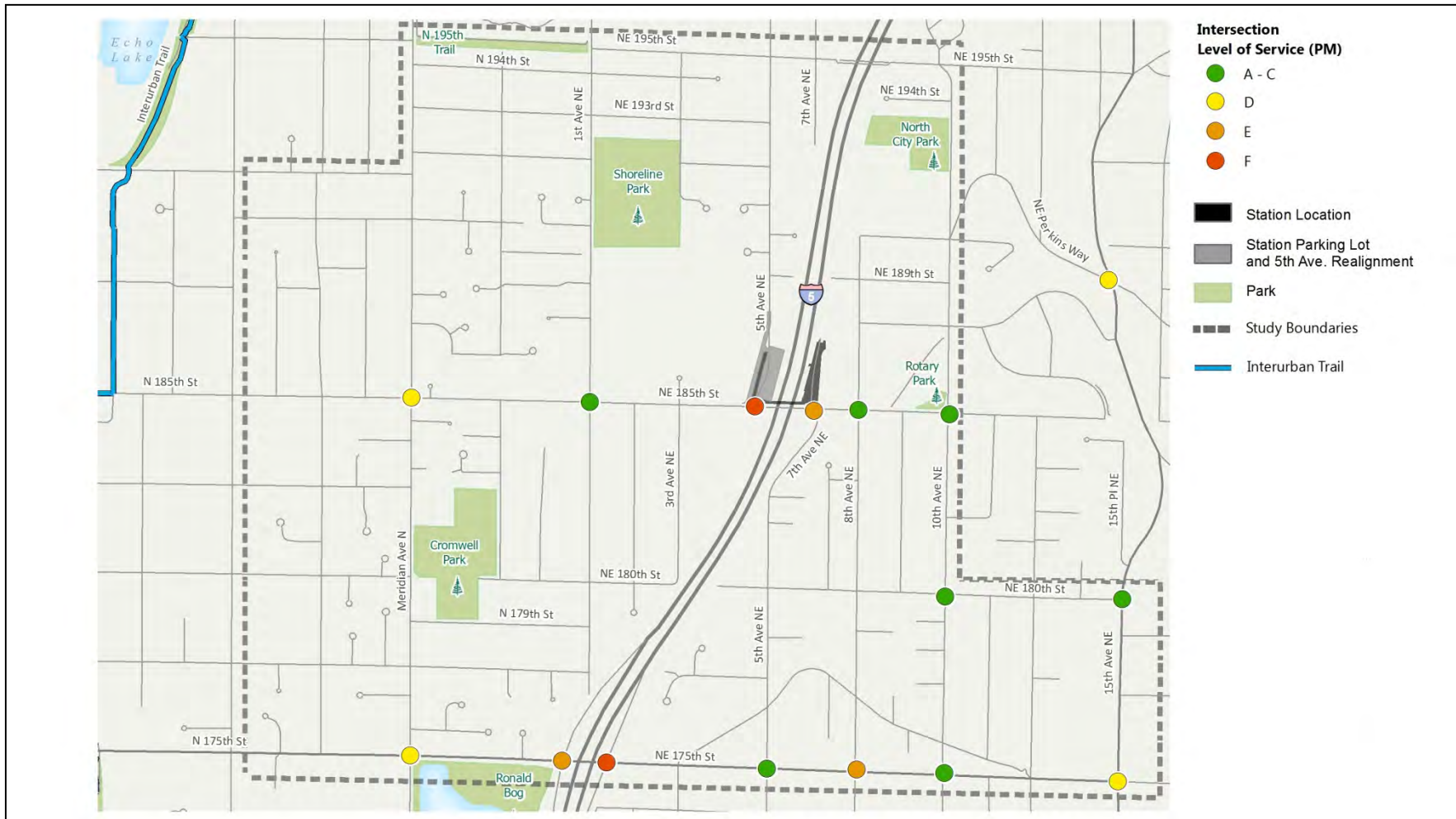
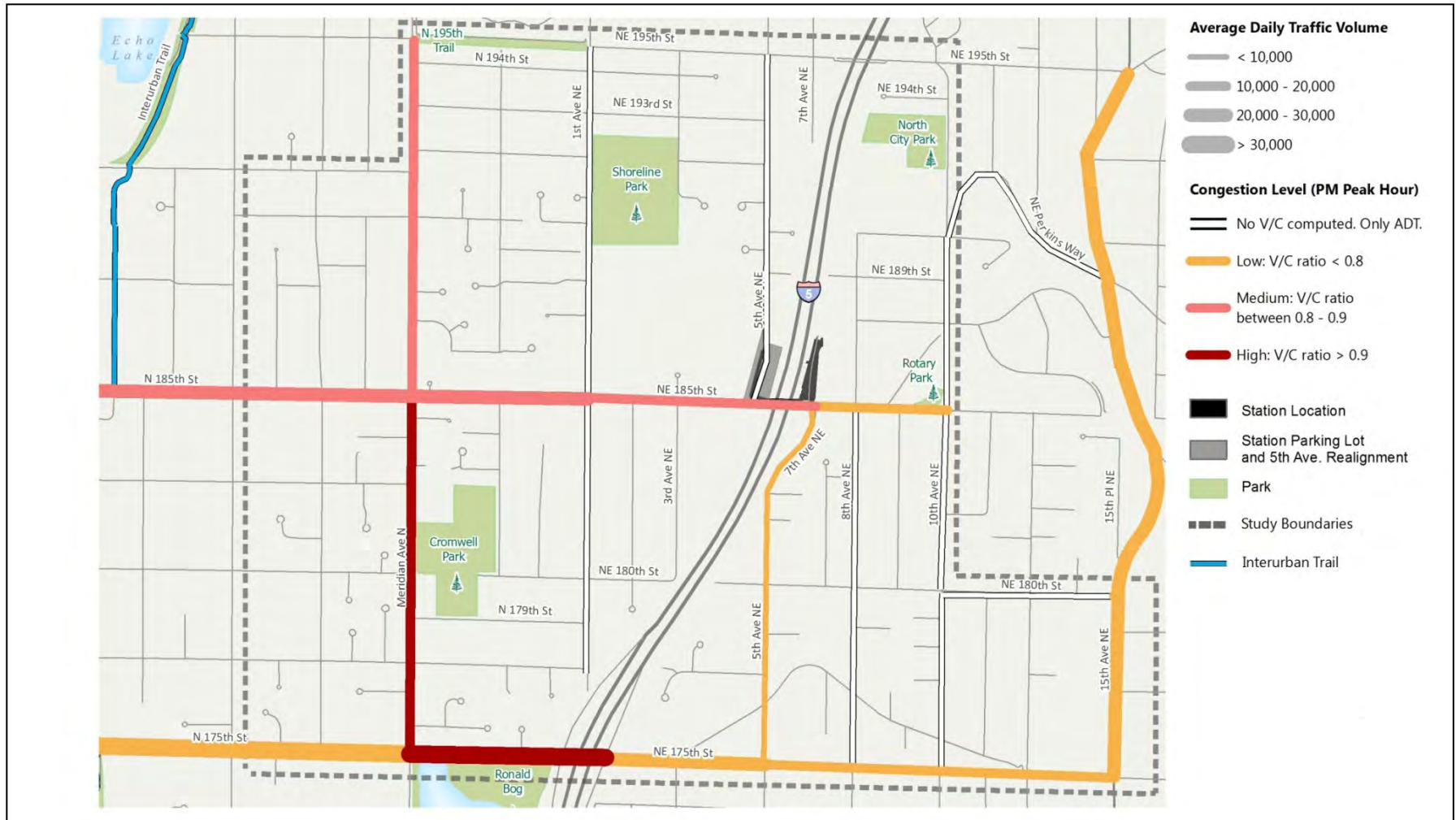


Figure 3.3-11 Average Daily Traffic and PM Peak Congestion (Alternative 1—No Action)



Alternative 2—Some Growth

Street Access and Circulation

With changes in land use zoning, parcel consolidation and redevelopment would allow for the creation of new streets and paths along with the consolidation of access points to N/NE 185th Street. While the current Shoreline Center site could provide additional alley or side street connections through the site to connect 3rd Avenue NE or NE 190th Street, the area would still be constrained by I-5 with east-west connections limited to N/NE 175th Street, N/NE 185th Street and N/NE 195th Street.

Traffic Volumes

Under Alternative 2—Some Growth, with full build-out of the proposed zoning, many intersections would fail to meet the City's standard, operating at LOS E or F as shown in **Figure 3.3-12** and **Table 3.3-7**. Intersections along N/NE 185th and N/NE 175th Street would experience a large increase in average vehicle delay due to additional vehicle trips generated by development proposed under Alternative 2—Some Growth. At this time, it has not been determined how many of these land uses would be accessed directly off of N/NE 185th and N/NE 175th versus from minor streets (such as 1st Avenue N and 5th Avenue N) or alleyways. Provision of internal circulation routes, which consolidate access, would potentially lessen intersection and roadway impacts. The improvements needed to mitigate these impacts are described later in this document.

Average Daily Traffic Volumes on Major Corridors

Similarly, the increase in trips generated within the study area would result in substantial growth in ADT volumes along roadway corridors as shown in **Table 3.3-8** and **Figure 3.3-13**. Meridian

Avenue N, 5th Avenue NE and N/NE 185th Street would experience the largest percentage change, with growth of between 75 and 160 percent as compared to existing conditions, while the growth along N 175th Street would be between 30 and 50 percent. V/C ratios for many of the major corridors would exceed .90 during the PM peak period.

It should be noted that some Collector Arterials in the subarea may experience substantial levels of traffic growth, including 1st Avenue NE and 5th Avenue NE north of NE 185th Street and 10th Avenue NE between NE 180th Street and NE 185th Street. In a later section, we describe the types of infrastructure improvements that would be necessary to fully mitigate the impacts of this alternative and meet the City's standard for roadway operations.

Vehicle-Miles-Traveled and Greenhouse Gas Emissions

Based on the land use forecasts, the total VMT generated from land uses within the subarea under Alternative 2—Some Growth would amount to roughly 340,000 miles per day. In total, future land use would generate roughly 211 metric tons of CO₂ per day. In comparison, a similar amount of housing and retail with a density similar to Alternative 1—No Action would generate approximately 455,000 daily VMT and 440 metric tons of CO₂ per day.

Transit Service and Mobility

The higher density provided under Alternative 2—Some Growth would support more robust public transit service within the study area. The TMP recommends that frequency of service could be improved to enable more frequent connections to the proposed light rail station. Based on the location of development forecast under Alternative 2—Some Growth, new transit stops along 10th

Avenue NE or 1st Avenue NE may be needed to service demand generated from increased development. The growth in vehicle traffic could impact overall transit service along N/NE 185th Street, Meridian Avenue N and N/NE 175th Street if no transit priority treatments are provided.

Parking Conditions

For Alternative 2—Some Growth, peak parking demand is expected to be approximately 13,000 spaces more than Alternative 1—No Action (a total of 18,500) in the subarea with a higher concentration near retail-uses. This amount is a 13 percent reduction from unadjusted demand due to the potential for shared parking between complementary uses. The current zoning code allows for a reduction of up to 25 percent required spaces if there is a shared parking agreement with adjoining parcels or if high-capacity transit service is available within a one-half-mile walk shed, conditions that future development would meet under Alternative 2—Some Growth. Based on existing and future supply provided by new development at current rates specified in the zoning code, approximately 21,000 spaces would exist within the subarea.

Pedestrian and Bicycle Mobility

Pedestrian and bicycle mobility should improve as new sidewalk and bicycle facilities are installed with new development. City code stipulates that any multifamily residential uses must have a minimum of one short-term bicycle parking space per 10 dwelling units and one long-term bicycle parking space per studio or 1-bedroom unit and two per unit having two or more bedrooms. Commercial development must have one short-term bicycle stall per 12 vehicle parking spaces and one long-term space per 25,000 square feet of commercial floor area. Additionally, conditions for development could be structured to allow for the creation of

internal path and pedestrian-only connections within larger parcels to enhance off-street pedestrian and bicycle facilities. Similar to Alternative 1—No Action, the increase in vehicle traffic along N 185th Street and Meridian Avenue N over time will impact bicycle stress along these streets and more separated facilities may be required.



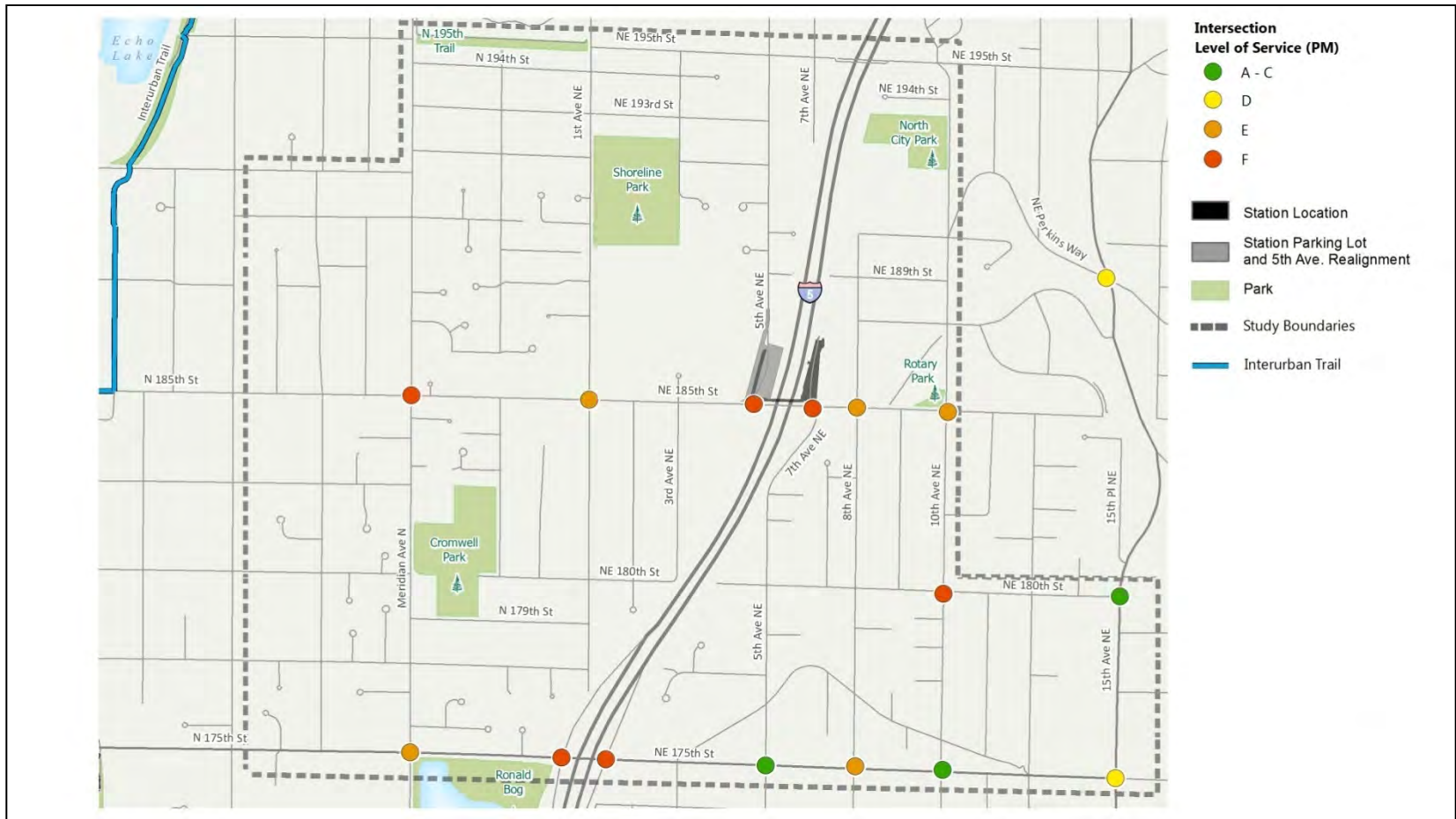
The subarea plan calls for creating a vibrant, walkable, transit-oriented neighborhood with safe and efficient pedestrian and bicycle access to and from the light rail station, as shown in this conceptual illustration.

**Table 3.3-7 PM Peak Period Intersection Level of Service
for 2035 for Alternative 2—Some Growth**

Signal Type	Intersection	Existing LOS	No Action LOS	Some Growth LOS
Signalized	185th St / Meridian Ave	D	D	F
Signalized	185th St / 1st Ave	A	B	E
Unsignalized	185th St / 5 th Ave	B	F	F
Unsignalized	185th St / 7 th Ave	B	E	F
<i>Unsignalized</i>	<i>185th St / 8th Ave</i>	A	C	<i>E*</i>
Unsignalized	185th St / 10th Ave	A	C	E
Signalized	15th Ave / Perkins Way	C	D	D
Unsignalized	180th St / 10th Ave	A	C	F
Signalized	180th St / 15th Ave	A	C	C
Signalized	175th St / Meridian Ave	D	D	E
Signalized	175th St / I-5 SB Ramps	C	E	F
Signalized	175th St / I-5 NB Ramps	D	F	F
Signalized	175th St / 5th Ave	C	C	C
<i>Unsignalized</i>	<i>175th St / 8th Ave</i>	A	<i>E</i>	<i>E*</i>
Signalized	175th St / 10th Ave	A	B	C
Signalized	175th St / 15th Ave	D	D	D

** Intersections not subject to the City's concurrency standard*

Figure 3.3-9 Intersection Level of Service (Alternative 2—Some Growth)

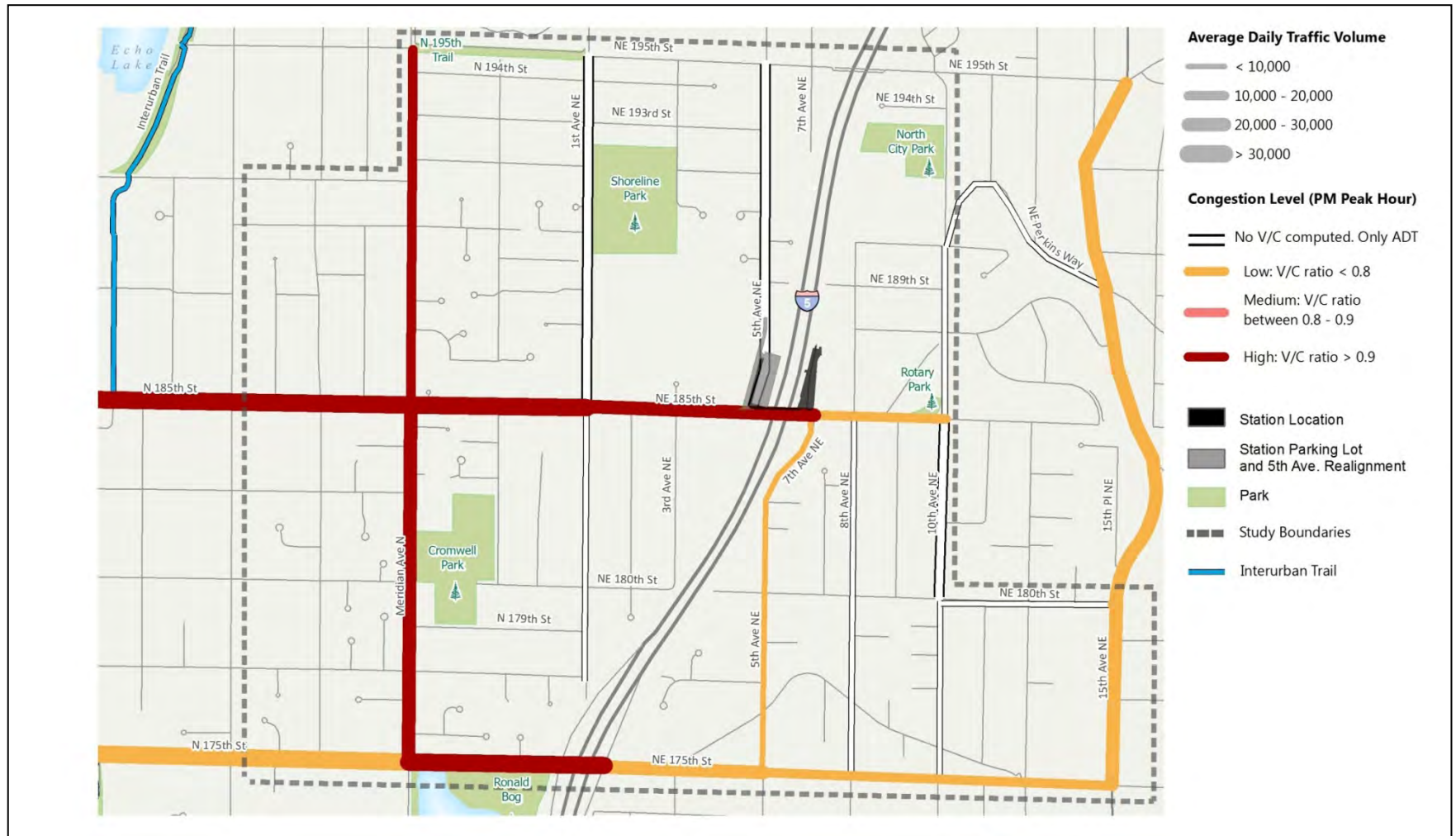


**Table 3.3-8 Average Daily Traffic Volumes and PM Peak Period Congestion
for 2035 Alternative 2—Some Growth**

Street	Segment	Existing ADT	No Action ADT	Some Growth ADT	Some Growth PM Peak Hour Volume ¹⁰	Some Growth V/C
East-West Corridors						
175th Street	West of I-5	30,770	39,490	46,850	1,842	>1.0
175th Street	East of I-5	18,010	21,180	23,970	1,009	0.65
185th Street	West of I-5	9,700	17,180	24,800	1,241	>1.0
185th Street	East of I-5	7,130	11,360	13,700	719	0.74
North-South Corridors						
5th Avenue NE	South of N 185 th Street	3,360	5,700	6,380	292	0.40
15th Avenue NE	North of N 175 th Street	15,040	20,340	20,990	1,435	0.75
Meridian Avenue N	North of N 175 th Street	12,070	15,140	21,270	1,302	>1.0

¹⁰ One-directional volume only, signifying the direction with the highest volume

Figure 3.3-10 Average Daily Traffic and PM Peak Congestion for Alternative 2—Some Growth



Alternative 3—Most Growth

Street Access and Circulation

Similar to Alternative 2—Some Growth, changes in redevelopment under Alternative 3—Most Growth would allow for the creation of new internal streets and paths. The current Shoreline Center site could provide additional connections through the site to connect 3rd Avenue NE or N 190th Street. Additionally, redevelopment and parcel consolidation in other areas could establish a denser grid of paths for improved pedestrian access. However, the area would still be constrained to N/NE 175th Street, N/NE 185th Street and N/NE 195th Street as primary connections across I-5.

Traffic Volumes

Under Alternative 3—Most Growth, with full build-out of the proposed zoning, many intersections would fail to meet the City's standard, operating at LOS E or F as shown in **Figure 3.3-14** and **Table 3.3-9**. Intersections along N/NE 185th and N/NE 175th Street would experience a large increase in average vehicle delay due to additional vehicle trips generated by development proposed under this alternative. At this time, it has not been determined how many of these land uses would be accessed directly off of N/NE 185th and N/NE 175th versus from minor streets (such as 1st Avenue and 5th Avenue) or alleyways. Provision of internal circulation routes, which consolidate access, would lessen intersection impacts. The improvements needed to mitigate these impacts are described later in this document.

Average Daily Traffic Volumes on Major Corridors

Similarly, the increase in trips generated within the study area would result in substantial growth in ADT volumes along roadway

corridors as shown in **Table 3.3-10** and **Figure 3.3-15**. Meridian Avenue N, 5th Avenue NE and N/NE 185th Street would experience the largest percentage change, with growth of between 175 and 400 percent as compared to existing conditions, while the growth along N/NE 175th Street would be between 70 and 110 percent. V/C ratios for many of the major corridors would exceed .90 during the PM peak period.

Similar to Alternative 2--Some Growth, the Collector Arterials in the subarea under Alternative 3—Most Growth would experience substantial levels of traffic growth, including 1st Avenue NE and 5th Avenue NE north of NE 185th Street and 10th Avenue NE between NE 180th Street and NE 185th Street with average daily traffic volumes exceeding their capacity. The types of infrastructure improvements that would be necessary to fully mitigate the impacts of this alternative and meet the City's standard for roadway operations are described later in this section.

Vehicle-Miles-Traveled and Greenhouse Gas Emissions

Based on the land use forecasts, the total VMT generated from land uses within the subarea under Alternative 3—Most Growth would amount to roughly 648,000 miles per day. In total, future land use and transportation would generate roughly 270 metric tons of CO₂ per day under Alternative 3—Most Growth. In comparison, Alternative 1--No Action would generate approximately 1,160,000 daily VMT and 630 metric tons of CO₂ per day based on existing land use patterns and the anticipated amount of driving.

Transit Service and Mobility

The growth in vehicle traffic would substantially impact overall transit service along N/NE 185th Street, Meridian Avenue N and N/NE 175th Street if no transit priority treatments are provided. However, the density forecast in Alternative 3—Most Growth would allow for a comprehensive restructuring of the public transit service provision within the study area. Additional transit service may be provided along 10th Avenue NE and NE 180th Street to provide a dedicated transit connection between the Aurora Town Center, the light rail station and the North City area and expanded frequency of service would be supported by the increase in population and employment density. Any new curbs installed along 10th Avenue NE and NE 180th Street should allow for proper curb radii that can accommodate buses.

Parking Conditions

Within the subarea, peak parking demand is expected to be approximately 35,000 spaces more than Alternative 1—No Action (a total of 41,000), with a higher concentration near retail-uses. This amount is a 16 percent reduction from unadjusted demand due to the potential for shared parking between complementary uses. The current zoning code allows for a reduction of up to 25 percent required spaces if there is a shared parking agreement with adjoining parcels or if high-capacity transit service is available within a one-half-mile walk shed, conditions that future development would meet under Alternative 3—Most Growth. Based on existing and future supply provided by new development at current rates specified in the zoning code, approximately 48,000 spaces would exist within the subarea.

Pedestrian and Bicycle Mobility

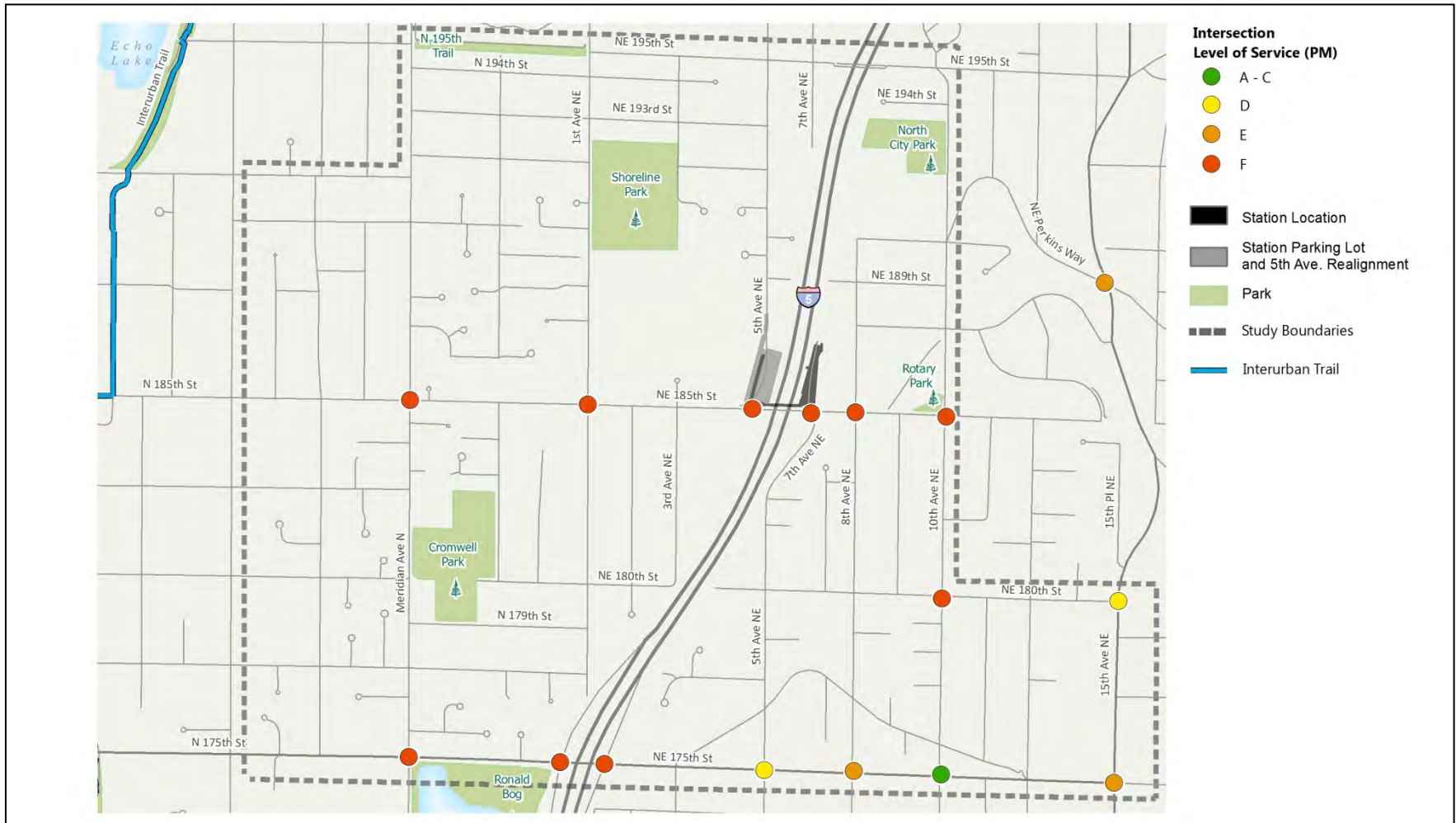
Pedestrian and bicycle mobility may improve as new sidewalk and bicycle facilities are installed with new development. Consolidation of parcels may allow for pedestrian-only paths to close current gaps in the roadway network. That said, significant increase in traffic volumes in the subarea may increase overall bicycle stress for a number of roadway segments. Bicycle connections from the Interurban Trail may be impacted by increased vehicle traffic along N/NE 185th Street, Meridian Avenue N and 1st Avenue NE, causing a higher bicycling stress environment.

**Table 3.3-9 PM Peak Period Intersection Level of Service
for 2035 Alternative 3—Most Growth**

Signal Type	Intersection	Existing LOS	No Action LOS	Most Growth LOS
Signalized	185th St / Meridian Ave	D	D	F
Signalized	185th St / 1st Ave	A	B	F
Unsignalized	185th St / 5 th Ave	B	F	F
Unsignalized	185th St / 7 th Ave	B	E	F
<i>Unsignalized</i>	<i>185th St / 8th Ave</i>	A	C	<i>F*</i>
Unsignalized	185th St / 10th Ave	A	C	F
Signalized	15th Ave / Perkins Way	C	D	E
Unsignalized	180th St / 10th Ave	A	C	F
Signalized	180th St / 15th Ave	A	C	D
Signalized	175th St / Meridian Ave	D	D	F
Signalized	175th St / I-5 SB Ramps	C	E	F
Signalized	175th St / I-5 NB Ramps	D	F	F
Signalized	175th St / 5th Ave	C	C	D
<i>Unsignalized</i>	<i>175th St / 8th Ave</i>	A	<i>E</i>	<i>E*</i>
Signalized	175th St / 10th Ave	A	B	C
Signalized	175th St / 15th Ave	D	D	E

**Intersections not subject to the City's concurrency standard*

Figure 3.3-11. Intersection Level of Service 2035 for Alternative 3—Most Growth

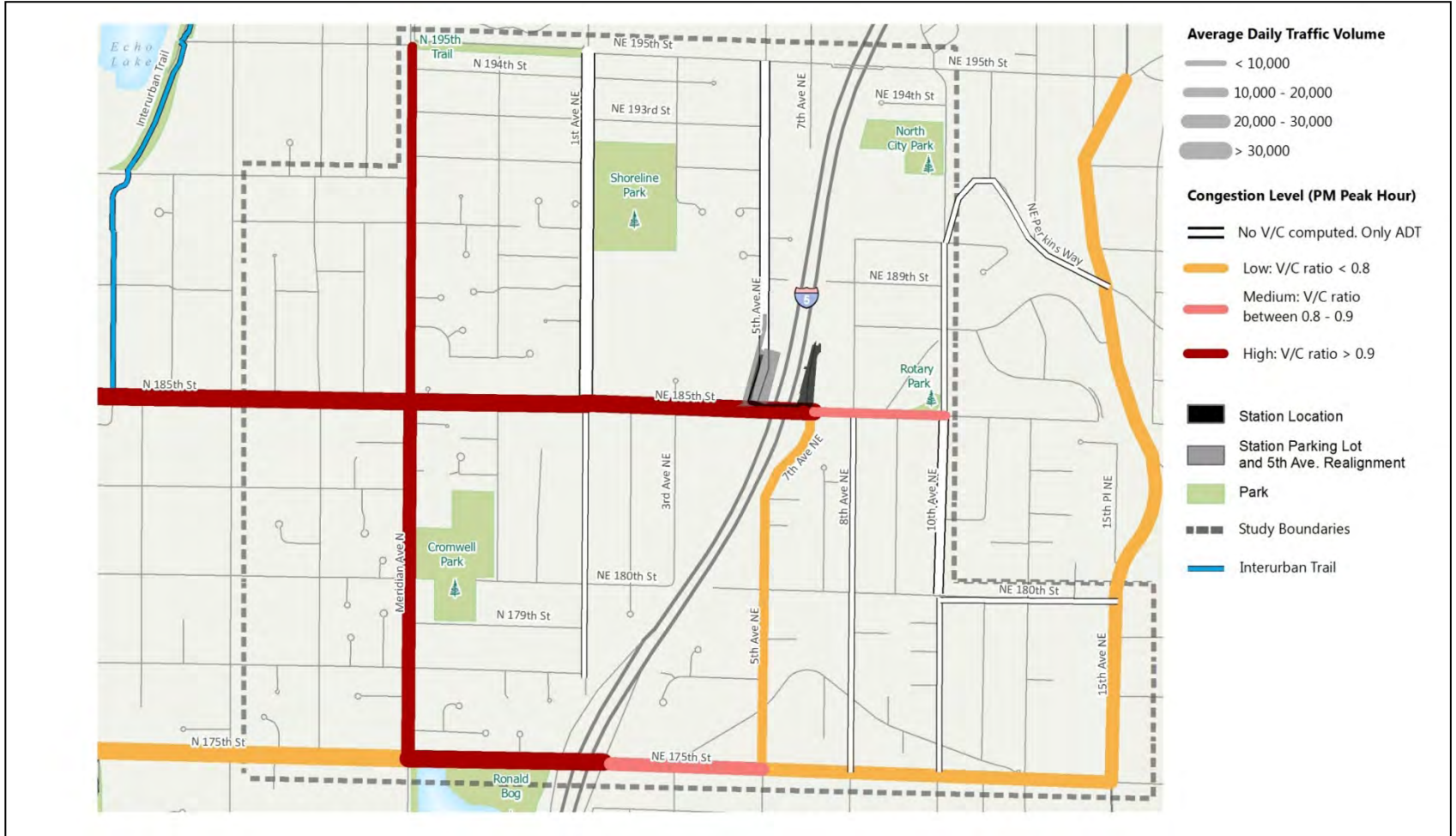


**Table 3.3-10. Average Daily Traffic Volumes and PM Peak Period Congestion
for 2035 Alternative 3—Most Growth**

Street	Segment	Existing ADT	No Action ADT	Most Growth ADT	Most Growth PM Peak Hour Volume ¹¹	Most Growth V/C
East-West Corridors						
175th Street	West of I-5	30,770	39,490	49,340	1,871	>1.0
175th Street	East of I-5	18,010	21,180	28,440	1,275	0.82
185th Street	West of I-5	9,700	17,180	34,030	1,748	>1.0
185th Street	East of I-5	7,130	11,360	16,240	890	.90
North-South Corridors						
5th Avenue NE	South of N 185 th Street	3,360	5,700	10,070	532	0.76
15th Avenue NE	North of N 175 th Street	15,040	20,340	21,950	1,481	0.78
Meridian Avenue N	North of N 175 th Street	12,070	15,140	23,800	1,377	>1.0

¹¹ One-directional volume only, signifying the direction with the highest volume

Figure 3.3-12. Average Daily Traffic and PM Peak Congestion
Alternative 3—Most Growth



3.3.3 Mitigation Measures

Introduction

This section describes the mitigation measures that would be needed to address impacts under each of the future year alternatives. It is important to note that the land use changes proposed and the traffic impacts identified in the previous section are based upon a full build-out scenario. While this build-out would occur over a long period of time and would not be fully implemented by 2035, the mitigation measures proposed below identify the full scale of actions needed. In reality, these measures would gradually be incorporated as development occurs and would be continually monitored to address the most current conditions.

Applicable Regulations and Commitments

The Shoreline Municipal Code (SMC) contains a number of regulations and stipulations that would apply to all future alternatives. Under Chapter 14.10, the City of Shoreline currently manages a Commute Trip Reduction program that assists employers of a certain size to reduce their overall VMT and automobile trips. This program should continue with new employers in the area to leverage the availability of high capacity transit and reduce the net increase in automobile trips. Additionally, Chapter 20.50 in the Shoreline Municipal Code contains a number of stipulations for new development that aim to improve pedestrian and bicycle facilities while also reducing the amount of parking provided.

Mitigation Measures for Street and Intersection Impacts

With full build-out, the level of development planned in Alternative 2—Some Growth and Alternative 3—Most Growth would be extensive and would require substantial multimodal transportation investments to mitigate the impacts. Additional mitigation measures may also be needed for Alternative 1—No Action to maintain the City’s current LOS standards in 2035.

It is estimated that Alternative 2—Some Growth would take 30 to 50 years or more to build out to the proposed zoning capacity and Alternative 3—Most Growth could take 60 to 100 years to build out.

Multimodal transportation improvements required to support the growth of either of these alternatives could be funded incrementally through a variety of sources, including federal and state grants and cycles of capital improvement plans. The length of time to build-out would enable the City to monitor growth and proactively plan for needed improvements over time.

The City also intends to pursue a variety of transportation demand management strategies to mitigate and minimize traffic congestion and reduce vehicle miles traveled, consistent with the Climate Action Plan and other City plans and policies.

N/NE 185th Street will be a major conveyor for all modes to get to and from the station. A conceptual design has been developed that would enhance connectivity in the corridor if implemented. The improvements conceptualized would improve mobility for pedestrians, bicyclists, and transit services, as well as automobile traffic. The concept envisions a European-style cycle track that would separate bicyclists from transit, as well as generous

sidewalk widths. Three lanes would be provided for traffic and transit (one westbound, one eastbound, and a center turn lane).

Figures 3.3-16 and **3.3-17** illustrate this concept design in cross section and perspective views.

With build-out of Alternative 2—Some Growth (30 to 50 years from now or more), it may be necessary to widen N/NE 185th Street beyond three lanes from Aurora Avenue N to 5th Avenue NE. With full build-out of Alternative 3—Most Growth (60 to 100 years from now or more) the full length of the corridor may need to be widened. However, in the coming years the City would pursue a full range of options to minimize traffic congestion on N/NE 185th Street to avoid the need to widen the street for as long as possible. For example, new development sites along the corridor likely would be required to have access from the side streets and/or rear alleyways and not directly onto N/NE 185th Street. This would reduce the amount of traffic that directly impacts the N/NE 185th Street corridor. Access management (reduced curb cuts/driveways), as well as a new system of well-connected blocks, road connections, and alleyways would serve corridor development, taking pressure off N/NE 185th Street. This would improve overall travel flow for all modes and enhance pedestrian and bicyclist safety.

Additionally, as mentioned above, the City would pursue a variety of travel demand management strategies, such as working with transit providers to increase connectivity to and from the station; exploring the opportunity to provide bike stations; and other actions.

Many of the projects identified as mitigation for Alternative 2—Some Growth and Alternative 3—Most Growth would require additional street right-of-way near the intersection locations, and

if N/NE 185th Street had to be widened in the long term future, additional easements or right-of-way would need to be obtained.

As a means to reduce the amount of infrastructure necessary to accommodate future growth, the City may look to revise its concurrency standards to allow for LOS E in certain situations.

Beyond the roadway improvements called out in the TMP¹², the following measures are recommended to mitigate street and intersection impacts under each alternative.

Alternative 1—No Action

- Timing adjustment and protected/permitted phasing for northbound and southbound left-turn movements at N 175th Street and Meridian Avenue N
- NE 175th Street and the I-5 Ramps are within WSDOT jurisdiction and would require additional mitigation, potentially an added westbound lane

Alternative 2—Some Growth

- Transportation demand strategies and actions to minimize traffic congestion on N/NE 185th Street, Meridian Avenue N and other key corridors in the subarea
- Additional through-lanes in the eastbound and westbound direction along NE 185th Street from Aurora Avenue to 5th Avenue NE could be needed a full build-out

¹² For example, where the TMP recommends a center-turn lane along Meridian Avenue, that profile is assumed in addition to the recommended improvements stated in this section.

of this alternative, if other mitigation measures are unsuccessful in controlling traffic levels

- Additional through-lanes in the northbound and southbound direction along Meridian Avenue N if transportation demand strategies are unsuccessful
 - Channelized right-turn lane for westbound approach at N 175th Street and Meridian Avenue N
 - Right-turn lane for the northbound approach at N 175th Street and Meridian Avenue N
 - Signalization of the following intersections:
 - NE 185th Street and 5th Avenue NE
 - NE 185th Street and 7th Avenue NE
 - NE 185th Street and 10th Avenue NE
 - NE 180th Street and 10th Avenue NE
 - Widening of the intersection of 5th Avenue NE and NE 175th Street to facilitate bus turns from EB NE 175th St to NB 5th Avenue NE. Only smaller buses can make the turn today.
 - NE 175th Street and the I-5 Ramps are within WSDOT jurisdiction and would require additional mitigation.
- Alternative 3—Most Growth**
- Additional through-lanes in the eastbound and westbound direction along N 185th Street from 10th Avenue NE to Aurora Avenue N
 - Additional right-turn pockets for the eastbound and westbound approaches along N 185th Street at the intersection with Meridian Avenue N
 - Additional through-lanes in the northbound and southbound direction along Meridian Avenue N with a right-turn pocket on the northbound approach to N 185th Street
 - Dual left-turn pockets for the southbound approach at 1st Avenue NE and NE 185th Street
 - Right-turn pocket for the westbound approach at 5th Avenue NE and NE 185th Street
 - Two-way left-turn lane along 5th Avenue NE between NE 175th Street and NE 185th Street
 - Dual left-turn pocket for eastbound approach at 15th Avenue NE and NE 175th Street
 - Northbound right-turn lane at N 175th Street and Meridian Avenue N
 - Signalization of the following intersections:
 - NE 185th Street and 5th Avenue NE
 - NE 185th Street and 7th Avenue NE
 - NE 185th Street and 10th Avenue NE
 - NE 180th Street and 10th Avenue NE
 - Widening of the intersection of 5th Avenue NE and NE 175th Street to facilitate bus turns from EB NE 175th St to

NB 5th Avenue NE. Only smaller buses can make the turn today

- NE 175th Street and the I-5 Ramps are within WSDOT jurisdiction and would require additional mitigation

With the identification of a Preferred Alternative, this transportation analysis will be adjusted to focus specifically on that alternative's land use and transportation. The analysis will more closely assess phasing of improvements to N/NE 185th Street.

In addition to the above projects which were based on the City's LOS standards, the City should engage as needed in traffic calming measures along local streets to prevent cut-through traffic both to the light rail station and the new development sites. The City of Shoreline created a Neighborhood Traffic Safety Program to help address the safety concerns on residential streets stemming from higher speed cut-through traffic. This program includes enhanced enforcement and education along with engineering solutions such as traffic circles, speed humps and narrowed lanes.

Transit Service Mitigation Measures

For all alternatives, at least 22 buses are expected to service the future light rail station during the PM peak hour, or roughly one bus every three minutes. Depending on final design of the station, ample bus pull-out and layover space should be provided to maintain operations efficiency and prevent spillover impacts to the roadway network.

The City of Shoreline should continue coordinating with area transit agencies in the development of a transit service implementation plan for the light rail station subarea. This

coordination should coincide with traffic analysis to ensure transit service reliability along the major corridors in the area.

Additional modes that could operate in coordination with transit include bike sharing or car sharing programs, with organizations such as Zipcar, Car2Go or Puget Sound Bike Share. An analysis of potential demand for these services may be conducted to determine their relative feasibility. Transit reliability can be improved via a number of transit priority treatments including signal priority, bus bulbs and bus queue jump lanes. These measures should be evaluated as part of the transit service implementation plan.

Parking Mitigation Measures

While any new development is required by City code to provide ample off-street parking for the demand generated by its respective use, there are alternatives to reduce the overall amount of parking supply created. City code stipulates that development may reduce its parking supply requirement by up to 25 percent by using a combination of the following criteria:

- Shared parking agreement with adjoining parcels and land uses that do not have conflicting parking demands
- High-occupancy vehicle (HOV) and hybrid or electric vehicle (EV) parking
- Conduit for future electric vehicle charging spaces, per National Electrical Code, equivalent to the number of required disabled parking spaces
- High-capacity transit service available within a one-half mile walk shed

- Concurrence with King County Right Size Parking data, census tract data, and other parking demand study results.

While Alternative 2—Some Growth and Alternative 3—Most Growth have more development and higher trip generation, they also provide greater opportunity to take advantage of these code provisions. Alternative 1—No Action by contrast lends itself to more auto-oriented development that is not as conducive to measures like shared parking. Besides mitigating parking demand generated from new development, any on-street parking spillover generated from the proposed land uses or the light rail station may be mitigated via a Residential Parking Zone (RPZ) designation. An RPZ provides on-street parking permits to residents located within the zone to help discourage long-term parking by non-residents on local streets. An evaluation of parking demand in the area as it redevelops following implementation of light rail service should be conducted on an annual basis to assess the need of an RPZ designation.

Pedestrian and Bicycle Facilities Mitigation Measures

Additional traffic along N/NE 185th Street along with increased bus service will create a higher potential for conflicts between bicyclists, pedestrians, transit vehicles and automobiles. A suitable measure to properly accommodate all modes may be a cycle track from the Interurban Trail to the light rail station. A facility of this nature would allow for a safe non-motorized connection via the key N/NE 185th Street corridor while separating bicycles from vehicles and pedestrians. Alternative 2—Some Growth and Alternative 3—Most Growth could improve overall pedestrian and bicycle connectivity by allowing for more

dedicated pathways with parcel consolidation and expanded development. Any new development in the area under the proposed zoning should consider pedestrian and bicycle paths through the sites to allow for connections to the station and subarea amenities without the need to travel along busy arterials. The increased traffic along 1st Avenue NE and 5th Avenue NE may also necessitate a dedicated path along the I-5 right-of-way near the proposed light rail alignment. This north-south path would provide a connection between the subarea and regional trails such as the Interurban Trail and the Burke-Gilman Trail.

The City is interested in exploring opportunities for bicycle sharing and bicycle facilities near the station to encourage and enhance bike access to transit.



Figure 3.3-16 Conceptual Cross Section for N/NE 185th Street



Figure 3.3-17 Perspective View of N/NE 185th Street Concept

3.4 Public Services

This section describes the affected environment, analyzes potential impacts, and provides recommendations for mitigation measures for public services, including public school services and facilities; parks, recreation, and open space; police, fire, and emergency services; solid waste management services; and other public services and facilities. Public facilities and community facilities within the subarea and its vicinity are illustrated on **Figure 3.4-1**.

This section is organized slightly differently from other sections in this chapter for better flow and readability of the subject matter. Affected Environment, Analysis of Potential Impacts, and Mitigation Measures are discussed under each public service topic area, beginning with Public School Services and Facilities, below.

3.4.1 Public School Services and Facilities

Affected Environment

Shoreline Public School District Number 412 provides kindergarten through twelfth grade (K-12) public education services for the cities of Shoreline and Lake Forest Park. The school district is known as one of the best in the region, and as such, these communities are known for having good schools and being desirable places to live for families with school children. Goals in Shoreline's Comprehensive Plan highlight the community's commitment to continue to support exceptional

schools and opportunities for lifelong learning, as well as to strengthen partnerships with schools and volunteers.

The school district encompasses a 16 square mile area, bounded by Puget Sound on the west, Lake Washington to the east, the Seattle city limits to the south of 145th Street, and the King/Snohomish County line to the north. The school district operates 16 public schools, a transportation center, and the Shoreline Center. Many of these facilities are located in proximity to the subarea (either located within the subarea boundaries or within less than a mile of these boundaries). Residents of Shoreline are served by all district schools, except Brookside Elementary School and Lake Forest Park Elementary School.

The school district operates seven elementary schools, two middle schools, two high schools, the Shoreline Center (see more detail, next page), a public preschool facility, and two additional surplus properties located within the city. In addition to these facilities, the school district maintains a transportation center (also known as the bus barn) located adjacent to the Ridgecrest Elementary School site, and a warehouse with a central kitchen located adjacent to Hamlin Park. The Shoreline Center and the old North City Elementary School sites are located within the subarea and the schools that serve the subarea, as well as the overall district are discussed later in this section.

Shoreline Center

The Shoreline Center (which includes the Shoreline Conference Center) was once the location of Shoreline High School. Located just west of the I-5 corridor and north of N185th Street, Shoreline Center is now the home of central offices of the School district,

offices for several local non-profit agencies, conference center facilities, and cultural and recreation services and facilities.

The Shoreline Center building accommodates a wide variety of public, non-profit, and private uses, including:

- Northshore/Shoreline Community Network
- Office space for Washington State Legislature Representative Cindy Ryu and Representative Ruth Kagi (32nd District)
- Office space for Washington State Senator Maralyn Chase (32nd District)
- Shoreline Chamber of Commerce
- Shoreline-Lake Forest Park Senior Services Center
- Shoreline-Lake Forest Park Arts Council
- Shoreline Schools Foundation
- The Norwest School of Horology
- Washington Alliance for Better Schools (WABS)

In addition, the school district maintains facility use agreements with entities that regularly use space at the Shoreline Center such as the University of Phoenix, Weight Watchers, Rotary Clubs, conference center users, and others.

The Conference Center hosts a wide variety of events from small meetings and workshops to large conferences and conventions, and social gatherings such as community banquets and wedding receptions. One of the ten largest event venues in the Seattle area, the Conference Center's hallways serve as a gallery for art

work created by students of the Shoreline School District, enjoyed by hundreds of thousands of visitors each year. Works by local professional artisans are also displayed in the on-site gallery of the Shoreline- Lake Forest Park Arts Council.

Shoreline Center's forty-acre campus includes the Shoreline Stadium (a venue for local and regional school sports events), the Spartan Recreation Center (a multi-use community facility jointly owned and operated by the Shoreline School District and the City of Shoreline), and the Shoreline / Lake Forest Park Senior Center (a community support center and gathering place for senior citizens). On adjacent property to the north of the campus, the City of Shoreline operates the Shoreline Pool and Shoreline Park.

Proceeds from operations at the Shoreline Center are allocated to the general fund of the 10,000 student district.

The school district's policies call for retaining ownership of their properties over the long term as assets for potential future educational and institutional needs. The school district has no immediate plans for redevelopment of the Shoreline Center site, and there is recognition within the community that many of the current uses at the site are beneficial to the public. That said, in considering long range possibilities for this large site that will be located within walking distance of high-capacity transit, the school district is interested in analyzing potential redevelopment opportunities. They intend to proceed with independent analysis and planning to explore possible long term options.

Zoning options for the Shoreline Center site that would maximize future development potential and allow flexibility for a variety of mixed use, housing, educational, commercial, and recreational

uses are explored by Alternative 2—Some Growth and Alternative 3—Most Growth. These two action alternatives propose building height and form at the site that could accommodate a variety of diverse redevelopment options. During subarea planning workshops, participants suggested that many of the existing uses at the site could be consolidated into a new, more compact multi-level building, freeing up land for new buildings and uses elsewhere on the property. Redevelopment concepts in the 185th Street Station Subarea Plan can help to inform potential options for the Shoreline Center site. Refer to Section 3.1 for additional information.

North City School Building and Site

While North City Elementary is no longer being operated as an elementary school, the building accommodates a variety of uses, including three cooperative preschools (North City, Shoreline, and Shorenorth all affiliated with Shoreline Community College) one independent preschool, the wonderland Development Center and the school district's Home Education Exchange, a resource to homeschoolers.

Public Schools

Public school facilities are listed in **Table 3.4-1**. It should be noted that while this environmental analysis focuses on public services and facilities, there are several private schools located in Shoreline that also provide education services to the population. The currently mapped school attendance areas directly affected by the subarea are Echo Lake, Meridian Park, and Ridgecrest. Echo Lake Elementary, Meridian Park Elementary, and Ridgecrest Elementary are the designated elementary schools for the subarea. Attendance at middle schools and high schools is

determined by where the student resides (either east or west of Interstate 5). Students in the subarea east of Interstate 5 currently attend Kellogg Middle School and Shorecrest High School. Students in the subarea west of Interstate 5 currently attend Einstein Middle School and Shorewood High School.

For the 2012-2013 school year, district enrollment was counted at 8,714 students. Given that there are an estimated 26,600 households in the district (combining households in Shoreline and Lake Forest Park), the estimated ratio of students per household is .33 students/household. It should also be noted that of the total enrollment in schools, approximately 81 percent are generated by Shoreline households and 19 percent by Lake Forest Park households. **Table 3.4-2** shows the approximate breakdown of enrollment per high school, middle school, and elementary school.

Recently Improved and Planned School District Facilities

The school district substantially renovated the district's two high schools, Shorecrest and Shorewood, between 2011 and 2014 to meet standards of the Washington Sustainable Schools Protocol. In February of 2014, a special election approved replacement levies for educational programs, maintenance, and operations, and capital for technology improvements and support.

The programs and maintenance and operations levy provides the district with approximately 26 percent of its general fund operating revenue. It pays for the basic education programs not supported by state and federal funding, including nurses, family advocates, librarians, and instructional materials. It helps support special education, highly capable, remedial and vocational

education programs, building maintenance and utilities, and transportation. Funds are also used to support extra-curricular student activities, including music, drama and athletics.

The technology improvements and support levy is used to meet the district's ongoing technology needs for capital improvements. This includes student computers and expanded online curriculum for classroom use, instructional specialists, equipment upgrade and replacement (including lab and library computers, printers, classroom audio-visual equipment), professional development and training, server and network replacements and upgrades, administrative software systems, online and subscription resources, along with virus and firewall protection.

In 2012, the school district concluded a three-year bond for construction projects. Those improvements included construction of the new Shorewood High School and Shorecrest High School, mechanical system, field and site upgrades, fire and security upgrades, traffic improvements, electronic and communications improvements, upgrades to finishes, and central kitchen upgrades.

The district anticipates that its replacement levies will allow for continued stability of school tax collections for the next four years. The proposed levy amounts are unchanged from the expiring 2010 Capital Levy for Technology Improvements and Support. The school district currently has no plans for building new schools. In recent years a number of elementary school sites to other uses (Aldercrest Annex and Cedarbrook, North City, and Sunset elementary school sites).

Analysis of Potential Impacts

Alternative 1 - No-Action

Under Alternative 1—No Action, population growth and new housing construction in the subarea would place additional demands on school services and facilities. The population of the subarea is anticipated to increase to 8,734 by 2035 under the No Action Alternative. This compares to a current population of 7,944 people, indicating a population growth of 790 people without any changes to zoning. Today there are 3,310 households in the subarea and these would increase to 3,639 by 2035 under the No Action Alternative, increasing the number of households by 329.

School enrollment trends are affected by a variety of factors, including population growth, housing availability, economic conditions, and prevailing birth rates. However it is generally accepted that growth in population equates to a greater demand for educational services. Under the No Action Alternative, population and housing growth in the subarea would create a demand for additional schools and educational services. Using a factor of .33 students per household based on current demographics, the increase in population and households would generate 1,200.87 students over the 20-year period.

While most of this demand would be for public school services provided by Shoreline School District, not all the projected students would attend public schools; some would attend private schools or may be home-schooled. In addition to increased student enrollment, Alternative 1 population increases would create a higher demand for other types of public school services, such as preschool and extracurricular activities.

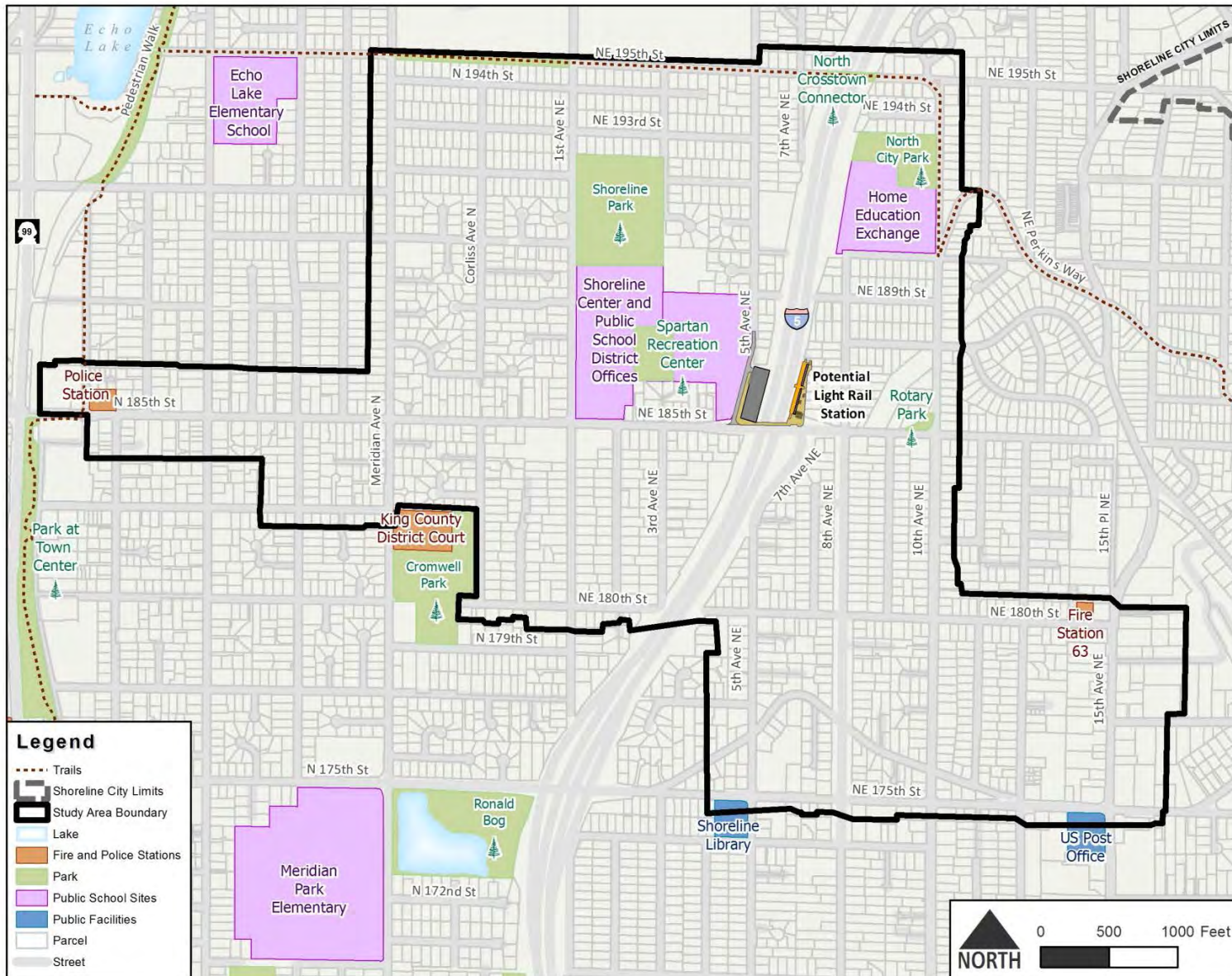


Figure 3.4-1 Public and Community Facilities in the Vicinity of the Subarea

**Table 3.4-1
Public Schools and School District Facilities**

School Name	Grades Served	2013 Enrollment	Location
Preschool/Daycare Centers¹			
Shoreline Children's Center*	N/A		1900 N 170 th Street
Elementary Schools			
Echo Lake Elementary*	K-6	481	19345 Wallingford Avenue N
Meridian Park Elementary*	K-6	450	17077 Meridian Avenue N
Ridgecrest Elementary*	K-6	475	16516 10 th Avenue NE
Briarcrest Elementary	K-6	715	2715 NE 158 th Street
Brookside Elementary	K-6	513	17447 37 th Avenue NE
Highland Terrace Elementary	K-6	433	100 N 160 th Street
Parkwood Elementary	K-6	444	1815 N 155 th Street
Syre Elementary	K-6	523	19545 12 th Avenue NW
Middle Schools			
Einstein Middle School	7-8	700	19343 3 rd Avenue NW
Kellogg Middle School*	7-8	625	16045 25 th Avenue NE
High Schools			
Shorecrest High School*	9-12	1,500	15343 25 th Avenue NE
Shorewood High School	9-12	1,600	17300 Fremont Avenue N

**Table 3.4-1
Public Schools and School District Facilities,
Continued**

Other Facilities

Cascade (Alternative Learning Choice School)*	K-8	145	17077 Meridian Avenue N.
The Shoreline Center*			18560 1 st Avenue NE
Home Education Exchange*			816 NE 190 th Street
Transportation Center			124 NE 165 th Street
Warehouse and Central Kitchen			2003 NE 160 th Street

Notes:

- * These are located in proximity to the subarea (either within or nearby).
- 1 This school is publicly operated by the Shoreline School District. There are several additional privately operated preschools and daycare centers within and in proximity to the subarea including the North City/Shoreline Cooperative Preschool, which is located in the subarea.

While it is not known exactly how this student population would be assigned to various levels in the school system, based on the breakdown in current enrollment (Table 3.4-2), assumptions can be made as to the proportion of potential students per school level. This is an estimation only, as future demographics may be different from current demographics.

From this assessment, it is estimated that of the 1,200.87 new students generated over the period from 2014 to 2035, approximately 591 will be elementary school students, 183 middle school students, and 427 high school students. In comparing these levels to existing enrollment levels in existing schools as a portion of the total enrollment generated citywide

and by Lake Forest Park households, it would appear that these students could be accommodated within the existing school facilities.

Alternative 2 – Some Growth

Under Alternative 2—Some Growth, population and housing growth would create increased demand for school facilities and services, including additional buildings and employees. The population will grow to 17,510, living in 7,296 households in the station subarea. This would be an increase in population of 9,566 people and 3,986 households above current levels in the subarea. Using the .33 students/household factor, approximately 2,408 students would be generated by the anticipated growth. Applying

the proportional factors per school level based on today's demographics, this would equate to 1,185 elementary school students, 366 middle school students, and 857 high school students.

In addition to increased student enrollment, Alternative 2 would create a higher demand for other types of public school services, such as preschool and extracurricular activities, than under Alternative 1.

It is important to consider that full build-out of Alternative 2—Some Growth would not be anticipated to occur by 2035 (as in Alternative 1-No Action). Based on market factors and current population growth trends in Shoreline, this level of growth would be anticipated to occur over many decades, perhaps not reaching build-out levels for 30 to 50 years (or by 2045 to 2065) or beyond.

It is also important to consider the potential influence of anticipated housing types on school enrollment projections. There would be a greater diversity of housing types in the station subarea, including a variety of multi-family and single family attached residences. Traditionally, families with higher ratios of students per household have tended to live in single family residences in the region. However, this trend has been changing and in recent years, with more fluctuation in household sizes. More people are choosing to live in smaller-sized residences including multi-family homes. At the same time, household sizes overall in the US have seen a decline over the last ten years. The factor of .33 students per household being applied in the subarea represents an overall average for all households in Shoreline. While this factor could potentially be less in the subarea with future build-out, it is being applied to this analysis to plan for the

greatest potential. Since Shoreline is a desirable community for families and the school district, the community could tend to attract more families with new and varied housing opportunities.

Given the student populations projected above at the elementary, middle, and high school levels, it is likely that the increased population in the subarea under Alternative 2 would require the need for additional schools and supporting facilities, as well as staff, facility, and ancillary services related to education. Because projected build-out would be expected to occur slowly, over the course of many decades, the school district would be able to monitor growth, plan for, and procure resources for additional facilities and services based on growth trends over the course of many years.

Alternative 3 – Most Growth

Under the Alternative 3—Most Growth, population and housing growth would place increased demands on the school district, creating the need for additional facilities and employees. This increased demand would be substantially higher than under the other two alternatives. The total population would be expected to rise to 37,315 people living in 15,548 households under Alternative 3—Most Growth. This is 29,371 more people and 12,238 more households than under today's levels. Using the .33 students/household factor, approximately 5,131 students would be generated by the anticipated growth. Applying the proportional factors per school level based on today's demographics, this would equate to an estimated 2,526 elementary school students, 780 middle school students, and 1,825 high school students.

In addition to increased student enrollment, Alternative 3 would create a higher demand for other types of public school services, such as preschool and extracurricular activities, than under Alternatives 1 and 2.

As under Alternative 2, it should be noted that full build-out under Alternative 3 would not be anticipated to occur by 2035 (as in Alternative 1—No Action). Based on market factors, property characteristics, and current population growth trends in Shoreline and the region, this level of growth would be anticipated to occur over many decades, not reaching build-out levels for 60 to 100 years (or by 2075 to 2115) or more.

The projected student populations above at the elementary, middle, and high school levels due to increased population in the subarea under Alternative 3—Most Growth would most definitely require the need for additional schools and supporting facilities, as well as staff, facility, and ancillary services related to education. Because protected build-out would be expected to occur slowly, over the course of many decades, the school district would be able to monitor growth, plan for, and procure resources for additional facilities and services based on growth trends over the course of many years.

Mitigation Measures

Background Considerations

In February 2014, two replacement levies were approved to extend financial support for educational programs, maintenance and operations, and technology improvements. These levies would need to be renewed in the future in order for the district

to continue to provide a level of service consistent with current conditions. The voting population has been supportive of school district levies, and it is anticipated (but not certain) that as more households with students move into the district, voters would continue to be supportive of future levies.

Mitigation measures that would address the potential impacts described above follow.

- The school district will continue to monitor growth levels within its service area, including the station subarea and document trends in student enrollment in order to plan, prepare, and secure resources for the addition of facilities and services to serve the growth.
- The school district retains properties for future uses that may be needed. The North City Elementary school site, which is currently not being used as an elementary school, should be retained for future potential school use to serve the growth projected for the subarea. The Shoreline Center also could be redeveloped and with reorganization of site uses, would have space for additional school buildings and facilities.
- For classroom expansion needed on an ongoing basis, the school district owns several portables for siting at impacted schools. If necessary, the school district could purchase or lease more, although this is not a preferred long-term operation scenario.

- The district also has the ability to alter or shift special program assignments to available space to free up space for core programs: gifted programs, special education, arts, activities, and others.
- Boundary adjustments could occur to reallocate the area from which individual schools draw attendance. As completed recently with the high schools, expansion of affected schools, if feasible, without eliminating required playfields or parking, could be a planned improvement to accommodate increases in demand.
- The City of Shoreline does not currently charge impact fees to new development applications for school facilities. The City should coordinate with the Shoreline School District to monitor and determine the potential need for an impact fee program over time. For example, King County charges school impact fees to development projects in unincorporated areas. Impact fees are adopted annually by ordinance following a thorough review by the School Technical Review Committee and the King County Council of the each district's capital facility plan and enrollment projections. Fees vary per school district and are assessed and collected for every new residential dwelling unit. Low-income housing, senior housing, and community residential facilities are exempt from the fee program.

Significant Unavoidable Adverse Impacts

Under any of the three alternatives, population growth and increased numbers of households would create additional demand for public school services and facilities. The anticipated increases in student population would be expected to

manageable since they would occur over several decades. The school district would have the ability to monitor growth in enrollment over time and plan, prepare for, and secure resources to increase the level of services and facilities to serve additional students as needed. Advancements in technology, educational programs, and teaching methods may also play a factor in accommodating the anticipated increases in demand on the public school system.

3.4.2 Parks, Recreation, and Open Space

Affected Environment

The Parks, Recreation, and Cultural Services (PRCS) Department of the City of Shoreline oversees the city's 404 acres of park property and provides recreational opportunities for Shoreline residents and the communities in the surrounding region. The department consists of three divisions: Administration, Parks Operations, and Recreation. From 2010 -2011, the City developed the 2011-2017 Parks, Recreation, and Open Space (PROS) Plan to build a framework for future maintenance and development of Shoreline's parks, recreation, and cultural service programs to serve the community as the population grows, demographics change, and financial situations evolve. The PROS Plan may be downloaded and reviewed for more information at:

<http://www.cityofshoreline.com/government/departments/parks-recreation-cultural-services/projects-and-plans/parks-recreation-and-open-space-plan>

The PROS Plan articulates a vision and goals and policies for the City's parks, recreation, and cultural services program and facilities.

Vision—Provide quality parks, recreation, and cultural services to promote public health and safety; protect our natural environment; and enhance the quality of life of our community.

Goals and Policies:

1. The preservation, enhancement, maintenance, and acquisition of facilities
2. Diverse, affordable community-based recreational, cultural, and arts programs
3. Equitable distribution of resources
4. Partnerships that maximize the public use of all community resources
5. Community engagement in parks, recreation, and cultural service activities and decisions

In order to assess the level of service of existing facilities, the PROS Plan classifies parks and recreation facilities into the following categories:

- Regional Parks
- Large Urban Parks
- Community Parks
- Neighborhood Parks
- Natural Areas
- Special Use Facilities
- Street Beautification

Shoreline's 404 acres of park and recreational lands and facilities fit into these classifications, including passive and active recreation parks, open spaces, natural areas, trails, and recreational facilities, as described in more detail below.

- **Regional Parks:** This park classification serves the City and beyond. These are often large parks and include a special feature that makes them unique. They also accommodate a mixture of active and passive activities and sometimes offer a wide range of amenities. Richmond Beach Saltwater State Park is Shoreline's only Regional Park at 32.4 acres of land. This facility provides a citywide level of service.
- **Large Urban Parks:** These parks serve a broad purpose and population, and can serve neighborhood and community park functions. The focus is on providing a mixture of active and passive recreation opportunities that serve diverse interests. There are two parks in Shoreline with this classification, Hamlin and Shoreview, covering a total of 127.5 acres. A facility of this type provides a citywide level of service.
- **Community Parks:** The purpose of a community park is to meet community based active, structured recreation needs and to preserve unique landscapes and open spaces. They are designed for organized activities and sports, although individual and family activities are also encouraged. Shoreline has seven community parks totaling over 101 acres. This type of facility typically

provides a level of service to populations located within one and a half miles from the park.

- **Neighborhood Parks:** A neighborhood park is a basic unit of the park system that serves as the recreational and social focus of the neighborhood within an estimated 15 minute walking time. The overall space is designed for impromptu, informal, unsupervised active and passive recreation as well as more intense recreational activities. Shoreline has seven neighborhood parks ranging in size from 1.8 – 4.5 acres and encompassing a total of 26.1 acres of land. Neighborhood parks typically serve populations located within one-half mile of the park.
- **Natural Areas:** This category includes areas developed to provide aesthetic relief and physical buffers from the impacts of urban development, and to offer access to natural areas for urban residents. These areas may also preserve significant natural resources, wildlife habitat, native landscapes, and open spaces. These areas typically serve populations located within one-half mile from the area. Shoreline has 11 areas categorized as natural areas, which total 80 acres.
- **Special Use Facilities:** These facilities provide specific purposes, such as an indoor pool, community recreation or civic center, botanic garden, regional or local trail connector. Special use facilities in the subarea include the Shoreline Pool, Spartan Recreation Center, Kruckeberg Garden, and the Interurban and North Crosstown Connector Trails. These types of facilities provide a citywide level of service.

- **Street Beautification:** Street Beautification sites are small areas or street corridors that have been developed in and around the public right-of-way. These sites provide aesthetic relief, enhance pedestrian safety, and provide limited active recreational opportunities. In the subarea, these sites include Rotary Park, Aurora Corridor, and the North City Business Corridor. Small public gathering spaces, such as urban plazas, pocket parks, and parklets may be located along and adjacent to street corridors, particularly with neighborhood redevelopment.

There are more than 17 acres of park land and 40,000 square feet of recreational facilities within the station subarea or in near proximity to it. A portion of the Interurban and North Connector Trail systems are also located in the subarea. Park assets located in proximity to the subarea are described below.

- **Shoreline Park:** This is an 11.6 acre Community Park located in the north central portion of the City in the Echo Lake Neighborhood. There are two synthetic turf soccer fields, a natural wooded area to the north, and the Shoreline Pool. The site is adjacent to the Spartan Recreation Center, the Shoreline Center, and the Shoreline Stadium.
- **North City Park:** This is a 4.0 acre Natural Area located in the northeast portion of the City in the North City Neighborhood. The site is heavily wooded, with walking trails. Development is limited to a circular asphalt trail with an interpretive display and plan identification markers.

- **Interurban Trail:** This trail is the spine of the City's bicycle and pedestrian trail system and provides an important link in the regional trail system. Extending north-south through the city from Seattle to Edmonds and beyond, this trail is a paved, multi-purpose pedestrian and bicycle trail that is located off Aurora Avenue and follows a linear corridor along Seattle City Light property. The trail connects neighborhoods to shopping, services, employment, transportation centers, and parks, and allows for the use of commuters as well as recreational bicyclists, walkers, and joggers. In the city, the entire trail corridor covers 21.2 acres and 3.25 miles of trail. A portion of this trail at N 185th Street and Aurora Avenue N is located in proximity to the subarea.
- **North Crosstown Trail Connector:** This is a 1.8 acre Special Use Facility located in the north end of the subarea along N 195th Street between 1st Avenue Northeast and Meridian Avenue North. It is a grade separated pedestrian and bicycle trail connector to support an east-west connection between the Interurban and Burke-Gilman Trails. This trail aligns with the pedestrian and bicycle bridge crossing Interstate 5 at N 195th Street. The City will be improving bicycle and pedestrian mobility along 195th to extend this multi-modal corridor.
- **Shoreline Pool:** Classified as a Special Use Facility, this 15,375 square-foot recreational pool is located adjacent to Shoreline Park on school district property. Maintained by the City, the building features a six lane, 25 yard pool ranging from four to twelve feet in depth; a six lane, ten-yard shallow section (three-feet in depth); a diving board; and rope swing. The pool is open to the public during posted hours and available for rental for special events.
- **Spartan Recreation Center:** This 25,000 square-foot recreational facility is located adjacent to the Shoreline Center and is used for a variety of Shoreline School District and City of Shoreline Parks, Recreation, and Cultural Services programs and activities. The Spartan Recreation Center is available for drop-in recreation when other programs are not scheduled and can be rented for special events and programs.
- **Rotary Park:** This is a 0.3 acre Street Beautification asset located in the northeast portion of the city in the North City Neighborhood. The site is a small segment of public right-of-way at the northwest corner of N 185th Street and 10th Avenue NE. Site amenities include seating. The City and Parks Board will need to consider the best use for this land, given its proximity to the 185th Street station. One option is retain it as a park and enhance the space with public art. Another is to incorporate it into a future redevelopment project, possibly with the criteria that the park space be replaced elsewhere in the development or nearby.
- In addition to the above park assets, the subarea benefits from being located within service areas of additional Parks, Special Use Facilities, and a Natural Areas located

outside of the subarea boundary, but within near proximity to the subarea. These facilities are described below.

- **Cromwell Park:** This 9.2-acre Community Park is located in the central portion of Shoreline in the Meridian Park neighborhood. In 2010 a major renovation of the park was completed to provide paths, an overlook, and a natural area. Major park amenities included a restroom, amphitheater and stage, play structure and swings, basketball court, stormwater retention features, and a play field.
 - **Brugger's Bog Park:** This Neighborhood Park is located in the northeastern portion of the city. The park is adjacent to Aldercrest School, and has access to Lyons Creek. It is a 4.5-acre park with picnic tables, play structures, swings, and various natural features.
 - **Echo Lake Park:** This Neighborhood Park is 2.4 acres and located in the northern portion of the city on the edge of Echo Lake with a public access area/boardwalk. The area surrounding the park is heavily developed and consists primarily of high-density residential in mixed use buildings (with retail at the ground floor). The Interurban Trail Corridor is on the eastern boundary of the park.
 - **James Keough Park:** Located in the central portion of the city in the Meridian Park Neighborhood, this 3.1-acre Neighborhood Park is adjacent to Interstate 5. Several non-park public facilities are in the vicinity of the park.
- Amenities include play equipment, a soccer field, a basketball court, and a bench.
- **Northcrest Park:** This is Shoreline's largest Neighborhood Park at 7.3 acres. It is located in the eastern portion of the City in the Ridgecrest Neighborhood. The park is heavily wooded and completely surrounded by single family residences. The park is long and linear approximately 300 feet in width by 1,050 feet in length.
 - **Hamlin Park:** This Large Urban Park is 80.4 acres and was recently improved in 2010. With a citywide service area, the park provides a variety of active and passive uses and natural areas.
 - **Ronald Bog Park:** This 13.4-acre Natural Area is located in the central portion of the city in the Meridian Park neighborhood. The focal point of this park is a small pond that serves an important function in stormwater management.
 - **Park at Town Center:** This is a Special Use Facility on 3.6 acres of land. This site is identified as a celebratory park space. Spanning from the west sidewalk of Aurora Avenue N to the east margin of Midvale Avenue N, this is a linear park developed to accommodate major gatherings.
 - **Shoreline Civic Center:** The Civic Center provides a fixed location for citizens to meet, exchange ideas, and explore issues that support and benefit the community. Located at City Hall, this Special Use Facility is adjacent to the

Interurban Trail, the Park at Town Center, and is serviced by major transit routes.

The Shoreline Public School District is an additional resource for neighborhood park amenities and facilities within and surrounding the subarea. Consideration of service from these facilities increases the availability of park assets to the subarea. In the subarea, school recreation facilities include:

- **Echo Lake Elementary**—grass field, play equipment, basketball court
- **Meridian Park Elementary**—grass field, play equipment, basketball court, dirt track, dirt/grass baseball field, tennis courts (2)
- **North City Elementary site**—grass field, play equipment, basketball court
- **Ridgecrest Elementary**—grass field, play equipment, basketball court
- **Kellogg Middle School**—full size turf, track-six lanes
- **Shorecrest High School**—full size turf, track-eight lanes, turf baseball field, discus area (grass), shot put area, tennis courts (4)
- **Shoreline Stadium**—full turf, track-eight lanes, grass discus area, shot put and javelin areas

Other recreation facilities at the Shoreline Center include soccer fields and tennis courts. Other schools outside of the subarea but

in close proximity provide similar types of facilities as those listed above.

Community Interests and the Projected Demand for Additional Parks, Recreation, and Open Space Facilities and Services

During development of the PROS Plan (completed in 2011), a community outreach process was used to identify community needs and inform potential improvements to level of service. The City conducted a Community Needs Assessment Survey. Results of the outreach process and survey are summarized below.

- Park and recreation usage in the community is high.
- Additional restrooms and walking trails continued to be the most desired park improvements.
- While there are a wide range of park and recreation needs, the City of Shoreline is currently meeting most of the needs of the community with paved walking and biking trails, playfields, and new neighborhood park amenities (such as shelters, drinking fountains, playgrounds, and walking trails).
- Deficiencies exist between demand and assets with regard to the community's expressed desire for a new aquatic center and cultural arts facility.
- Community participants believed the future focus should be on improving and maintaining existing facilities and developing proactive partnerships.

- The City of Shoreline has studied how to enhance energy efficiency at the Shoreline Pool since the facility is the largest consumer of electricity of City-managed assets. With a modern building and integrating other uses in more of a multi-purpose recreation center, energy efficiency and public functions could be greatly enhanced. If the Shoreline Center were redeveloped in the future, the City would be interested in partnering with the School District to consider how facilities could be integrated between the two sites. For example, Spartan Gym could be combined in a new facility, built to green building standards, that houses multiple functions including a new pool and other recreation resources.

Level of Service Assessment

The City uses a combination of community participation and review of the classifications and their service areas described above to assess demand. Classifications set the stage for analyzing need (also described as level of service). Level of service is a term that describes the amount, type, or quality of facilities neighborhood parks are served by Shoreline School District sites, which provide neighborhood park amenities, as shown in Figure 3.4-4 (also from the PROS Plan).

that are needed in order to serve the community at a desired and measurable standard. The PROS Plan analyzed level of service based on geographic service area standards for community and neighborhood park classifications. (Neighborhood parks have a 1/2 mile service area and community parks have a 1-1/2 mile service area.) The City's analysis also takes into consideration the inclusion of Shoreline School District property and other community and large urban parks that provide neighborhood park amenities.

Figures 3.4-2 and 3.4-3 from the PROS Plan illustrate community park and neighborhood park service areas in the City of Shoreline. As shown in these figures, all of the subarea is located with community park service areas and portions are located within neighborhood park service areas. Areas of the subarea not specifically served by

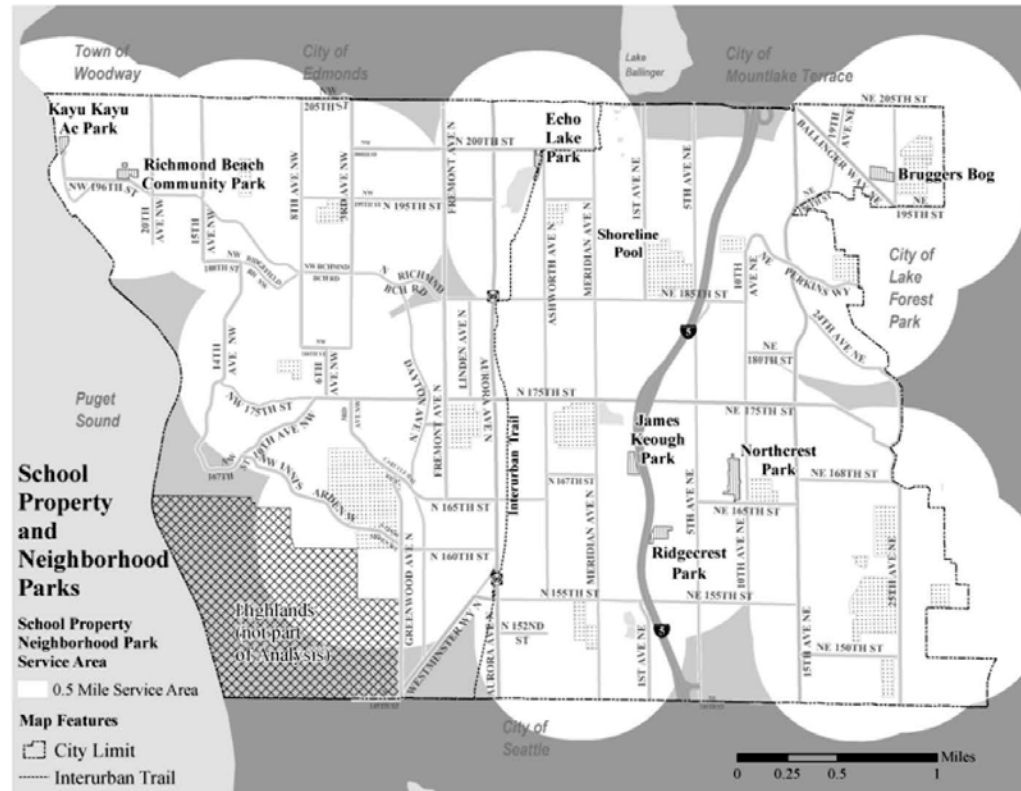


Figure 3.4-4 School District Amenities Service Area

In review of these overlapping service areas, most of the demand for parks and recreation is currently being met by existing facilities. However, the PROS Plan does identify the northeast area of the City as an area of deficiency and indicates that the possible of acquisition of two new park locations at Aldercrest and Cedarbook would help in addressing the deficiency.

In the 185th Street Station Subarea, there is a lack of

neighborhood parks, and while the proximity of schools helps to serve residents’ needs in the subarea, with future redevelopment, there is the potential to develop additional parks that would serve the growing neighborhood.

Planned Improvements and Desired Amenities

The PROS Plan identified the following projects are listed in the six-year capital improvement plan for 2012-2017 that potentially

could include funding of parks and trails in the vicinity of the subarea:

- Parks repair and replacement funding
- Trail corridors
- King County Trails Levy funding

The PROS Plan also identifies potential new facilities, including the following in proximity to the station subarea:

- Open space for park use as part of the Aldercrest annex site and the development of the old Cedarbook elementary school site
- Echo Lake Park—possible parking improvements and park expansion

The PROS Plan identifies desired amenities as capital project ideas that did not have an intended facility/site. Five major amenities were identified as partnership opportunities with other agencies, such as the Shoreline School District and others:

- Aquatic Facility
- Cultural Arts Center
- Environmental Learning Center
- Farmers Market
- Trail Connectors

Other desired amenities identified in the plan include a variety of recreational facilities, such as:

- Basketball courts
- Barrier-free playground
- Community gardens
- Disc golf courses
- Freeride bike parks
- Off-leash dog areas

- Putt-putt golf course
- Pickleball courts
- Signage (directional, entry, interpretive)
- Skate parks
- Spray parks
- Swings
- Tennis courts
- Water trails
- Wi-Fi in parks

The PROS Plan provides 20-year capital improvements recommendations focused on addressing the needs above. The scope of planned improvements to parks and recreation facilities ranges from master planning and conceptualization to design and implementation of improvements. Timing for these projects was categorized in the PROS Plan as short-term, mid-term, and long-term recommendations.

Analysis of Potential Impacts

Alternative 1—No-Action Alternative

Under Alternative 1—No Action, the 2035 subarea population growth would place greater demands on the area parks, recreation, and open space. The population of the subarea is anticipated to increase to 8,734 by 2035 under the No Action Alternative. This compares to a current population of 7,944 people, indicating an estimated population growth of 790 people without any changes to zoning. Today there are 3,310 households in the subarea and this would increase to 3,639 by 2035 under the No Action Alternative, increasing the number of households by 329.

Alternative 2—Some Growth

Under Alternative 2—Some Growth, the changes in zoning would accommodate increased population and housing growth. The increased population would place increased demands on parks, recreation, and open space, creating the need for additional facilities. The population would grow to 17,510, living in 7,296 households in the station subarea. This is an increase in population of 9,566 people and 3,986 households above current levels in the subarea. However, as stated under the analysis for schools, this growth would not be expected to occur by 2035, and likely will take several more decades based on market conditions, regional growth trends, and other factors. Full build-out of the proposed zoning likely could take 30 to 40 years (or by 2045 to 2055) or beyond.

When considering the specific type of facilities the increased population will need, it is important to consider a number of factors, including community involvement, availability of the different classifications of parks and open space, and level of service standards. Community involvement during the subarea planning process has confirmed that residents are interested in ensuring that neighborhood parks and other facilities (playgrounds, public gathering spaces, teen centers, etc.) are available to serve new residents as they move to the area in the future. They are also interested in public art, enhanced streetscapes, and other amenities.

In reviewing the locations of neighborhood parks in proximity to the subarea, there is a baseline need for at least one and possibly two new neighborhood parks to serve the subarea; however, this need is mostly filled by school facilities in the area. In the future,

as redevelopment occurs, and the population grows, Based on traditional National Park and Recreation Association standards, it is advisable to have a neighborhood park serving a half-mile area with population of up to 5,000 people.

Given the addition of 9,566 people to the subarea under the Some Growth Alternative, there would be a baseline demand for two new neighborhood parks. Although some of this demand could continue to be served by neighborhood school facilities, it would be advisable to seek opportunities to develop a new neighborhood park in the subarea to serve the growing population's needs. A neighborhood park could be integrated into the redevelopment of large parcels (such as the Shoreline Center site if it were to redevelop). Neighborhood parks can vary in size, from a few acres to up to 15 acres or more, but one could be accommodated with the redevelopment of the Shoreline Center site and adjacent City property. Given the lack of available land and limited resources of the City to purchase land for development of new parks, dispersed mini-parks and pocket parks, which are smaller (one-half acre or less), and are created as part of new developments in the subarea also could help to serve the demand. Every new development should be required to provide some level of park and open space use for residents.

Alternative 3 – Most Growth

The Most Growth Alternative will create the highest level of demand for parks, recreation and open space facilities. It is estimated that an additional 29,371 people would be living in 12,238 households in the station subarea with the zoning changes. However, as stated above, this growth level would not be expected to be reached for 50 to 60 years or more (by 2065-

2075 or beyond). This additional population would create a baseline demand for approximately six new neighborhood parks in the subarea. Assuming that school facilities would continue to serve part of the demand and given the lack of available land and space for new neighborhood parks, the demand could be served by a smaller number of neighborhood parks (one or two) and dispersed mini-parks, and pocket parks created as part of redevelopment sites.

Mitigation Measures

Background Considerations

A number of park-related projects are currently in the PROS Plan recommendations list and the City's Capital Improvements Plan. The PROS Plan has short-term, mid-term, and long-term recommendations along with community goals during the current planning period. In the future, these recommendations will be reviewed annually and appropriately considered during budgeting of the Capital Improvement Plan. In proximity to the subarea, the current plan recommendations include property acquisition at Echo Lake and master planning and phase 1 implementation of the Shoreline Center. As stated above, it will be important to consider how neighborhood park facilities may be integrated with redevelopment of the Shoreline Center and adjacent City of Shoreline property.

The PROS Plan likely will receive updates in 2017, 2023 and 2029. At those times, the City will reassess the demands and needs and may modify recommendations based on budgeting, available funding, or environmental changes in the City. With those updates, the City should carefully evaluate the level of recent and pending change in the station subarea and make

recommendations for additional park, recreation, and open space facilities accordingly.

In addition to these activities that will help to ensure adequate parks, recreation, and cultural services are provided to the growing subarea, the following mitigation measures would be applicable to the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth.

- City regulations should require dedication of open space by developers building in the subarea. Open space requirements may vary by zone, but the intent would be to create a variety of public spaces capable of connecting the disparate public facilities in the subarea and to other existing facilities located throughout the city. The requirements could be written as incentives, awarding bonus density and height to developers that provide open space and amenities.
- There should be flexibility in the requirements for open space and recreation facilities as part of private redevelopment, so that some of the most-needed facilities can be provided in lieu of a more standard approach where just park space is provided. Developers could select from a list of needed facilities. (See list of needed facilities earlier in this section, on page 3-20.)
- As the City develops capital improvement projects in the subarea, funding should be retained for implementation of public park and recreation facilities that could be accommodated within public rights-of-way or utility easements (in cooperation with the utility providers). For

example, in a conceptual analysis of the potential redevelopment of 8th Avenue NE completed as part of the subarea planning process, it was determined that sufficient right-of-way exists for development of community gardens, pedestrian/bicycle trails, or other features that would be compatible within the Seattle City Light right-of-way.

- The City of Shoreline does not currently charge impact fees to new development applications for parks and recreation facilities. The City should monitor and determine the potential need for an impact fee program over time. Funds from this program would allow the City to purchase property and develop parks, recreation, and open space facilities over time to serve the growing neighborhood.

Significant Unavoidable Adverse Impacts

Under any of the alternatives, there will be an increased in demand for parks, recreation, and open space areas in the subarea. The demand would be substantially higher under Alternatives 2 and 3 than under Alternative 1. As changes in population occur throughout the city, the PROS Plan and the Capital Improvement Program can be referenced to adjust priorities and support accommodation of the needs in the station subarea. The City also will be considering requiring open space dedication (or impact fees in lieu of) and provision of recreation amenities as part of each redevelopment project. Given that the anticipated increases in population would be expected to manageable since they would occur over several decades, the City would have the ability to monitor growth over time and plan,

prepare for, and secure resources to increase the level of services and facilities to serve the population as needed.

3.4.3 Police, Fire, and Emergency Services

Shoreline is known region-wide for the effectiveness of its police force and for programs that encourage troubled people to pursue positive activities and provide alternative treatment for non-violent and non-habitual offenders. Police protection in the subarea is provided by the Shoreline Police Department, King County Sheriff's Office, and Washington State Patrol. The Shoreline Fire Department provides fire protection and emergency medical services to the City of Shoreline. Servicing the community with fire suppression, prevention techniques, public outreach, and plan review and inspection services, they are committed to improving life safety and protection in Shoreline.

Affected Environment

Police Protection

The Police Station was built in 1956 and purchased by the City shortly after incorporation in 1995. The Station is located in the subarea at 1206 N 185th Street. The building is 5,481 square feet, and is constructed of unreinforced masonry that has not been retrofitted to earthquake standards. In 2012, the City initiated a facility feasibility study to analyze potential locations of a new facility. This need was identified during the City's 2009 Hazard Mitigation Planning effort.

As of 2014, there are 52 full-time employees assigned to the Shoreline Police Department. A majority of the officers are in the patrol division; additionally, there is a traffic unit, burglary-larceny detectives, special emphasis team (undercover) detectives, school resource officer, community services officer, professional support staff, sergeants, two captains and a police chief. In 2012, the average response time to emergency calls for service for Shoreline Police was 3.39 minutes compared to the national standard of 5 minutes. Shoreline partners with the King County Sheriff's Office for specialized services, homicide/robbery investigations, SWAT, K9, air support, bomb technicians and other services.

Police services are provided to Shoreline through a year-to-year "City Model" contract with King County in three major areas:

- **City Services:** staff is assigned to and works within the city. In 2012, there were 52 FTEs dedicated to the city.
- **Regional Services:** staff is assigned within the King County Sheriff's Office, and deployed to the city on an as-needed basis (e.g., criminal investigations and special response teams).
- **Communications:** The City contracts with King County for dispatch services through the King County 911 Communications Center.

There are no City-managed jail cells located within the city. The Shoreline Police maintain two holding cells at the Police Station on N 185th Street to detain suspects until they can be transferred to the King or Snohomish County jail facilities.

Special Emphasis Team (SET)—The Shoreline Police Department Special Emphasis Team (SET) consists of one

sergeant and four detectives. All four of the detectives are solely dedicated to the day to day operations of the SET Unit.

The responsibilities of the unit vary and are flexible to address identified crime trends in the city. This unit typically works in a plain clothes (undercover) capacity and drives unmarked cars to enhance surveillance abilities. The SET Unit has received extensive training in surveillance techniques, case development, interviewing techniques, and vice and narcotic investigations.

The Shoreline SET Unit works closely with other neighboring police agencies, local and state federal task forces, and the King County Sheriff's Office on a regular basis. SET detectives follow up on all narcotics and vice related complaints and arrests in Shoreline, and all Narcotic Activity Reports (NARs) generated from citizens.

The SET Unit is also actively involved with the Citizens Academies, Community Landlord Tenant Training, community meetings, and problem solving projects.

Criminal Investigations Unit—The Criminal Investigations Unit is comprised of one sergeant and four detectives. Three of the detectives are responsible for investigation and follow-up on most felony crimes committed in the city, with the exception of homicide/special assault and major accident investigations, which are handled by the King County Sheriff's Office Major Crimes Unit.

The fourth detective works exclusively on fraud and forgery investigations originating in Shoreline. This detective is also assigned on a part-time basis to a Secret Service Task Force. His

participation in this task force brings extra support to the City of Shoreline for any complicated investigations that include counterfeiting of US currency, internet and computer investigations and money laundering cases. Additionally, this detective also investigates Adult Protection referrals for financial exploitation of vulnerable adults in Shoreline.

Community Service Officer—The Shoreline Police Department has one Community Service Officer (CSO). The CSO provides non-law enforcement services to the community, relieving police officers of some tasks that do not require police legal authority.

The CSO's main function is that of community outreach. They are familiar with the various social services in the area and work closely with these agencies to provide needed services to citizens. They also work closely with the courts, domestic violence victims, and the Adult Protective Services concerning our adult vulnerable population.

Active Shooter and Patrol (ASAP) Teams--In the last decade, law enforcement on a national level has experienced a spike in violent, criminal behavior that has targeted vulnerable locations, such as schools, shopping centers, and movie theaters. The Shoreline Police Department has worked hard to develop and implement appropriate tactics by drawing on the expertise of multiple sources. They have designed a program that can be adjusted as needed to fit a wide range of scenarios. One of our highest priorities is their partnership with the school district. The Shoreline Police Department strives to provide a safe environment for students.

Shoreline District Court (Non-City-Managed)—The Shoreline District Court, located at 18050 Meridian Avenue N, is supportive of police services provided to the City through an interlocal agreement with King County. The District Court provides City-managed court services for the prosecution of criminal offenses committed within the incorporated city limits. The District Court serves several other jurisdictions as well.

Police Level of Service

The Shoreline Police department strives to maintain the level of service of 1 patrol officer per 1,000 residents. In 2012 level of service was 0.99 commissioned officers per 1,000 Shoreline residents. The total number of commissioned officers includes full-time dedicated officers, plus officers who work in supervisory or other non-patrol related positions, as well as officers that work in specialty units that are on-call for the city. Although the number of Shoreline's dedicated officers may stay the same from year to year, the number of officers that respond to calls for service can change with the city's needs. Therefore, the number of total commissioned officers can increase or decrease depending on Shoreline's service needs from year to year.

Planned Police Facilities

The Police Department recently closed two storefront neighborhood centers that were staffed by community volunteers. Closing those facilities is associated with future plans to consolidate services into one facility. Scheduled for early 2016, the Police Department will close their precinct at N 185th Street and relocate to the Civic Center on the first floor of City Hall. Long-term plans include constructing a critical and essential

infrastructure building for emergency related equipment, generators, and emergency communication systems.

Requests have been made for patrol officers to have available electric motorcycles that are environmentally friendly and quieter, which is beneficial when patrolling urban areas and parking structures. The department currently plans to maintain an approximate ratio of .85 commissioned officers per 1,000 residents (population) based on the City's adopted level of service standard/policy. The department reports it is currently operating at a ratio of approximately 1 commissioned officer per 1,000 residents.

Fire and Emergency Services

The Shoreline Fire Department is a non-City-managed service providing Fire Protection and Medical Emergency Services across an area slightly larger than the incorporated boundaries of the City of Shoreline. In the 2012 Comprehensive Plan, the Shoreline Fire Department estimated that the population served by the department is approximately 53,000. In addition to the Shoreline Area, the Fire Department provides fire suppression services to Point Wells in Snohomish County on a contractual basis. The Shoreline Fire Department maintains five stations located at 17525 Aurora Avenue N (Station 61), 719 N 185th Street (Station 64), 1851 NW 195th Street (Station 62-Children's Safety Center), 145 NE 155th Street (Station 65), and 1410 NE 180th Street (Station 63). The department also maintains five pumpers, three advanced life support units, three basic life support units, and one ladder truck. None of the stations are located within the subarea, however, Stations 61, 63, and 64 are adjacent to or within close proximity to the subarea.

The Fire Department currently employs twenty-nine full-time firefighter/paramedics who provide professional 24-hour advanced life support services. Station 61 has six command and support staff and no operations officers. Station 63 has a minimum of four staff including one officer, two fire fighters, and one medical service officer. Station 64 provides a minimum staff of eight including one officer and two fire fighters on an engine, two fire fighters on an aid car, two paramedics, and a Battalion Chief. Station 65 has a minimum of three staff including one officer and two fire fighters. In addition, Shoreline Medic One staffs one full-time medic unit serving Northshore, Lake Forest Park, and Bothell.

Emergency medical services make up the largest number of 911-responses. Shoreline Fire Department provides two levels of medical care: Basic Life Support and Advanced Life Support. Firefighter/EMT's (Emergency Medical Technicians) and Firefighter/Paramedics provide a total team approach and provide distinct yet complimentary care.

City of Shoreline Emergency Operations Center (EOC)—The City assumes responsibility of emergency management for their jurisdiction. The City has established its Emergency Operations Center at the Shoreline Fire Headquarters (Station 61) through a Memorandum of Understanding (MOU) signed by the City Manager and Fire Chief. The City supports the equipment needed to operate from the Fire Department's community room. The need for a more permanent EOC was also discussed in the 2009 Hazard Mitigation Planning process. This could potentially be included in the planning for a new police facility, and is considered a "critical facility" during emergencies.

Fire and Emergency Level of Service

The Shoreline Fire department determines their level of service by call volumes defining staffing and station demands and needs. The type of calls and location of the call relates to reliability or availability of the first due station to provide coverage. The department is operating at a very high level of service with about one call/incident for every 8 to 10 people. A typical level of service standard is approximately one call for every 30 people.

Planned Fire Facilities

The Shoreline Fire Department recently completed construction of two new neighborhood fire stations and a training/support services/administrative facility. Future projects are anticipated with expected population growth but specific projects are not currently programmed. Station 63 is most likely to receive improvements since it is one of the older facilities and is designated as the first due station associated with the subarea. Improvements to this facility would provide an increase in response and allow for housing of appropriate equipment and response vehicles.

Analysis of Potential Impacts

Alternative – No-Action

Under the Alternative 1—No Action, population growth and construction of new housing and businesses in the study area would place additional demands on police, fire, and emergency services. Under the No-Action Alternative, the City's population growth would impact fire protection with an estimated total

population in the subarea of 8,734, an increase of 790 people over the current population of 7,944.

For police protection, Alternative 1—No-Action would increase demand for police, fire, and emergency services. Related to police services, if Shoreline Police maintained the level of policy standard ratio of .85 commissioned officers per 1,000 residents, the additional population would require approximately one additional commissioned police officer. Additional impacts may be incurred depending on the involvement and future continued support by the King County Sheriff's Department.

Redevelopment under the No-Action population increase is less likely to include advanced technology to support emergency service and security systems in connection with the dispatch service.

For fire and emergency services, the population increase would equate to an additional 79 to 99 calls/incidents. With the fire and emergency services already under a substantial burden to serve the current population and responding to three times more calls than typical service levels, any increases in population would require additional services and facilities.

Alternative 2—Some Growth

For police protection, with a total population of 17,510 persons projected for the subarea, 9,566 over the current population of 7,944, approximately 8 additional commissioned officers would be needed at build-out. It would be expected that new developments would include modern technology that would likely increase efficiencies within the communication, call,

dispatch services, and security systems related to needs within the subarea.

Fire protection and emergency services facilities, equipment, and staff also would be needed with the increased population. The current rate of one incident call for every 8-10 people applied to the additional population of 9,566 may impact fire protection and emergency services by 957 to 1,196 additional calls per year. Similar to police protection, it would be expected that modern technology incorporated into new medium to high density developments would likely increase efficiencies within the communication, call, and dispatch services related to needs within the subarea.

Given the level of existing services and facilities compared to the potential future demand, additional funding and resources would be needed to support increases in the level of service provided by police, fire, and emergency services.

Under both Alternative 2—Some Growth and Alternative 3—Most Growth, with the building heights and types proposed, there would be a need for the district to evaluate current equipment and vehicles to determine if additional resources would be needed. For example, increased ladder height may be needed, and rescue and evacuation training needs may change.

Because build-out under Alternative 2—Some Growth would be expected to occur very gradually over several decades (30 to 50 years or longer; by 2045 to 2065 or beyond), the service providers would be able to monitor growth in their activities, proactively plan for, and seek funding and resources to adjust services as needed to respond over time.

Alternative 3—Most Growth

For the higher level of population growth projection expected under Alternative 3—Most Growth, at full build-out there would be a much higher demand for fire protection and emergency service facilities, equipment, and staff than under current conditions. Based on current incidents/calls per population, an additional 2,937 to 3,671 calls per year would be expected with the population growth of 29,371 additional people.

Full build-out of Alternative 3—Most Growth would impact the Shoreline Police Department facilities and services by creating an increased demand for approximately 25 additional commissioned officers maintaining the level of service ratio of .85 commissioned officers per 1,000 residents at full build-out.

Given the level of existing services and facilities compared to the potential future demand, additional funding and resources would be needed to support increases in the level of service provided by police, fire, and emergency services.

As with Alternative 2—Some Growth, modern technology incorporated into new medium to high density developments is likely to increase efficiencies within the communication, call, and dispatch services within the subarea benefiting police, fire, and emergency services.

Because build-out would be expected to occur very gradually over several decades (60 to 100 years or longer; by 2075 to 2115 or beyond), the service providers would be able to monitor growth in their activities, proactively plan for, and seek funding and resources to adjust services as needed to respond over time.

Mitigation Measures

- The demand for police protection could be reduced through requirements for security-sensitive design of buildings and Crime Prevention Through Environmental Design (CPTED) principles for surrounding site areas.
- Additionally, provisions of onsite security services could reduce the need for police protection, and revenues from increased retail activity and increased property values could help offset some of the additional expenditures for providing additional officers and response to incidents.
- The Fire Department places a lot of emphasis on fire prevention tactics and community education to reduce unintentional injuries and the loss of life and property from fire, accidents, and natural disasters by increasing public awareness.
- Implementation of advanced technology features into future development could increase response time and improve life safety in emergency situations.
- The increases in households and businesses in the subarea will result in increased tax revenue, which could help to offset some of the additional costs associated with providing increased services and the need for additional facilities related to police, fire, and emergency services.

Significant Unavoidable Adverse Impacts

There would be an increase in demand on police, fire, and emergency services under any of the alternatives, but to more substantial levels under Alternatives 2 and 3. Because the growth under Alternative 2—Some Growth and Alternative 3—Most Growth would be expected to occur gradually, over decades, department and district planning for services and facilities should be able to proactively plan for and keep pace with the growth to allocate resources (staffing, buildings, equipment, etc.). However, there is a concern related to fire and emergency services that funding levels may not be sufficient for the department to maintain the level of service required to respond to increased calls. Police Protection has been able to manage an acceptable industry level of service for years and plans to continue achieving that service standard during population growth. However, increased population or other changes in the community may require alteration of specific unit development within the Police Department or may require changes in support from the King County Sheriff's department or Washington State Patrol.

Adequate funding for provision of services, as well as procurement of equipment and resources would need to be allocated over time to support population growth in the subarea. With this investment it is anticipated that potential adverse impacts would be mitigated, and there would not be significant unavoidable adverse impacts.

3.4.4 Solid Waste Management Services

Affected Environment

City Contracted Services through Recology Cleanscapes

Solid waste, recycling, and food scraps and yard waste collection services in Shoreline are provided under contract with Recology Cleanscapes. Typically the solid waste and recycling services are contracted by the City of Shoreline for a period of seven years, but the contract timeframe can vary depending on the specific service and contracting agency. Residential customers receive curbside garbage collection every week. Recycling and food and yard waste collection occurs every other week. The schedule for collecting recycling is offset from the food and yard waste collection week. Recology Cleanscapes will haul bulky waste items (e.g. refrigerators, sofas, mattresses, etc.) curbside for an additional charge. After collection the solid waste is transported to the King County Recycling and Transfer Station in Shoreline. The food and yard waste is taken to Lenz Recycling Compost Facility in Stanwood, Washington. The recycling materials are transported Recology Cleanscape's own materials recycling facility in Seattle, Washington.

King County Solid Waste Division

A King County Recycling and Transfer Station is located at 2300 N 165th Street. This facility receives solid waste and a variety of recycling materials from the Shoreline community and surrounding cities. The Shoreline Transfer Station accepts large

appliances and fluorescent light bulbs which aren't disposable at other area facilities. Waste consolidated at the transfer station is hauled to the Cedar Grove Regional Landfill in Maple Valley.

Analysis of Potential Impacts

Under all three alternatives, population increase in the subarea would increase demand for solid waste, recycling, and food and yard waste collection services over the course of the time the population reaches build-out levels. Under Alternative 1—No Action, the demand for additional solid waste services would be expected to be minimal, covering the need of 329 additional households and additional businesses in the subarea. Under Alternative 2—Some Growth, an additional 3,986 households, as well as various businesses and other land uses, would develop over time and create increased demand for services in the subarea. Under Alternative 3—Most Growth, an additional 12,238 households, as well as businesses and other land uses would develop over time and create a great demand than under Alternative 2—Some Growth.

As discussed previously in this section, full build-out of Alternatives 2 and 3 would be expected to occur gradually, over many decades into the future. As a contracted public service, the City would need to allocate additional funding to solid waste services to serve the growth in population. It is anticipated that increases in households and businesses in the subarea would result in increased tax revenue, which could help to offset some of the additional costs associated with providing increased solid waste services.

Mitigation Measures

- To reduce construction related waste, the City could require development applicants to consider recycling and reuse of building materials when redeveloping sites, and as part of their application require them to explain what measures are included.
- The City may condition Planned Action applications to incorporate feasible recycling and reuse measures.
- Using solid waste, recycling, and food and yard waste collection storage and container size requirements would mitigate impacts associated with all of the alternatives.
- Currently the City of Shoreline hosts two recycling events typically in the fall and the spring. These events provide a place for homeowners to recycle materials commonly not collected at the curb. With population growth, increasing the number of events per year could mitigate additional demand on the recycling collection vendor.

Significant Unavoidable Adverse Impacts

The three alternatives are anticipated to increase demand for solid waste services due to increased residential and employment population in the subarea. With additional budget allocation to contracted services supported by increased tax revenue from new households and businesses over several decades, the increased demand for services would be addressed. As such, no significant unavoidable adverse impacts would be anticipated.

3.4.5 Other Public Services and Facilities

Affected Environment

City Hall/Shoreline Civic Center/City Services

The Shoreline Civic Center and City Hall are located at 17500 Midvale Ave. N. This is new facility is a 67,000 square feet. LEED Gold certified building with an expected lifespan of 50-100 years located in the heart of Shoreline's Town Center. It offered the ability for the City to consolidate services to one location, and will further that goal to better serve the community by welcoming the new police department precinct in late 2015. City Hall currently includes the Executive, City Clerk, Finance, Administrative Services, Legal functions, Parks and Cultural Services, Engineering, and Planning and Development. City Hall has a count of 135 FTEs. The current level of service for the City calculates to approximately 2.52 employees per 1,000 residents. If the City assumes additional responsibilities in the future, such as jurisdiction over utility systems, this ratio could change with more employees per 1,000.

Historical Museum

The Shoreline Historical Museum is located just outside the subarea at the intersection of N 185th Street and Linden Avenue N. It is managed and operated by a non-profit organization with a mission dedicated to preserving, recording and interpreting the heritage of the historic Shoreline area and its relationship to the Northwest region.

Libraries

The Shoreline Library is a King County District Library located in the subarea at 345 NE 175th Street. It is a 20,000-square-foot facility opened in 1993, replacing the 15,000-square-foot library built in 1975, and offers additional features that the recent previous facility did not include, such as two meeting rooms and two study rooms.

Postal Buildings

A United States Postal Service Office is located in the subarea at 17233 15th Ave. NE. This North City Post Office has full service capabilities for the surrounding community with hours from 8:30 – 5:30 Monday through Friday, and open from 8:30 to 3:00 on Saturdays. The lobby area is open 24 hours for PO Box access, mail drop off, and other self service features.

Human Services

A Washington Department of Public Health Laboratory is located in Shoreline at 1610 NE 150th Street. The location is outside the subarea but provides diagnostic and analytical services for the assessment and surveillance of infectious, communicable, genetic, and chronic diseases, and environmental health concerns to the surrounding community.

Analysis of Potential Impacts

City Services

Under Alternative 1—No Action, the population projection increase of 790 people would require additional city services. Applying the current ratio of 2.52 city employees per 1,000 population, it is estimated that an additional two full time

equivalent (FTE) City employees would be needed to serve this growth.

Alternative 2—Some Growth would increase impacts to the City with necessities for new regulations, planning and development review, and capital projects. The population growth of an additional 9,566 people under Alternative 2—Some Growth would require an additional 24 FTE City employees at build-out.

Alternative 3—Most Growth would bring an additional 29,371 people to the subarea. Based on the City's current level of service ratio of 2.52 FTE per 1,000 residents, this population growth has the potential to require an additional 74 FTE City employees at build-out.

Other Services

All alternatives would increase population in the subarea and require additional public services, including the need for additional historical museum and library services, as well as postal and human services.

For all public services, it is anticipated that increases in households and businesses in the subarea would result in increased tax revenue, which could help to offset some of the additional costs associated with providing increased services and facilities to serve the growing population. Also, because growth would happen gradually over many decades, it is anticipated that the demand could be monitored, planned for, and served in a manageable way over time.

Mitigation Measures

- The City may consider increases in development application review fees to cover costs associated with increased redevelopment activities in the subarea.
- The City should continue to provide outreach and communication to other public service entities listed above to make them aware of the potential for growth over time and the gradual increased demand for services that may accompany the growth.

Significant Unavoidable Adverse Impacts

Under all three alternatives, the subarea is anticipated to experience growth. Under Alternative 2—Some Growth and Alternative 3—Most Growth, substantial levels of growth would be anticipated to occur gradually, over many decades. The City and service providers would have opportunities to monitor growth, update plans, and prepare for and respond appropriately with additional services to accommodate the increased demand. As such, no significant unavoidable adverse impacts would be anticipated.

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3.5 Utilities

This section describes the affected environment, analyzes potential impacts, and provides recommendations for mitigation measures related to utilities, including water, wastewater, surface water, electricity, natural gas, and communications.

3.5.1 Affected Environment

3.5.1 a Water

Service Providers

Two water purveyors offer service in Shoreline: North City Water District and Seattle Public Utilities. Water service in the subarea is split, with Seattle Public Utilities serving the western half, and North City Water District serving the eastern half. A map of the water service area is provided as **Figure 3.5-1**, at the end of this section.

Water Supply

North City Water District

North City Water District along with sixteen other water utility districts purchase water wholesale from Seattle Public Utilities. In January 2012, North City Water District completed a new connection with the Seattle Public Utilities NW regional supply, which draws water from both the Tolt and Cedar River Watersheds. The Tolt Watershed acts as the main water supply for the North City Water District, with the Cedar River Watershed as a newly acquired backup water source.

The Tolt River Watershed is located in the foothills of the Cascades in East King County. It supplies about 30 percent of the drinking water for 1.4 million people in the greater Seattle area. The Tolt Reservoir captures water and snow from the Tolt watershed.

The City of Seattle's Cedar River Municipal Watershed is managed to supply drinking water to 1.4 million people in the greater Seattle Area.

The North City Water District contains seven pressure zones. Half of the subarea is located within the 509 pressure zone, the largest zone within the city. The North City Water district conducted an analysis of water currently available to customers within their system. **Table 3.5-1** contains an analysis of their existing and projected water supply demands for the water source feeding pressure zone 509, and all other zones associated with this source.

As indicated in Table 3.5-1, under the North City Water District's current demand projections, the district will have a deficit of 378 gpm under peak demands for the year 2030. This deficit is due to contractual limitations for water withdrawal rate from the Seattle Public Utilities transmission mains.

According to the North City Water District 2011 Comprehensive Plan, the district does not currently forecast to have a deficiency in source capacity through the year 2030. However, the current Seattle Public Utilities contractual maximum supply rate under minimum supply hydraulic gradient of 2,830 gpm is insufficient to adequately supply the district beginning in 2013.

Table 3.5-1—Water Source Analysis

Year	ERUs ¹	MDD ² (GPM)	FSS ³ Replenishment Rate (GPM)	Source (GPM)		
				Required	Existing/Proposed	Surplus (Deficit)
2011	7,951	1,799	250	2,049	2,004	(45.00)
2013	7,745	1,836	250	2,086	2,010	(76.00)
2016	7,977	1,891	250	2,141	2,019	(122.00)
2030	9,275	2,198	250	2,448	2,070	(378.00)

1. ERU = Equivalent Residential Unit is used to convert commercial units and multifamily dwellings to equivalent single family residential units for water demand forecasting purposes
2. MDD = Max Daily Demand
3. FSS = Fire Suppression Storage

The district’s comprehensive plan identifies three source improvements which will directly affect the subarea:

1. The North City Water District is currently developing an additional supply station (SS4) from the SPU Northwest Sub-Regional System for the 590 Zone at 5th Avenue NE and NE 185th Street (CIP Project #14). The new station will serve as an additional source of supply for the District’s entire system and supply the 590 Zone without pumping. As of the 2011 Comprehensive Plan, this project is currently underway.
2. North City Water District and Seattle Public Utilities are formalizing a contract between the two agencies to address supply from three new supply stations. The two utilities are currently negotiating to address source of supply additions for the North City Water District.
3. The two utilities are negotiating to revise the existing contract to ensure the required source capacity to the North City Water District is contractually available for withdrawal for the future.

Seattle Public Utilities

The Seattle Public Utilities is the primary water purveyor in the area. In addition to the City of Shoreline, SPU services the City of Seattle, and a number of communities and wholesale water purveyors within King County and southern Snohomish County. Seattle Public Utilities current supply estimate is 172 mgd. Based on Seattle Public Utilities Comprehensive Plan, SPU’s source of supply is adequate for demand forecast until 2060.

Water entering the distribution system from the SPU’s water sources is treated at a number of treatment facilities. Current water quality readings are adequate for the water system at various water quality sampling locations. In the future, SPU will be evaluating contract extension options for the Tolt and Cedar Water Treatment Facilities.



Water Storage

North City Water District

The North City Water District owns three reservoirs in the area. The reservoirs contain 6.1 million gallons of water collectively. The largest of the storage facilities contains 3.7 million gallons of water storage. This reservoir directly serves the pressure zone in which the subarea is located. The 2011 North City Water District’s Comprehensive Plan performed an analysis on this reservoir, and determined it has adequate capacity for the 2030 forecasted demand scenario.

Table 3.5-2 contains a summary of the water storage available to the system in millions of gallons (MG) for Equivalent Residential Units (ERU). An ERU is a unit of measure used to equate non-residential or multi-family residential water usage to a specific number of single-family residences. For example, if a system has sufficient physical capacity to serve 100 ERU’s, then that system would have sufficient capability to meet the projected needs of 100 full-time single-family residences. That same system would also be able to serve any combination of customers (residential, customers, etc.) provided the quantity of water used is equivalent to the projected needs of 100 single-family homes (100 ERUs).

Table 3.5-2—Water Storage Analysis

Year	ERUs	Grouped Zone Gross Vol. (MG)	Storage Component Volume (MG)					Effective Volume (MG) ⁵	Storage Surplus (Deficit) (MG) ⁶
			Dead Storage ¹	Standby Storage ^{2,4}	Fire Suppression Storage ^{3,4}	Equalizing Storage	Operational Storage		
2011	7591	3.7	1.93	2.59	1.08	0.14	0	1.77	(0.96)
2016	7977	3.7	0	2.72	1.08	0.16	0	3.7	0.82
2030	9275	3.7	0	3.17	1.08	0.23	0	3.7	0.3

1. Dead Storage includes the stored volume that is not available to all customers at a minimum design pressure. The construction and operation of the North City Pump Station will make use of the dead storage in the 3.7 MG reservoir.
2. Standby Storage determined by Department of Health (DOH) recommendation to provide storage for two days of the system’s average day demand (ADD). DOH recommends at a minimum, 200 gallons/ERU.
3. Fire Suppression Storage is a volume available at a minimum pressure of 20 psi to all customers and includes the volume consisting of the highest minimum required fire flow rate and duration.
4. Standby and Fire Suppression Storage are consolidated (nested).
5. Effective Volume is the total volume of the reservoir less any dead storage.
6. Storage Surplus is the Effective Volume, less the larger of the Standby and Fire Suppression Storages, less the Equalizing Storage.

Table 3.5-2 shows a current storage deficiency for the year 2011. According to the North City Water District's 2011 Comprehensive Plan, the District is currently in the process of bringing another permanent source of supply online. When this occurs, the required standby storage for the North City Water District will reduce significantly and the district will have storage in excess of that required by the Washington State Department of Health (DOH), according to the North City Water District's expected growth forecast.

In addition to the reservoirs, The North City Water District contains seven pressure zones. The subarea is located within the 509 pressure zone, the largest zone within the city. Two booster pumps supply water to the system, and work in conjunction with the 3.7-million-gallon reservoir. The Tolt Booster Station 1 has a capacity of 2,000 gpm with alternating pumps, and Tolt Booster Station 2 has a capacity of 2,300 gpm with alternating pumps.

Work is underway to install a third booster pump, Supply Station 4, to provide 2,750 gpm of additional water capacity to the system. With all three booster pumps and the 3.7-million-gallon reservoir, the District projects to have adequate water storage capabilities for the forecasted demand of 2,448 gpm in year 2030. However, these pump stations will be limited by the contractual maximum withdrawal rate of 2,070 gpm between the North City Water District and the Seattle Public Utilities for the prospective pressure zones.

Seattle Public Utilities

The Seattle Public Utility District owns and operates a number of water storage facilities within the City of Shoreline. The subarea is primarily serviced by the Lake Forest Park open reservoir, which

contains 60 million gallons of available water storage. A \$31-million project was completed in 2002 to cover the Bitter Lake and Lake Forest reservoirs, both of which serve areas within the Shoreline city limits. Seattle Public Utilities is currently in the process of replacing a number of existing surface reservoirs with underground structures. In 2020, the floating covers on Bitter Lake and Lake Forest Park Reservoirs will be evaluated for their remaining service life and possible replacement.

Modeling of the water conveyance system has verified that the Lake Forest Park reservoir is currently adequately sized for the population. No upsizing of the reservoir is projected in the near future.

Water Distribution

North City Water District

According to the North City Water District's Comprehensive Plan, over 50 percent of the District's mains were installed between 1966 and 1968. The North City Water District's distribution and transmission main inventory identified approximately 10 percent of their network as 4" mains or less, 54 percent as 6" mains, 35 percent as 8"–12" mains, and less than 3 percent as larger than 12" mains. In order to ensure adequate fire flow within the system, when a new development is constructed, they are required to upsize all public water mains adjacent to their development to a minimum 6" diameter to provide adequate fire suppression.

The majority of water mains within the North City Water District's portion of the subarea are 6" diameter mains. A series of 12"

mains run along 12th Avenue NE, from NE Serpentine Place to NE 180th Street, then north along 10th Avenue NE. A 10” diameter main crosses I-5 and runs down 5th Avenue NE, servicing a small number of customers on the west side of I-5. No mains within the North City Water District portion of the subarea are less than 6” in diameter.

Seattle Public Utilities

Pipe diameter ranges from 2” distribution mains to 30” transmission mains within the subarea. Within the Seattle Public Utilities region of the subarea, there are 7,200 feet of water mains less than 6” in diameter, 23,800 feet of water mains between 6” and 12”, and 10,300 feet of water mains greater than 12”. A 30” water transmission main runs along NE 185th Street, between the primary 66” supply main from the Lake Forest Park water reservoir and Aurora Avenue N.

Current Demand for Water

Residential water demand is based on a survey generated by Seattle Public Utilities regarding wholesale water customers. The study included the Shoreline Water District (North City Water District) residential demand per household. A comparison of residential water demand for the North City Water District, Seattle Public Utilities District, and Seattle’s Wholesale customers is shown in **Table 3.5-3**

Note that water service to individual parcels is typically measured in gallons per day (gpd), while fire flow is calculated in gallons per minute (gpm).

Table 3.5-3—Water Consumption Analysis

	2005	2006	2007	2008	2009	2010
Shoreline Water District	169	163	177	169	171	171
Wholesale Average	197	200	193	179	193	164
Seattle	157	162	145	140	145	145

For the purposes of this analysis, the average water consumption of 171 gpd per single family residential household will be used for the residential demand calculations. Commercial water use is based on a 2013 study completed by Pacific Institute. Based on the study, the average commercial water use per employee per day is 127 gpd (including landscaping and maintenance water use purposes).

With these demand figures, the North Creek Water District supplies 381,354 gpd of water during peak season operations, and Seattle Public Utilities supplies 368,552 gpd. The total estimated demand on the system under current conditions is 749,906 gpd.

Fire Flow

According to Seattle Public Utilities (SPU), all fire hydrants were tested in their section of Shoreline in 2012. The “Modeled ADD Fire Flow in Shoreline August 30, 2012” map depicts the available fire flow in the SPU region of the city. According to the map, the subject area is within the 590 pounds per square foot pressure zone. Current fire flow for the area ranges in pressure from 2,000 gpm to over 4,000 gpm. Two fire hydrants within the subarea

currently operate between 1,000 and 2,000 gpm. An area south of the subarea on N 175th Street contains nine hydrants operating with a flow between 1,000 gpm and 2,000 gpm.

3.5.1.b Wastewater

Service Provider

The City of Shoreline is served by the Ronald Wastewater District. Currently, the City of Shoreline is in the process of assuming the Ronald Wastewater District, which will make the wastewater system a municipal utility, owned and operated by the City.

The subarea is located within five sewer drainage basins, and contains two lift stations and two overflow valves all served by the Ronald Wastewater District. The majority of the wastewater flows to the southeast through a series of pipes ranging from 15" to 30" in diameter. A map of the wastewater lines in the subarea is provided as **Figure 3.5-2** at the end of this section.

Wastewater Treatment Facilities

Wastewater collected from the Ronald Wastewater District is treated at two separate treatment facilities, King County's West Point Treatment Plant and the City of Edmonds Treatment Plant.

King County's West Point Treatment Plant treats wastewater from homes and businesses in Seattle, Shoreline, North Lake Washington, North King County, and parts of South Snohomish County. The treatment plant treats 90 million gallons per day (mgd) of sewage during the dry months, and up to 440 mgd during the rainy season. The Ronald Wastewater District currently pays King County based on the number of residential

customer equivalents within the district, which are tributary to the West Point Treatment Plant. There is currently no cap on the amount of wastewater the Ronald Wastewater District is allowed to discharge to the West Point Treatment Plant. Currently an estimated 3.82 mgd of wastewater is transported from the Ronald Wastewater District to the West Point Treatment Facility.

The City of Edmonds Wastewater Treatment Plant treats wastewater from the cities of Edmonds, Mountlake Terrace, and Lynnwood; as well as parts of King County; Olympic View Water and Sewer District; and Ronald Wastewater District. On average, the City of Edmonds Wastewater Treatment Plant treats 5.6 mgd of wastewater. The District pays the City of Edmonds based on the actual volume of wastewater discharged to the Edmonds Treatment Plant. Due to monitored flow rates, Ronald Wastewater District pays not only for customer wastewater generation, but also infiltration and inflow (I/I) that leaks into their system from high groundwater tables and unmonitored connections within the system. On average the Ronald Wastewater District discharges 0.33 mgd of wastewater to the Edmonds Treatment Plant and has a treatment capacity daily limit of 0.861 mgd.

Water Reclamation

Reclaimed wastewater is a way to reduce wastewater discharge, as well as reduce potable water demand. Using reclaimed water preserves drinking quality water for direct use and keeps water continually recycling for new uses. It is a drought-proof source of water available on a year-round basis. Using reclaimed water saves taking water out of aquifers, rivers and lakes, which means more water is available for fish, wildlife, recreation, and drinking. In addition to being a tool to help extend our water supply,

reclaimed water is an important mechanism for improving water quality and reducing discharge of treated wastewater into Puget Sound and other sensitive areas. Treated wastewater effluent can be distributed back to the communities for non-potable uses, such as industrial water use, landscaping, and flushing toilets. Treated wastewater is never reused for drinking purposes.

Nationally, reclaimed water is transported through a network of “purple pipes”. The cost of building infrastructure to move water from reclaimed water plants to customers is one of the most significant challenges to the distribution and use of reclaimed water. Legislative approval is needed for an expanded grant program to fund reclaimed wastewater treatment and transportation.

Reclaimed water was introduced into the King County wastewater treatment system for on-site industrial processes and landscape irrigation at two wastewater treatment plants in 1997. King County’s current reclaimed water program produces 284 million gallons of Class A reclaimed water per year at these two regional wastewater plants. A portion of the wastewater produced within the subarea is transported to The West Point Treatment Plant, which has the potential to produce up to 0.70 mgd of Class A reclaimed water from an average capacity of 133 million gallons per day.

Seattle Public Utilities performed a study on the viability and cost analysis of installing a new and much larger reclaimed water distribution system from the Brightwater Treatment Facility, which went online in 2011. The analysis examined the benefits and disadvantages of installing reclaimed “purple pipes” to facilities in North Seattle and Shoreline. The study analyzed

potential commercial customers which could benefit from reclaimed water. The study identified 60 potential reclaimed water customers divided into five categories within the North Seattle and Shoreline communities:

Golf Courses	4
Cemeteries	7
Parks	19
Schools	20
<u>Other</u>	<u>7</u>
Total	60

It was estimated that the full life-cycle cost of building and operating a distribution system to deliver reclaimed water from the Brightwater Treatment Facility to potential customers in North Seattle and Shoreline would be about \$109 million.

The potential benefits of this reclamation project were found to be minimal. Calculations showed that the project would reduce peak season demand from Seattle’s regional water supply system by up to 0.7 mgd. By itself, this amount is too small to have a detectable positive impact on regional water supply, reliability, or environmental conditions in the Cedar River and Tolt River. The project would reduce the peak season withdrawals of self-supplied irrigators from their own local supplies by up to 1-mgd. This might provide small improvements in habitat conditions for several streams in the area, though it would not be expected to result in significant increases in biological productivity. The project would reduce the discharge of pollutants from King County treatment plants into Puget Sound by about 0.04 percent to 0.05 percent.

Although the analysis determined that a purple pipe distribution system would not be cost effective to serve a large number of relatively small customers, dispersed over a large area, as areas redevelop, this type of system could become more cost effective. Other alternatives are currently being pursued to minimize wastewater discharge and reduce water consumption in the area. Currently, the two existing water reclamation facilities are the only facilities in operation. There could be the potential to introduce future water reclamation facilities within the King County wastewater system. However, this is not currently being actively pursued.

The City of Shoreline should coordinate with service providers to monitor advancements in water reclamation systems regionally on an ongoing basis in the future, and to determine opportunities to use these systems with new development/redevelopment as feasible. The potential to convert existing systems also should be evaluated with advancements in the use of this technology in the region over time.

Wastewater Collection Systems

The subarea contains 80,700 feet of mains between 6” and 12”, 370 feet of mains larger than 12”, and 3,200 feet of sewer mains of undetermined diameter.

The primary sewer basin collects wastewater flowing south, concentrating the flow along NE Serpentine Place to NE 175th Street. The network of pipes that connects to this discharge point ultimately connects to the King County’s West Point Treatment Plant further down the system.

The second main discharge location is to the north along 5th Avenue NE. The network of pipes that connects to this discharge point ultimately connects to the City of Edmonds Wastewater Treatment Plant.

Currently, the use of gravity systems is the preferred collection and transportation system for sewer. The Ronald Wastewater District contains primarily gravity sewer mains within the subarea. However, due to topography, a few areas within the subarea are serviced by sewer lift stations. **Table 3.5-4** contains a summary of the sewer lift stations currently servicing a portion of the subarea.

Table 3.5-4—Ronald Wastewater District Lift Stations

Station #	Location	Pump Type	GPM @ Head
8	1208 NE 201st St	Wetwell/Drywell w/ Standby generator	100 gpm @ 39 ft
14	343 NE 178th St	Wetwell/Drywell	240 gpm @ 37 ft
15	18349 10 th Ave NE	Wetwell/Drywell	550 gpm @ 120 ft

Current Demand

The wastewater demand for the City of Shoreline is based on a study performed by CHS Engineers, LLC for the Ronald Wastewater District’s 2010 Comprehensive Plan. Residential wastewater generation is estimated at 85 gpd per person.



Commercial wastewater generation is estimated at 187 gpd per Equivalent Residential Unit (ERU) with 2.4 employees per ERU. Based on these generation quantities, the average daily wastewater demand within the subarea under current conditions is estimated at 788,063 gpd.

3.5.1 c Surface Water

Service Provider

The City of Shoreline owns and maintains its own surface water collection system. The 2005 City of Shoreline Surface Water Master Plan, outlines the surface water maintenance and repair program adopted by the City.

Drainage Basin

The City of Shoreline contains seven drainage basins, to which surface water facilities discharge. The subarea drains to two of these drainage basins.

Thornton Creek

The south and western half of the site drains to the Thornton Creek Basin. The Thornton Creek Basin drains approximately 2,418 acres in the southeast quarter of the City of Shoreline. The basin is almost completely developed, with only about 3-percent of the basin remaining as vacant or open space. Land use in the basin is primarily single-family residences and roads. Commercial areas are the next most prevalent land use type, followed by institutional uses. Currently, there is a relatively small amount of multifamily use or apartments. Since I-5 intersects this basin, it and the resulting connector streets and on/off ramps contribute a large volume of impervious surface runoff to the basin.

The Thornton Creek drainage system contains primarily piped and channeled surface water conveyance, within the City of Shoreline. There are very few natural water courses remaining in the upper basin due to development. Many wetlands and hydraulically sensitive areas have been altered or filled in this drainage basin, dating back to the 1950's and 1960's. Very few natural infiltration or surface water storage facilities remain in this basin to assist with peak flow demands.

Over the years, urbanization of the drainage basin without mitigation to address runoff impacts has increased erosion and sedimentation within the creek, due to increased peak flows. This includes activities such as building homes without adequate drainage systems, filling in drainage ways, and construction without sufficient erosion control measures.

The subarea drains into two of the main sub-basins for Thornton Creek. The majority of the subarea portion that discharges to Thornton Creek ultimately discharges to Ronald Bog. The north branch of Thornton Creek's main stem begins near the intersection of 180th Street and Corliss Avenue. This drainage flows through piped water courses into Ronald Bog, a 7.7-acre pond that was previously a peat bog. Outflow from the pond is regulated by a 30-inch diameter pipe extending over 1,000 feet. This pipe is at a reverse grade and contributes to flooding into the area immediately south of Ronald Bog.

The remaining southeastern portion of the subarea, which discharges to Thornton Creek, ultimately discharges to Littles Creek. Littles Creek flows south along the east side of I-5 to Thornton Creek. The tributary originates as a piped system near NE 174th Street and 14th Avenue NE, near the southeastern corner

of the subarea. This sub-basin collects drainage from mostly residential areas. A retention pond with a pumped overflow at the southwest corner of 170th Street NE and 15th Avenue NE drains to Littles Creek. A piped water course carries drainage from Paramount Park to the tributary. The tributary then passes through the Paramount Park Open Space, which has a 6.9-acre wetland system and two open water ponds.

McAleer Creek

The north and eastern half of the subarea drains to McAleer Creek. Within the City of Shoreline, surface water enters McAleer Creek Basin in three ways: through a piped network of tributaries to Echo Lake, which in turn drains into Lake Ballinger; through piped networks discharging directly into Lake Ballinger; and through piped networks discharging to either McAleer Creek or one of its tributaries. The portion of the McAleer Creek Basin within the city totals approximately 1,322-acres. Land use in the McAleer Creek Basin is predominantly residential, although there is a moderately large commercial/industrial section along the Aurora Avenue N corridor. There are small areas of schools, parks, open space, and a cemetery which drain into McAleer Creek. Roads make up the largest impervious area in the basin.

The headwaters of McAleer Creek begin in the Hall's Creek and Echo Lake watersheds, both of which drain into Lake Ballinger. McAleer Creek begins at Lake Ballinger's outlet and flows through the City of Mountlake Terrace, the City of Shoreline, and the City of Lake Forest Park. The main stem of McAleer Creek enters the City of Shoreline in the area enclosed by the south cloverleaf off-ramp for Interstate 5 at NE 205th Street and exits the city just downstream of NE 196th Street.

McAleer Creek passes beneath NE 205th Street through a 4-by-6-foot box culvert. The creek flows approximately 300 feet in an open water course before entering a culvert beneath the south cloverleaf off-ramp for Interstate 5. Downstream of the south cloverleaf, the stream flows 24 feet before entering a 72-inch diameter culvert beneath Forest Park Drive NE. Downstream of Forest Park Drive NE, the stream gently meanders approximately 1,500 feet to a 4-by-4-foot box culvert beneath 15th Avenue NE. At this point, the west tributary flows into the main stem just upstream of the 15th Avenue NE box culvert. From there, the creek continues its course until it reaches the McAleer Creek Regional Detention Pond on the north side of NE 196th Street and approximately 500 feet east of 15th Avenue NE.

The McAleer Creek Regional Detention pond is controlled with a sluice gate at the upstream end of the dam. The pond's maximum surface area is 1 acre and it extends 550 feet upstream of NE 196th Street in a natural ravine on McAleer Creek.

After exiting the pond, McAleer Creek flows through a 12-by-8-foot box culvert under NE 196th Street, where it leaves the City of Shoreline and enters the City of Lake Forest Park. The channel section in this area transitions gradually from a manicured residential channel to a natural ravine. The main stem of McAleer Creek then flows through Lake Forest Park and empties into Lake Washington.

The subarea drains into four of the main sub-basins for McAleer Creek. The northern section of the subarea drains into the west tributary of McAleer Creek. The west tributary drains the Interstate 5 corridor and west basin south of NE 205th Street. The west tributary follows along the west side of 6th Avenue NE as an

open water course. It remains open, running east along NE 200th Street, until it enters a culvert just west of I-5. The tributary remains piped for approximately 1,500 feet and daylights just before its confluence with the main stem. The west tributary drainage enters the main stem in an open channel upstream of 15th Avenue NE.

The eastern section of the subarea drains into two sub-basins. A portion discharges into Brookside Creek. Brookside Creek drains into McAleer Creek just downstream of NE 178th Street in the City of Lake Forest Park. At the Brookside Elementary School in Lake Forest Park, the tributary divides into west (Hillside Creek) and south (Brookside Creek) forks. The Basin Characterization Report states that it is not evident in the field whether either fork extends into the City of Shoreline (Tetra Tech/KCM 2004d).

The other portion discharges into Whisper Creek. Whisper Creek (also called Cedar Brook Creek) enters McAleer Creek from the west, out of a ravine approximately 200 feet downstream from Perkins Way near NE 185th Street. Segments of the creek lie inside Shoreline's city limits. The total length of the segments in the city is approximately 1,300 feet. Predominantly spring-fed from five major sources within the Shoreline city limits, the tributary potentially offers, for its size, the best continuous clean water source, cover, and substrate in the basin, and contributes to good water quality in the lower main stem of McAleer Creek.

The western corner of the subarea along N 185th Street, from Stone Avenue N to Aurora Avenue N (Hwy 99) enters the Echo Lake Drainage sub-basin. Echo Lake is in the western portion of the McAleer Creek Basin. Echo Lake has a year-round open water area of approximately 13 acres. The outlet stream from the lake,

beginning at the lake's north end, flows north to Lake Ballinger (outside the City), which in turn outlets into McAleer Creek. The outlet of the Echo Lake is piped until passing beneath North 200th Street. North of the street crossing, the drainage is highly confined as it flows through an open water course surrounded by a commercial development to the west and residential neighborhood to the east. The primary inlet to the lake is a pipe entering at the south end that drains an area extending west of Aurora Avenue N.

Surface Water Treatment Facilities

There are a number of treatment facilities and detention facilities within the subarea. Surface water infiltration occurs within a few of the parks within the subarea. The largest infiltration area is in Shoreline Park (owned by the City of Shoreline) and the soccer fields at the Shoreline Center (owned by the Shoreline School District).

Surface Water Collection Systems

Table 3.5-5 summarizes surface water facilities maintained by the City of Shoreline, from the City's Surface Water Master Plan.

Within the subarea, there are approximately 11,500 feet of surface water pipes less than 8" in diameter, 64,500 feet of surface water pipes between 8" and 18" in diameter, and 5,900 feet of pipes larger than 18-inches in diameter.

Although the City has only been incorporated since 1995, the area encompassed by the city was largely developed in the 1960s and 1970s. Consequently, the age of the majority of the City's surface water infrastructure is greater than 40 years.

Table 3.5-5 Surface Water Drainage System Infrastructure

Drainage System Component	Estimated Quantity	Unit
Surface water pipe	500,000 (95)	LF (Miles)
Catch Basins	5,500	Each
Ditches	180,000 (34)	LF (Miles)
Outfalls (to open water courses)	60	Each
Outfalls (to Puget Sound)	Unknown	Each
Retention and Detention Facilities Maintained by the City	95	Each
Retention and Detention Facilities (privately maintained)	219	Each
Lift Stations	2	Each

Since the life expectancy of this type of infrastructure (pipes and catch basins), is estimated at 50 years, the majority of the surface water infrastructure in the city is at or approaching its useful life expectancy.

The majority of pipes within the subarea are concrete, with a number of corrugated metal pipes south of NE 180th Street, and east of I-5. Many of the streets within the subarea currently do not possess pedestrian facilities or curb and gutter. Many of these streets contain a combination of drainage ditches and culverts for surface water collection. The majority of ditches within the subarea are along 5th Avenue NE, NE 194th Street, and NE 195th Street. If pedestrian improvements are made to these streets, the majority of these ditches will become piped.

Current Demand

The conveyance system was analyzed based on a 25-year storm event, in relation to percent impervious surface area for the subarea under current conditions versus proposed improvements. In order to assess stormwater runoff generation within the subarea, this analysis references the Seattle Public Utilities methods for computing stormwater fees for residential units within the City of Seattle and neighboring communities, based on average lot size and type of development. The study determined the amount of stormwater reaching the municipal surface water collection system for a customer class.

Table 3.5-6 depicts the percentage of impervious surface area for residential homes, based on size.

Commercial and institutional development was analyzed based on the assumption that the majority of these developments will have similar impervious surface areas to very heavy residential units. Under this assumption the average runoff factor would be 0.76 (76 percent impervious).

The City of Shoreline's surface water conveyance system was analyzed using the Rational Method, based on a 25-year storm event, and the percent of impervious surface area for each zone. Calculations by area (in acres) were multiplied by the applicable average runoff factor in Table 3-5.5 for each zoning/density type. (Example: R-6 zone = 7,000 to 10,000 square foot lots, and has an average runoff factor of 0.48.)

Table 3.5-6—Impervious Surface Area for Residential Homes

Small Lot Residential

Class	SF	% Impact	Avg. Runoff Factor
Tier A	<3,000	N/A	0.65
Tier B	3,000 to < 5,000	N/A	0.53
Tier C	5,000 to < 7,000	N/A	0.51
Tier D	7,000 to < 10,000	N/A	0.48

General Service/Large Lot Residential

Undeveloped	Regular	0-15%	0.18
	Low Impact	0-15%	0.31
Light	Regular	16-35%	0.32
	Low Impact	16-35%	0.41
Moderate	Regular	36-65%	0.43
	Low Impact	36-65%	0.53
Heavy		65-85%	0.66
very Heavy		86%-100%	0.76

Assumptions were based on Chapter 3 of the 2009 King County Surface Water Design manual, a 24-hour precipitation factor of 2.6 based on current 25-year isopluvial maps, and an average runoff time of concentration of 30-minutes. Surface water runoff rates were based on the following calculation: Total Flow = Runoff Factor x Area (acres) x 2.6 (25-year storm precipitation amount in inches) x 0.29 (peak runoff factor for a 30-minute time of concentration – Equation 3-4 of the 2009 King County Stormwater Design Manual).

The total estimated runoff from the subarea, under existing conditions is 224.70-cubic feet per second (CFS), from the 25-year storm event.

3.5.1 d Electricity

Electricity is supplied by Seattle City Light. The Seattle City Light service area includes all of the City of Seattle, portions of the cities of Burien, Tukwila, SeaTac, Shoreline, Lake Forest Park and Renton, as well as portions of unincorporated King County.

Electricity Sources

Seattle City Light obtains energy from a mix of sources. Table 3.5-7 shows the distribution of energy sources used by Seattle City Light.

Table 3.5-7 Energy Sources Used by Seattle City Light

Generation Type	Percentage
Hydroelectric	89.8% (50% from the Skagit and Pend Oreille Rivers)
Nuclear	4.4%
Wind	3.9%
Coal	0.8%
Landfill Gases	0.5%
Other	0.6%

Transmission Corridor

The transmission corridor servicing the City of Shoreline runs southeast through tracts and easements through Snohomish County until it reaches NE 185th Street, within the City of Shoreline. At NE 185th Street, the transmission corridor turns due south and runs parallel to 8th Avenue NE, adjacent to the eastern edge of the subarea. The transmission corridor continues to parallel 8th Avenue NE, as it connects into its main service area within the City of Seattle.

Distribution Network

Seattle City Light does not provide service area maps of their distribution network. The distribution network within the subarea is currently a mix of overhead and underground facilities. The majority of the area is serviced by overhead electricity lines, which share the space with telecommunication networks within the area. Typically transferring electricity lines from overhead to underground occurs only when either building setbacks are too tight to allow overhead lines, new developments pay for undergrounding within their development area, cities undertake capital improvement projects (CIPs), or neighborhoods agree to pay for underground improvements. There is current work being done to underground a large portion of lines between NE 145th Street and NE 205th street, along Aurora Avenue N.

Current Demand

Current demand projections are based on a study prepared by the US Energy Information Administration. In 2009, a nationwide survey was conducted, depicting residential energy usage for different demographics throughout the United States. According to the survey, residents in Washington used on average 5 percent

less electricity per capita than the average for all Pacific Coast users. Based on an average 2.4 persons per household, the average household uses 31.84 million British Thermal Units (BTUs) per year. This equates to 87.23 thousand BTUs per household per day. The total residential demand currently projected on the system is 693 million BTUs per day.

Commercial energy demands were based on a US Department of Energy survey of various commercial, government, and institutional building usage types. **Table 3.5-8** presents a summary of the information.

**Table 3.5-8 US Department of Energy Survey on Energy Demand
Commercial Sector Energy Consumption, March 2012**

Building Type	Thousand BTUs/SF/Year
Health Care	345.9
Food Sales	535.5
Lodging	193.1
Office	211.7
Mercantile	223.6
Education	159
Service	151.6
Food Service	522.4
Religious	77
Public Order	221.1
Warehouse	94.3
Public Assembly	180
Vacant	33.1
Other	318.8
Average	233.36

Based on these figures, the average annual energy use for commercial developments is 233.36 thousand BTU/SF of space per year, or 0.64 thousand BTU/SF per day. The total daily commercial energy demand, based on four office workers per 1,000-square feet is 231 million BTUs per day. The total estimated demand on the system within the subarea is 924 million BTUs per day.

3.5.1 e Natural Gas

Puget Sound Energy provides natural gas service to the residents of the City of Shoreline. The City maintains a franchise agreement (Ordinance #308) with Puget Sound Energy through October 31, 2017.

Sources

Puget Sound Energy purchases natural gas from other regions and manages the distribution of natural gas to customers within its service area. They regulate pressure, and develop and maintain distribution lines within their service areas.

PSE purchases 100 percent of the natural-gas supplies needed to serve its customers. About half the gas is obtained from producers and marketers in British Columbia and Alberta, and the rest comes from states in the Rocky Mountains.

After purchasing natural gas, PSE controls its gas supply by storing gas in large underground facilities, and withdrawing gas in the winter when customer usage is highest. PSE co-owns the largest natural gas storage facilities in the Pacific Northwest in Jackson Prairie, Washington. The storage facility can hold about 44 billion cubic feet of natural gas, and can meet up to 25 percent of the

Pacific Northwest's peak demand on the coldest days in winter. PSE also stores 12.9 billion cubic feet of natural gas in a facility in Clay Basin, Utah. From these storage facilities, PSE transports gas through main pipelines to its service areas in the Puget Sound region, where it is distributed to customers in the region through 21,000 miles of service lines.

Washington State Utilities and Transportation Commission (WUTC) does not define natural gas as an essential service. Therefore, Puget Sound Energy is not required to provide services.

Extension of service is based on individual requests and the results of an analysis to determine if revenues from a developer extension will offset the cost of construction. Overall, Puget Sound Energy does not foresee any problems that would limit the supply of natural gas to the City of Shoreline in the future.

Transmission Main

Natural gas is currently supplied to most areas within the City of Shoreline through 136 miles of natural gas mains. Gas flows through the system through a 16 inch high pressure force main located along 10th Avenue NE continuing west along NE 180th Street, and south along 5th Avenue NE. As of December 2011, Puget Sound Energy serves approximately 11,556 customers in the City of Shoreline with natural gas.

Distribution Network

Within the subarea, 6-inch high pressure mains run along Aurora Avenue N, NE 185th Street, 8th Avenue N, NE 190th Street, N 175th Street, and 5th Avenue NE. The majority of residential connections

are through 5/8 inch laterals. A series of 1-1/4 inch to 4 inch distribution mains stem off the 6" transmission mains, serving all sides within the subarea. **Figure 3.5-4** illustrates existing natural gas service in the subarea.

Current Demand

Puget Sound Energy serves approximately 760,000 natural gas customers in 10 counties within Washington State. Natural gas connections are extensive within the subarea. No demand quantities are presently available. However, the current configuration adequately services the subarea. Upsizing lines and connecting stub-outs to form loops may be necessary if the area is further developed.

3.5.1 f Communications

Purveyors

According to the Shoreline Comprehensive Plan, there are multiple communications companies operating within the City of Shoreline. Service within the city is provided through a network of overhead and underground services. Service providers that serve residential and commercial customers in the City of Shoreline are summarized below.

Comcast

Comcast provides land-line cable television, internet service, and Voice over Internet Protocol (VoIP) or digital telephone service. The City of Shoreline maintains a franchise agreement with Comcast to maintain and operate their cable and fiber optic network within the city limits. Comcast currently serves the entire

City of Shoreline. No maps of Comcast's distribution network are currently available.

Frontier Communications

Frontier Communications provides land-line cable television, internet service, VoIP, and local telephone service to the community. The City of Shoreline maintains a franchise agreement with Frontier Communications to maintain and operate their cable and fiber optic network within the city limits. There is currently no franchise agreement with Frontier for the local telephone service. Frontier Communications serves the area west of Meridian Avenue N and north of N 160th Street/NW Innis Arden Way. Currently their footprint within the subarea is relatively small, only serving the four blocks west of Meridian Avenue N, along N 185th Street. They recently completed a project within the City of Shoreline installing fiber cable in their service area. According to an email from their network engineer, Jeremy Fallt, their current demand is very low. Within their service area, they have a residential and commercial customer demand of approximately 25 percent for broadband, 15 percent for TV, and 20 percent for phone. Their phone cable and fiber networks were built to handle a capacity of 100 percent within the service area. There are no forecasted projects or plans for growth in the near future.

CenturyLink

CenturyLink provides local telephone service to the area east of Meridian Avenue N, and south of N 160th Street/NW Innis Arden Way. CenturyLink serves the majority of the population within the subarea, serving everyone west of Meridian Avenue N. Currently, they do not have a franchise agreement with the City of Shoreline.

Integra Telecom

Integra Telecom provides a fiber optic data network within the City of Shoreline. They have a franchise agreement with the City through July 24, 2026. They primarily serve commercial and institutional users. Their network passes through the subarea along 8th Avenue NE and NE 180th Street along a series of overhead wires before going to an underground conduit east of 12th Avenue NE. Currently there are very few end users within the City of Shoreline. With the potential for future growth within the subarea, Integra Telecom has the potential for more service connections and possibly expanding their network in the future.

Zayo Group (formerly AboveNet Communications)

Zayo Group provides a fiber optic data network within the City of Shoreline. Prior to being purchased by Zayo Group, AboveNet Communications had a franchise agreement with the City of Shoreline, through September 9, 2021. Zayo Group is a global provider of bandwidth infrastructure services, including dark fiber, wavelengths, SONET, Ethernet, and IP services. They have network in seven countries and 45 states. They primarily serve commercial and institutional users. Their network currently does not encroach upon the subarea. Zayo Group owns a Metro Dark Fiber run along the west coast of the United States. The run continues along Aurora Avenue N, just west of the subarea limits. The dark fiber provides a secure major bandwidth fiber optic connection for commercial and institutional users. They are currently constructing a connecting fiber run along NE 165th Street, just south of the study limits, and along 244th Street SW, north of the study limits, which connects to their main Metro Dark Fiber run along Aurora Avenue N. Along with Integra Telecom, Zayo Group has the potential for future service

connections within the subarea, if future commercial development growth occurs.

Communications Network

Figure 3.5-5 at the end of this section shows partial mapping of existing communications lines located within the subarea, as made available for this analysis. There are extensive communication lines and facilities located in the subarea that are not shown in the figure because this information was not made available for the purposes of this analysis.

Undergrounding of Utility Lines in the City of Shoreline

It is the goal of the City of Shoreline to facilitate undergrounding of utilities including power and communications lines in order to promote the health, safety, and general welfare of the residents of the community by:

- Removing potential hazards and blockages from the right-of-way;
- Achieving a more aesthetically pleasing community while improving property values; and
- Decreasing the vulnerability of service delivery due to the effects of natural disasters and storm events.

As more capital improvements occur within the City's right-of-way to facilitate future growth, more of the current overhead utilities will be required to relocate underground. Communication companies providing services within the subarea are briefly described below.

3.5.2 Analysis of Potential Impacts

3.5.2 a Impacts Common to All Alternatives

All three scenarios within the subarea would result in some population growth. Any growth within the city will ultimately require some improvements or upsizing of utilities to serve projected demands within the subarea.

Water

The North City Water District contains many water mains 6" or less in diameter. These pipes may need to be upsized to provide adequate fire suppression if development occurs within the North City Water District region of the subarea. Additionally, the contractual maximum withdrawal rate of 2,070 gpm between the North City Water District and the Seattle Public Utilities may need to be analyzed for the added demand rate associated with the selected alternative.

Fire suppression is currently adequate within the Seattle Public Utilities service area; however, two fire hydrants currently provide less than 2,000 gpm of fire flow. The International Fire Code (IFC), Appendix B requires a minimum of 1,000 gpm of fire flow suppression. Additional demand on the system could prevent these water mains from producing adequate fire suppression. One fire hydrant is located at the intersection of N 180th Street and 2nd Avenue NE on an 8-inch dead end line. This line may need to be connected in a loop to continue to provide adequate fire flow. The other fire hydrant is located north of the intersection of N 180th Street and Sunnyside Avenue N. This hydrant is located on a 6" line. This water main may need to be upsized and or connected into a loop.

Wastewater

All pipes within the subarea are 8" in diameter or larger. Many of the 8" diameter pipes may need to be upsized to provide suitable collection capacity for sewer flows from new developments. According to a phone conversation with Clayton Putnam, a planner with Ronald Wastewater District, there are two sewer lift stations located within the subarea. These lift stations handle a large portion of the sewer capacity within the subarea. New demand put on the system may require upsizing these lift stations.

The Ronald Wastewater District pays for water treatment for discharging wastewater to the King County's West Point Treatment Plant and the City of Edmonds Treatment Plant. Greater flow through the sewer system will incur greater charges from the perspective of the treatment plant for accepting additional wastewater.

Surface Water

Since the majority of surface water collection pipes are reaching the end of their serviceable life, an active capital improvement plan should be adopted to replace damaged or undersized pipes.

In order to adequately capture surface water from the surrounding area, the 11,500 feet of surface water pipes less than 8" will most likely need to be upsized to handle projected storm flows. Additionally, if any development occurs along 5th Avenue NE, NE 194th Street, or NE 195th Street, pedestrian improvements will most likely be installed, requiring installation of surface water facilities for approximately 5,000 feet, including but not limited to

piped stormwater conveyance pipes, pervious pavement, or bio-retention swales within roadside planters.

Electricity

No capacity constraints were provided for the electricity network within the City of Shoreline. New development within the subarea may require sections of the overhead electricity lines be placed underground. Costs for undergrounding projects are typically placed on the developers, unless the project is part of a capital improvement project undertaken by the City, in which all utilities are required to be placed underground to accommodate the City's roadway improvements.

Natural Gas

No demand projections were available under existing conditions, so the capacity of the network could not be analyzed. In order to better serve future development within the subarea, many of the smaller gas mains could be connected to form loops. This information is based on observation. Future improvements and additions to the natural gas network are based solely on future customer request for service.

Communications

None of the communications providers provided demand projections within the subarea, so the capacity of each network could not be analyzed.

Frontier Communications recently completed a major utility project within the City of Shoreline. They do not anticipate any improvements in the foreseeable future. The company currently serves only the western portion of the subarea, west of Meridian

Avenue N. Their system is currently serving 25 percent of their projected capacity. They have the ability to take on 300 percent more customer base within their portion of the subarea.

Integra Telecom and Zayo Group serve primarily commercial and institutional customers. Under Alternative 2—Some Growth, and Alternative 3—Most Growth, considerably more commercial development is projected within the subarea. With additional commercial development, these communication networks may extend their branch lines further within the subarea. Future improvements are based on forecasted development and future customer request for service.

The only expense projected for communication networks is undergrounding their facilities that currently share poles with overhead electricity lines. Communication networks will be required to place their systems underground if developers or the City of Shoreline decides to underground existing utilities within a section of the city.

3.5.2 b Future Growth Demand Forecasting

Water

Estimated water demand rates were projected for the three alternatives for the projected population in 2035. **Table 3.5-9** shows the demand for water related to the alternatives.

This analysis, as that for other utilities, was based on review of projected development and population within Traffic Analysis Zones (TAZs) served by the Seattle Public Utilities and North City Water District. Referencing of TAZs, which correlate to census

tract population data, is a common practice in planning and assessment of potential impacts as part of environmental analysis. A map of the TAZs related to the subarea and included in the analysis is provided as **Figure 3.5-6** at the end of this section. Refer to this map in review of the discussion below, which describes assumptions related to TAZ areas.

Alternative 1—No Action

Based on water demand projections and population growth rates for 2035, implementation of Alternative 1—No Action would have little to no effect on the existing water system. The TAZ with the most improvements will be TAZ 7, with a 41 percent increase in growth. One water line in this zone is a 200-foot-long 4” dead-end main on N 185th Court. Currently, no fire hydrant is located

at the end of this water main. If fire suppression is required in the future at the end of this roadway, the line will need to be upsized.

Alternative 2—Some Growth

Full build-out of Alternative 2—Some Growth would potentially increase water demand up to 200 percent of the current demand within the system. A 30” transmission main is located along N 185th Street, which would have capacity for more flow than the current system demands. The distribution mains spanning off this 30” transmission are primarily 6” to 8” mains, within the Seattle Public Utilities service area. With a 200 percent demand increase to the system, a number of these pipes will have to be upsized to handle the projected flow.

Table 3.5-9—Demand for Water Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1—NO ACTION		ALTERNATIVE 2—SOME GROWTH		ALTERNATIVE 3—MOST GROWTH	
	Total Water Demand (gpd)	Total Water Demand (gpd)	% Growth from Existing	Total Water Demand (gpd)	% Growth from Existing	Total Water Demand (gpd)	% Growth from Existing
Seattle Public Utilities:							
Totals	368,552	419,802	14%	1,686,004	357%	3,503,800	851%
North City Water District:							
Totals	381,354	424,060	11%	800,116	110%	1,789,015	369%
Total of Both Districts	749,906	843,861	13%	2,486,120	232%	5,292,815	606%



Very few pipes connect to TAZ 38, which is projected to increase demand by 2,275 percent over the current demand. TAZ 38 lies between the service areas of Seattle Public Utilities and North City Water District. Pipes within this zone will need to be connected into a loop and most likely upsized in order to provide adequate fire suppression and peak daily demands within this zone. The zones which do not forecast high water demand increases are TAZs 11, 36, 37, 40, 66, 79, 125, and 127.

Within the Seattle Public Utilities service area of the subarea, approximately 7,200 feet of water mains are less than 6" in diameter. In order to adequately provide fire suppression, these mains will need to be upsized under Alternative 2 or Alternative 3. The majority of undersized mains are located along N 183rd Street, from Meridian Avenue N past the boundary of the subarea to the intersection of Midvale Avenue N, and the residential neighborhood north of N 185th Street between 1st Avenue NE and Meridian Avenue N.

Alternative 3—Most Growth

Full build-out of Alternative 3—Most Growth would potentially increase water demand up to 540 percent of the current demand within the system. The 30" transmission main located along N 185th Street would most likely still be sufficient for water transport; however, the majority of lateral mains stemming off the transmission main will need to be upsized to provide adequate fire suppression and peak daily demand. The majority of zones forecasted to produce higher demands are located within the North City Water System. No pipe diameters or modeled fire flow projections were available. TAZ 38 is projected to increase demand by nearly 8,500 percent over current demand projections. Upsizing will need to occur around TAZ 38, and most

likely TAZs 11, 124, and 126. The only zones which do not forecast high water demand increases are TAZs 66, 79, and 125.

Wastewater

Estimated wastewater demand rates were projected for the three alternatives for the projected population in 2035. **Table 3.5-10** shows the demand for wastewater related to the alternatives.

Alternative 1—No Action

Based on wastewater demand projections and population growth rates for 2035, implementation of Alternative 1—No Action would have little to no effect on the wastewater system, with 11 percent increase in projected demand over the existing system.

The TAZ with the most improvements will be TAZ 7, with a 44 percent increase in growth. Growth projections for Alternative 1—No Action should not require the upsizing of any pipes within the system.

Alternative 2—Some Growth

Implementation to full build-out of Alternative 2—Some Growth would have a dramatic effect on the wastewater collection system within the subarea, with a 92 percent increase in flow rates over the existing system. The majority of demand would be centered along N/NE 185th Street, forecasting wastewater demand rates at a 1,877 percent demand increase in TAZ 38 and a 559 percent increase in TAZ 124.

Alternative 3—Most Growth

Implementation to full build-out of Alternative 3—Most Growth would have the greatest effect on the wastewater collection

system within the subarea, with a 508 percent increase in flow rates over the existing system. The only TAZs that would not be dramatically affected by the Alternative 3—Most Growth would be TAZs 66 and 125. Similarly to Alternative 2, the majority of wastewater demand would be concentrated along N/NE 185th

Street. However, demand increase would affect nearly all the side streets within the subarea, and may require upsizing multiple sections of pipes 8” in diameter and below, as well as upsizing the two lift stations within the subarea.

Table 3.5-10—Demand for Wastewater Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1—NO ACTION		ALTERNATIVE 2—SOME GROWTH		ALTERNATIVE 3—MOST GROWTH	
	TOTAL SEWER DEMAND (gpd)	TOTAL SEWER DEMAND (gpd)	% Growth from Existing	TOTAL SEWER DEMAND (gpd)	% Growth from Existing	TOTAL SEWER DEMAND (gpd)	% Growth from Existing
Totals	788,063	878,317	11%	1,516,803	92%	4,787,862	508%

Surface Water

Surface water management is not directly impacted by population; however, more development will produce larger areas of impervious surface, reduce the discharge time for surface water to enter city facilities, and generally increase stormwater runoff. Development methods such as integration of low impact development and green infrastructure into redevelopment projects can reduce the demand generated. Surface water management demand, based on precipitation rates for the 25-year peak storm event and percent impervious surface area is shown in **Table 3.5-11**.

Alternative 1—No Action

Alternative 1—No Action was assumed to have the same surface area as the existing system. Currently, the majority of the subarea

is zoned R-6, and would remain so under Alternative 1—No Action. The total projected flow rate for Alternative 1—No Action would be 224.70 cubic feet per second (cfs) of storm water runoff for the peak 25-year storm event. TAZs 36, 37, and 38 are projected to have the highest surface water discharge rates of 39 cfs, 26 cfs, and 23 cfs respectively.

Alternative 2—Some Growth

Alternative 2—Some Growth is projected to create an increase of surface water flow by 12 percent from existing conditions. The TAZs projected to see the most increase in storm flow runoff would be TAZs 64, 124, and 126. The entire subarea is projected to see a 25 cfs increase in storm flow.

Table 3.5-11—Demand for Surface Water Management, All Alternatives

	ALTERNATIVE 1— NO ACTION	ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— MOST GROWTH	
	Flow (cfs)	Flow (cfs)	% Growth from Existing	Flow (cfs)	% Growth from Existing
TOTALS	224.70	250.58	12%	271.60	21%

Alternative 3—Most Growth

Alternative 3—Most Growth is projected to create an increase of surface water flow by 21 percent from existing conditions, for a total 25-year peak storm runoff rate of 271.60 cfs. The TAZs projected to see the most increase in storm flow runoff would be TAZs 64, 124, 126, 131, and 132

Electricity

Estimated demand rates for electricity were projected for the three alternatives for the projected population. **Table 3.5-12** shows the demand for electricity related to the alternatives.

Alternative 1 – No Action

Based on energy demand projections and population growth rates for 2035 Alternative 1 – No Action would have little to no

effect on the electricity system network. The TAZ with the most improvements would be TAZ 7.

Alternative 2—Some Growth

Alternative 2—Some Growth would generate an increase in energy demand of almost 240 percent compared to existing conditions. TAZs projected to see the most increase in electricity demand are 7, 10, 38, and 124. The entire subarea is projected to generate a demand of 3,086 million BTUs per day.

Alternative 3—Most Growth

Alternative 3—Most Growth is projected to create an increase of energy demand by approximately 610 percent from existing. TAZs projected to see the most increase in electricity demand are 7, 10, 11, 38, 124, and 126. The entire subarea is projected to generate a demand of 6,570 million BTUs per day.

Table 3.5-12—Demand for Electricity Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1— NO ACTION		ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— MOST GROWTH	
	Energy (Thousand BTU/Day)	Total Energy (Thousand BTU/Day)	% Growth from Existing	Energy (Thousand BTU/Day)	% Growth from Existing	Energy (Thousand BTU/Day)	% Growth from Existing
	924,420	1,040,741	13%	3,086,199	234%	6,570,263	611%

3.5.3 Mitigation Measures

3.5.3 a Incorporated Plan Features

Incorporated plan features include improvements to services and facilities that are already being planned by the utility providers. These are described below to the extent that information was made available by existing providers. Planned utility improvements in the subarea, along with additional recommended improvements to support implementation of the action alternatives (either Alternative 2—Some Growth or Alternative 3—Most Growth) are illustrated in **Figures 3.5-7 through 3.5-10** at the end of this section.

Water

North City Water District

The following is a list of recently completed and planned capital projects within the subarea for a 30-year improvement plan. Several of these projects have already been completed.

1. This project will lower the 660 zone hydraulic grade line to 615; expand the existing zone area and create additional 615 zone area to the west. This project is located within the North City Business District, at the eastern edge of the subarea, along 15th Avenue NE, near the intersection of NE 175th Street.
 - a. Replace 660 Booster Pump Station with a new North City Booster Pump Station and demolish a 0.4-million gallon reservoir. The estimated cost is \$4,185,000, of which \$285,000 would be incurred through connection charges and rate increases, and \$3,900,000 would be acquired through bonds and loans. As of the 2011 Comprehensive Plan, this work should have been completed by 2014.
 - b. Install new 1,650 feet of 16” transmission main along NE 175th Street, between the eastern and western portions of the 615 zones, including installation of 3 vaults.

This project is located within TAZs 66 and 67. None of the alternatives would see much demand increase within these TAZs. Nearby zones are projected to increase demands significantly under Alternatives 2 and 3. If this work affects other zones, within the 590 pressure zone, specifically zones 124 and 126, the improvements should be reanalyzed to verify they meet adequate capacity for the forecasted demands.

2. Recoat and install railing on the 3.7-million gallon reservoir. This work will occur northeast of the intersection of NE 179th Street and 15th Avenue NE, near the eastern edge of the subarea. The 3.7-million gallon

Under Alternative 2—Some Growth, the projected demand of 1.60-million gallons of water would be required for standby storage for prospective residences within the subarea. Under Alternative 3—Most Growth, the projected demand of 3.58-million gallons of water would be required for standby storage for prospective residents within the subarea. Under both alternatives, there is potential that this projected demand coupled with the demand generated by the rest of the system would require additional water storage volume.

3. Install Supply Station #4 near the intersection of 5th Avenue NE and NE 185th Street. Additionally, install 12" water mains connecting to an existing 10" main along 5th Avenue NE. This work will assist in servicing the North City Water District customers located on the west side of I-5. The estimated cost is \$455,000.

reservoir currently services the 590 pressure zone in which the North City Utility District portion of the subarea is located. The estimated cost is \$300,000.

This work will benefit the largest water storage tank currently serving the North City Water District portion of the subarea. Although the CIP project mentioned does not propose an increase in storage capacity, Alternatives 2 and 3 may require an increase in water storage for the system. The DOH recommends that the storage facilities servicing a system contain two days of Average Daily Demand for all Equivalent Residential Units within the system. All the storage reservoirs within the system contain a standby storage capacity of 5.38-million gallons.

This CIP project is located adjacent to TAZ 38, which is projected to see the most water demand increase within the subarea. TAZ 38 could be serviced by both the Seattle Public Utilities District and the North City Water District. Under Alternative 2—Some Growth, this area is projected to use 454,059 gpd of water.

Under Alternative 3—Most Growth, this area is projected to use 1,682,478 gpd. The pipe sizing may need to be increased along the portion of the North City Water District's western service area, west of I-5, including upsizing the existing 10" transmission main that connects the system underneath the freeway. Additional analysis may need to be completed to verify the adequacy of the pump station size in relation to the projected demands under Alternative 2 and Alternative 3.

4. Provide zone separation between the 615 pressure zone and the 590 pressure zone by installing two check valves. The estimated cost is \$105,000.

This CIP project is located along the eastern boarder of the subarea. This project should not be affected by any of the alternatives. The 615 pressure zone will only incorporate TAZs 66 and 67, which do not project to have a large increase in water demand under any of the alternatives.

5. Replace 980 feet of 4" water main with an 8" water main to meet fire flow velocities at the intersection of NE 185th Street and 14th Avenue NE. This work is located near the eastern edge of the project limits. The estimated cost is \$463,000. This project is projected to be constructed in 2026.

This CIP project is located outside of the subarea; however, due to its proximity to TAZs 124 and 126, the project may need to be reanalyzed for projected demand increases, depending on which alternative is implemented. Under Alternative 2 – Some Growth, these zones would increase water demand by 306,181 gpd. Under Alternative 3—Most Growth, these zones would increase water demand by 963,525 gpd. The pipe selection may need to be upsized to accommodate the projected demands, depending on which alternative is implemented.

6. Replace and/or relocate/remove fire hydrants on 4" and 6" dead end mains. This work is proposed throughout the

entire North City Water District. The estimated cost is \$1,365,000; and is projected to be constructed in 2026.

This CIP project would improve fire flow throughout the North City Water District's portion of the subarea. Due to the increased demand projected in a number of the zones within the subarea, many of the mains may need to be upsized to 8" or larger mains to provide suitable fire flow protection under Alternative 2 or Alternative 3.

Seattle Public Utilities

The Seattle Public Utilities serves a large area within King and southern Snohomish County. The 2013 Water System Plan describes general funding allocation for different aspects of the water system. Improvement planning is general for the entire system. The largest portion of funds allocated for improvements to the SPU water system over the next 30 years will be towards SPU's distribution system. Distribution improvements include replacing aging water mains to provide seismic upgrades, improve pressure and fire flows. The draft six-year CIP includes \$4.5 to \$10 million per year for distribution system improvements and water main rehabilitation projects.

Due to the broad overview of the 2013 Water System Plan, details were not specific to the Shoreline area, and in particular the region surrounding the subarea. The only planned capital improvement project forecasted for the near future is upsizing and replacing approximately 3,000 feet of water mains along Aurora Avenue N (Hwy 99) between N 192nd Street and N 205th Street. The original water mains are a series of 4" to 8" cast iron mains installed as early as 1946. All proposed mains will be 8" ductile iron mains. This work is located north of the subarea, and

should not affect future demands generated by any of the alternatives.

Wastewater

The following is a list of capital improvement projects for the North City Water District within the subarea for a 30-year improvement plan:

1. NE 185th Street Sanitary Sewer Improvements – Replace approximately 749 feet of 8” gravity sewer main and side sewers with 10” – 15” sewer mains by pipe bursting and open cut from 12th Ave NE to 16th Ave NE. The estimated project cost is \$417,000.

This CIP project would assist with projected demand flows for all alternatives. Alternative 3 may increase loading to where 10” to 15” pipes may not be large enough diameter pipe for the projected flow during peak conditions.

2. 1st Avenue NE Sanitary Sewer Improvements – Replace approximately 1,321 feet of 8” gravity sewer main and side sewers with 10” mains by pipe bursting from N 185th Street to N 180th Street along 1st Avenue NE. The estimated project cost is \$719,000, and is projected to be completed in 2017.

This CIP project would assist with projected demand flows for all alternatives. Based on a peaking factor of 4 times the average daily demand generation for peak hour demand, Alternative 2 may increase loading to where 10” mains may not be large enough diameter pipe for the projected flow during peak conditions. Implementation of

Alternative 3 would greatly increase loading along this pipe run, and would require upsizing to larger diameter pipe than the planned 10” mains. The forecasted loading may require upsizing to 18” or larger mains to accommodate the projected peak demand.

3. Basin 17 Sanitary Sewer Improvements – Replace approximately 2,136 feet of 8”, 10”, and 15” gravity sewer main and side sewers with 10”, 12”, 18”, and 21” sewer main along NE 180th Street from 10th Avenue NE to 8th Avenue NE, along 5th Avenue NE from NE 180th Street to NE 178th Street, and along NE 175th Street, from a 15” crossing of I-5 to near Meridian Avenue N. The estimated project cost is \$1,305,000, and is projected to be completed in 2019.

Based on a peaking factor of 4 times the average daily demand generation for peak hour demand, Alternative 3 may increase loading to where the proposed pipe diameter upsizing is not adequate to serve the projected population, especially for the improvements along NE 180th Street. Increasing the pipe diameters of the proposed pipes and upsizing additional pipes within the vicinity may be necessary to facilitate the projected demand.

4. 11th Ave NE Sanitary Sewer Improvements – Replace approximately 3,252 feet of 8” and 10” gravity sewer main and side sewers with 10” and 12” sewer main by pipe bursting along 11th Avenue NE from NE 175th Street to NE 168th Street, up 11th Place NE, and along NE 170th Street from 11th Place NE to 14th Avenue NE. The

estimated project cost is \$1,792,000, and is projected to be completed in 2016.

This project is located at the southern end of the subarea. None of the alternatives propose much rezoning or future growth around the area where this capital improvement project is intended. This project will have some benefit for future growth within the region, but should not be adversely affected by increased demand from one of the alternatives.

Surface Water

Five drainage issues identified within the City's Comprehensive Plan are directly associated with the subarea. These five issues are currently in the process of being designed or financed. If future growth occurs within the subarea, the capacity of the proposed designs may need to be evaluated.

1. Ronald Bog – Ronald Bog receives surface water from the surrounding streets and developments, including from TAZs 7, 11, 64, 1321, and 132 within the subarea. The City has completed a comprehensive examination of the problem and determined that Ronald Bog is currently undersized to handle storm flows associated with the 25-year storm event, and floods into neighboring properties. The City has identified a series of culvert replacements, channel improvements, pipe system replacements, a flood control berm as well as flood monitoring and early warning system.

Additional analysis should be performed to determine if increased runoff generated by the selected alternative

would require additional upsizing of the bog and associated pipe network.

2. 12th Avenue NE and 11th Avenue NE, from NE 175th Street to NE 170th Street – The existing drainage system within this corridor daylights on the west side of 12th Avenue NE, and discharges into residential backyards. The water is then collected in catch basins on 11th Avenue NE and conveyed to a pond located at 17201 11th Avenue NE. The pond was designed to infiltrate flows and has no outlet. This area is subject to flooding during significant events. The City is currently planning to expand the ditch along 12th Avenue NE for use as an infiltration ditch. The ditch will provide additional storage and help infiltrate runoff to attenuate the flows coming into the area.

Additional impervious surface area created with the adoption of the Preferred Alternative would have some effect within the region, especially under Alternative 3—Most Growth, when the area is rezoned. Additional storage or flow control facilities may be required. Additional LID and green infrastructure improvements would provide mitigation. Further analysis will be conducted in the Final Environmental Impact Statement (FEIS).

3. Serpentine Pump Station near 5th Avenue NE and NE 178th Street – Serpentine drainage system is a complex set of gravity pipes and pump stations that currently does not provide a 25-year level of service for flood protection. Drainage currently accumulates at the low spot on 5th

Avenue NE near NE 178th Street because the capacity of the Serpentine Pump Station is inadequate to convey the necessary flow up into the system that runs down NE Serpentine Avenue. This problem was studied under the Thornton Creek Watershed plan. Two alternative solutions were identified (ranging from \$900,000 to \$1.8 million). Prior to implementing one of these solutions, the City invested in low impact development (LID)/green infrastructure in the contributing basin to address the drainage problems. The City received a grant in 2010 for this project.

Additional impervious surface area created with the adoption of the Preferred Alternative would have some affect within the region, especially under Alternative 3—Most Growth, when the area is rezoned. Additional storage or flow control facilities may be required. Additional LID and green infrastructure improvements would provide mitigation. Further analysis will be conducted in the FEIS.

4. 10th Avenue NE near NE 174th Street – During the December 2007 storm event, 110th Avenue NE south of NE 175th Street was flooded. Based on City observation, this is a recurrent problem. The roadway drainage system backed up and flow came up out of the catch basins on the east side of the roadway, which resulted in stormwater flowing down the driveways into garages. A preliminary solution was identified in the Thornton Creek Watershed Plan and included detention and conveyance improvements. The detention could be on the south side of NE 175th Street between 10th and 11th Avenue NE.

The rezoning will have little effect on this CIP project. No major rezoning is projected within this area. Under Alternative 3—Most Growth, there would be zoning changes along the neighboring blocks.

5. Pump Station No. 25 (located north of N 175th Street and east of I-5) – Flooding of structures, yards, and driveways due to undersized pump station. Replace pump and force main to provide additional pumping capacity. The City received a grant to correct this problem in addition to implementing LID/Green infrastructure in the tributary basin in 2010. LID/green infrastructure improvements are also part of the project to reduce flows to the Serpentine Pump Station.

Additional impervious surface area created with implementation of the Preferred Alternative would have some effect within the region, especially under Alternative 3—Most Growth when implemented. Additional LID and green infrastructure improvements would provide mitigation.

Electricity

Seattle City Light does not generate a comprehensive plan of capital improvement projects. The main project underway within the City of Shoreline is undergrounding a section of electricity lines running along the Aurora Avenue N (Hwy 99) corridor. This project will abut the subarea.

Natural Gas

Puget Sound Energy does not generate a comprehensive plan of improvement projects. Additionally, Washington State Utilities and Transportation Commission (WUTC) does not define natural gas as an essential service. Therefore, Puget Sound Energy is not required to provide service. Extension of service is based on individual requests. Overall, Puget Sound Energy does not foresee any problems that would limit the supply of natural gas to the City of Shoreline in the future.

Communications

Future Telephone Services and Facilities

According to the City of Shoreline's Comprehensive Plan, Washington Utilities Trade Commission regulations require CenturyLink and Frontier to provide adequate telecommunications service on demand; and Section 480-120-086 of the Washington Administrative Code (WAC) requires CenturyLink and Frontier to maintain adequate personnel and equipment to handle reasonable demand and traffic. Because CenturyLink and Frontier provide service on demand, there are no limits to future capacity. Additionally, telephone service should only be restricted by bandwidth constraints on fiber optic networks that provide this digital service.

Future Cable Television and Broadband Services and Facilities

Although the demand for cable television is likely to continue to increase as population grows, access to cable television in Shoreline is likely to increase at the same pace as population growth. However, the demand for broadband services, including

cable television, telephone and internet services, is likely to continue to grow as networks are supported with additional bandwidth. This growth will most likely occur relative to internet service, as more content become accessible online, and as people continue to communicate and interact online. These broadband services can be provided over fiber optic networks, cable networks or telephone networks.

3.5.3 b Applicable Regulations and Commitments

Washington State Department of Ecology and City of Shoreline Surface Water Management Requirements

Environmental regulations pertain primarily to surface water runoff for future development. The City of Shoreline has adopted a Western Washington Phase II National Pollutant Discharge Elimination System (NPDES) Permit to control pollutant loads and reduce peak flows from developed sites and municipal facilities within the city. There are seven goals pertaining to the NPDES Permit, two of which actively affect development growth within the subarea.

NPDES Goal #4 – Controlling Runoff from New Development, Redevelopment and Construction Sites

This goal requires that the City of Shoreline develop, implement, and enforce a program to reduce pollutants in stormwater runoff from new development, redevelopment, and construction site activities. The NPDES Permit intends to make Low Impact

Development (LID) the preferred and commonly-used approach to site development

A major aspect of this goal is ongoing maintenance and inspection of surface water facilities. The City is currently meeting this goal by enforcing that private developers maintain their private surface water facilities permitted since 2007. The City of Shoreline inspects several hundred surface water facilities on a rotating inspection cycle to ensure all surface water facilities are functioning as designed.

Additionally, in 2009 the City of Shoreline adopted the Department of Ecology Low Impact Development Manual, which requires that best practices be used unless shown to be infeasible.

NPDES Goal #5 – Municipal Operations and Maintenance

This goal requires that the City of Shoreline reduce potential impacts to water quality through its operations and maintenance division of public infrastructure. The Roads Division of the City of Shoreline follows guidance from the ESA Regional Road Maintenance Program Guidelines. The Surface Water Division implements a rigorous stormwater system inspection, maintenance, and cleaning program. The Parks Department adopted an Integrated Pest Management Program. Additionally, all City Maintenance Yards operate under a Surface Water Pollution Prevention Plan (SWPPP) and are regularly inspected to assure compliance with the SWPPP.

A major aspect of this goal is inspecting all municipally owned and operated catch basins and inlets at least once before August 1, 2017. Additionally, the City of Shoreline is committed to using applicable BMPs associated with runoff control during routine

maintenance, and using a Work Order software program to track inspections and maintenance/repair activities.

These two goals are applicable to future development within the subarea, in that future growth will require additional infrastructure, both public facilities and private. Through the NPDES permit, it is encouraged to pursue LID improvements to help manage and mitigate surface water runoff. The conventional approach to manage stormwater runoff has limitations for recovering adequate storage and distributed flow paths necessary to more closely match pre-development hydrologic function and protect aquatic resources from adverse effects of development. Low Impact Development principles and applications present a significant conceptual shift from a structural approach to a source reduction approach. LID improvements utilize native soils, vegetation protection areas, and landscaping strategically distributed throughout the project to slow, store, and infiltrate storm flows. LID improvements are designed into the project as amenities, as well as hydrologic controls. Types of LID improvement include vegetated roofs, rainwater harvesting, rain gardens, permeable pavement, and bio-retention swales.

New development within the City of Shoreline will need to conform to regulations within the NPDES Permit and the Ecology LID Manual provisions of the Development Code. Development will be required to utilize LID improvements to reduce flows, infiltrate where applicable, and treat stormwater before discharging to the city's surface water network. The City is required to monitor these facilities to verify they are working properly, and maintain LID improvements installed within public right-of-way.

3.5.3 c Other Potential Mitigation Measures

Water

North City Water District

Table 3.5-12 contains a list of distribution and transmission main improvements projected to accommodate future demands associated with each alternative.

**Table 3.5-12
North City Water District – Water System Upgrades**

	8"	12"
Alternative 1—No Action	0	491
Alternative 2—Some Growth	1,685	4,332
Alternative 3—Most Growth	8,155	13,008

Alternative 1—No Action

Improvements necessary for Alternative 1 would coincide with the Capital Improvements Plan adopted by the district. The primary improvement that would assist with pressure distribution and fire flow suppression would be the inclusion of the Supply Station #4, which would connect to the Seattle Public Utility transmission main along NE 185th Street, along with approximately 500 feet of 12" transmission main from the pumps station to the connection with a dead end 10" water main along 5th Avenue NE.

The majority of the subarea is located within the North City Water District’s 590 pressure zone. This zone is currently, zoned

primarily residential. Alternative 2 and 3 would change a portion of this area to zoning that would allow more intensive residential uses as well as neighborhood supporting commercial/retail. This change in land use would create a substantial increase in demand within this pressure zone. The North City Water District generated historical and projected water demands for the system, for each pressure zone. **Table 3.5-13** contains a comparison of the 2030 projected demand on the 590 pressure zone based on the existing growth rates, and demand estimated for the study are based on the rezoning alternatives.

**Table 3.5-13
North City Water District – Demand Comparison**

		ADD (MGD) ¹
Pressure Zone 590 - Year 2030		0.41
Subarea	Existing Conditions	0.38
	Alternative 1—No Action	0.42
	Alternative 2—Some Growth	0.8
	Alternative 3—Most Growth	1.79

1. MGD = Million Gallons per Day

According to this comparison, both Alternative 2 and Alternative 3 would generate far more demand than the entire pressure zone generates. Major system improvements may be necessary to accommodate the influx of demand generation within the North City Water District’s portion of the subarea.

Alternative 2—Some Growth

The majority of water mains within the North City Water District’s portion of the subarea are 6" water mains. Due to demand



generation within a number of the TAZs in the subarea many of the 6” mains may need to be upsized, and connected to the existing 12” transmission mains along NE 180th Street and 12th Avenue NE. Approximately 1,700 feet of water mains may need to be upsized to 8” diameter, and 4,300 feet of mains may need to be upsized to 12” diameter to serve the projected demands. In addition, the storage reservoirs servicing the community should be analyzed to verify that adequate storage is accessible to residents for fire suppression and recommended two-day standby storage if a water source becomes off line. The District may need to analyze its contract with the Seattle Public Utilities to verify that the allocated water withdrawal rights from the SPU Tolt transmission main is adequate to service the community with the increase in water demand generated within the subarea.

Alternative 3—Most Growth

Due to the projected high demands within TAZs 24 and 26, a number of the existing 6” water mains may need to be upsized, and dead end mains connected into loop networks to improve pressure distribution and fire flow suppression throughout the North City Water District’s portion of the subarea. The existing 10” main connecting the western portion of the district’s service area with the eastern portion underneath I-5, may need to be increased in diameter to a 12” main to improve flow and distribute pressure through the entire area. The 10” main along 5th Avenue NE may need to be increased to a 12” main, because the area would be changing from an R-6 zone to more intensive zoning. Approximately 8,200 feet of water mains may need to be upsized to 8” diameter, and 13,000 feet of mains may need to be upsized to 12” diameter to serve the projected demands. In addition, the storage reservoirs servicing the community should be analyzed to verify adequate storage is accessible to residents

for fire suppression and recommended two-day standby storage if a water source becomes off line. Similar to Alternative 2—Some Growth, the District may need to analyze its contract with the Seattle Public Utilities to verify that the allocated water withdrawal rights from the SPU Tolt transmission main is adequate to service the community with the increase in water demand generated within the subarea.

Seattle Public Utilities

Table 3.5-14 contains a list of distribution and transmission main improvements projected to accommodate future demands associated with each alternative.

**Table 3.5-14
Seattle Public Utilities – Water System Upgrades**

	8" Main	12" Main
Alternative 1—No Action	1,884	0
Alternative 2—Some Growth	8,057	12,192
Alternative 3—Most Growth	5,487	22,416

Alternative 1—No Action

Approximately 1,900 feet of water mains may need to be upsized or connected into a loop system to provide suitable fire suppression to two fire hydrants in TAZ 132.

Alternative 2—Some Growth

Demand generation would be concentrated along NE 185th Street. The majority of water main upsizing would be mains stemming off the existing 30” transmission main along NE 185th Street to accommodate the rezoning from R-6 to more intensive zoning.

Upsizing of mains would especially be necessary adjacent to TAZ 38, where the largest increase in water demand is projected. A 6” distribution main along NE 183rd Street may need to be upsized to an 8” main to accommodate demands within the subarea. A number of the dead end distribution mains within TAZ 36 are 4” diameter pipes. In order to accommodate projected demand increases along the southern half of this zone, many of these mains should be upsized to 8” water mains. Approximately 8,100 feet of water mains should be upsized to 8” diameter, and 12,200 feet of mains should be upsized to 12” diameter to serve the projected demands.

Alternative 3—Most Growth

Similar to Alternative 2—Some Growth, demand generation under Alternative 3—Most Growth would be concentrated along NE 185th Street, where rezoning would change the area from an R-6 to an R-48 zone. The majority of water main upsizing would be mains stemming off the existing 30” transmission main along NE 185th Street. Upsizing of mains would especially be necessary adjacent to TAZ 38, where the largest increase in water demand is projected. A 6” distribution main along NE 183rd Street may need to be upsized to an 8” or 12” main due to the zoning increase from R-6 to R-48. Approximately 5,500 feet of water mains may need to be upsized to 8” diameter, and 22,400 feet of mains may need to be upsized to 12” diameter to serve the projected demands.

Wastewater

Table 3.5-15 contains a list of sewer main improvements projected to accommodate future demands associated with each alternative.

**Table 3.5-15
Ronald Wastewater District – System Upgrades**

	12” to 15” Main	18” or Larger Main	Lift Station #15 Upsize	Lift Station #14 Upsize
Alternative 1—No Action	0	0	No	No
Alternative 2—Some Growth	6,800 ft	0	Maybe	No
Alternative 3—Most Growth	2,609 ft	6,121 ft	Yes	Maybe

Alternative 1—No Action

Potential demand generation from the Alternative 1—No Action would create a 15 percent increase in wastewater generation. No pipe upsizing other than what is proposed within the Comprehensive Plan should be necessary to accommodate future growth.

Alternative 2—Some Growth

TAZs 34, 36 and 38 are connected to the same sewer drainage basin. Based on demand analysis within the Ronald Wastewater District’s Comprehensive Plan, a multiplier of four was applied to the average daily demand to convert to the peak amount projected to enter the system at one time. The peak flow within this pipe network is projected to be 2.5675 cfs of wastewater. According to Table 28.3 of the Civil Engineering reference Manual, 12th Edition, an 8” diameter pipe flowing full at a minimum slope can handle 0.771 cfs. Approximately 5,300 feet of 8” diameter sewer pipes may need to be upsized to 12” to 15” diameter pipes to handle the increase in flow.

TAZs 124, 126, and half of zones 40, 65 and 125 enter into Lift Station #15 within the system. The estimated peak flow would be 735 gpm from these zones. The existing lift station has a max flow rate of 550-gpm. Although the entire projected demand may not discharge into this lift station, Lift Station #15 may be under sized if Alternative 2 is implemented. Additionally, 1,500 feet of 8” diameter pipe may need to be upsized to 12” diameter pipe to assist with the sewer flow from the lift station.

Alternative 3—Most Growth

Similar to Alternative 2—Some Growth, TAZs 34, 36, and 38 under Alternative 3—Most Growth are hydraulically connected to the same sewer drainage basin. Under Alternative 3, the peak sewer flow rate would be 9.63-cfs. Approximately 4,600 feet of 8” diameter sewer pipes will need to be upsized to 18” or greater diameter pipe network to handle the increase in flow, and additional 2,000 feet of 8” main would need to be upsized to 12” to 15” diameter pipe.

TAZs 124, 126, and half of zones 40, 65 and 125 would create an estimated peak flow of 8.1 cfs, or 3,635 gpm. This will require upsizing Lift Station #15. Additionally to accommodate the forecasted flow, approximately 1,500 feet of 8” diameter pipe would need to be upsized to 18” or larger diameter pipe, and 650 feet of 8” diameter pipe would need to be upsized to 12” to 15” diameter pipe.

The majority of TAZ 79 and a quarter of TAZ 127 discharges to Lift Station #15. Currently, Lift Station #15 has a pump rate of 240-gpm at 37 feet of head. The estimated combined demand entering the lift station would be approximately 170 gpm under peak conditions. Although the lift station appears to be sized

correctly for forecasted demands, Lift Station #15 should be analyzed with the level of growth forecasted under Alternative 3.

Surface Water

Table 3.5-16 contains a list of surface water facilities projected to manage future runoff and increased impervious surface associated with development from each alternative.

**Table 3.5-16
Surface Water System Upgrades**

	18" Main	Pump Station Upsizing
Alternative 1—No Action	0	0
Alternative 2—Some Growth	19,015	MC03
Alternative 3—Most Growth	28,733	MC03 & Serpentine Pump Station

Alternative 1—No Action

Since Alternative 1—No Action would contain the same zoning as under existing conditions, no additional surface water runoff is projected within the subarea, and no additional improvements except those described in Section 3.5.3.a would be necessary. However, it should be noted that creation of new households or infill redevelopment could occur under Alternative 1—No Action. New sites and households would be required to manage stormwater related to individual redevelopment, even though there would be no capital improvements at a larger scale.

Alternative 2—Some Growth

TAZ 38 currently contains a large infiltration field. If this zone is projected to be redeveloped as projected in both Alternative 2—Some Growth and Alternative 3—Most Growth, there may not be room for the infiltration field. An alternative flow control facility and upsizing connecting surface water pipes from the existing 12” diameter pipes may be required.

Approximately 19,000 feet of 12” pipe should be upsized to 18” diameter pipe to handle projected surface water runoff from future development, and Pump Station MC03 may need to be upsized in order to receive additional flows from TAZ 126.

Alternative 3—Most Growth

Approximately 29,000 feet of 12” pipe should be upsized to 18” diameter pipe to handle projected surface water runoff from future development. Two pump stations may receive additional flow from the surrounding developments, Pump Station MC03 and the Serpentine Pump Station. Since the Serpentine Pump Station is already projected to be improved due to flooding issues, the design may need to be reanalyzed for future flows.

Under either of the two action alternatives, Alternative 2—Some Growth and Alternative 3—Most Growth (and under the Preferred Alternative selected for implementation), there could be an opportunity to study and implement a regional stormwater facility project that would serve future growth. This project could include construction of a regional system of facilities funded through grants and capital improvement planning. Providing regional facilities can help to catalyze redevelopment by reducing costs of stormwater infrastructure improvements to individual site development, similar to several other examples in the region,

including the Overlake Village light rail station area in Redmond. Individual developments would be required to provide water quality treatment, but detention and flow control could be handled by the regional facilities.

Additionally, implementation of LID and green stormwater infrastructure solutions as part of public right-of-way improvements as well as onsite development would have a beneficial effect in reducing impacts in the subarea by enhancing stormwater treatment and management.

Electricity

Although no data was made available for Seattle City Light’s existing distribution network, primary improvement to the system would be undergrounding existing overhead lines when new developments are constructed within the subarea, as feasible.

Alternative 1—No Action

The primary energy demand increase would occur in TAZ 7. Additional distribution lines and transformers may need to be installed to adequately service this area.

Alternative 2—Some Growth

The primary energy demand increase would occur in TAZs 7, 10, 38, 124, and 126. The Seattle City Light transmission corridor runs through TAZs 124 and 126. It should be relatively easy to acquire additional energy supply to these TAZs. TAZs 7, 10, and 38, may require additional distribution lines and transformers to adequately serve these areas.

Alternative 3—Most Growth

The primary energy demand increase would occur in TAZs 7, 10, 11, 38, 124, and 126. Similar to Alternative 2, TAZs 124 and 126 would not need much upsizing of the distribution lines due to their proximity to the Seattle City Light transmission corridor. It should be relatively easy to acquire additional energy supply to these zones. Zones 7, 10, 11 and 38, may require additional distribution lines and transformers to adequately serve these areas.

Natural Gas

No data was provided for Puget Sound Energy's demand. Puget Sound Energy is a privately owned company. All improvements are based on future customer requests, and funding for future growth would be financed by customer fees within the region.

Energy Efficiency Considerations

Related to energy use, including electricity and natural gas, technological advancements in building systems and design are improving efficiency on an ongoing basis. New developments are more commonly integrating green building and alternative energy systems (solar, geothermal, etc.). These approaches will maximize energy conservation and help the region and city achieve Climate Change Action Plan goals, in addition to reducing impacts on energy providers.

Communications

No data was provided for any of the communication companies' distribution networks. The primary improvement to the system would be undergrounding existing overhead lines when new developments are constructed within the subarea. All

communication networks are privately owned entities. Funding to serve future growth would be financed by customer fees within the region. As such, there would not be adverse impacts associated with providing communication services in the future under any of the alternatives.

3.5.4 Significant Unavoidable Adverse Impacts

Increased demand for utilities services and facilities within the subarea would occur under all three alternatives, with Alternative 2—Some Growth generating more demand than Alternative 1—No Action, and Alternative 3—Most Growth generating the most demand of all alternatives. Existing deficiencies within the water, wastewater, surface water, and electricity service areas would need to be addressed over time as the subarea grows in population, households, and businesses.

Growth and change are expected to occur gradually over many decades under either of the two action alternatives. Implementation of full build-out of Alternative 2—Some Growth would take an estimated 30 to 50 years, and implementation of Alternative 3—Most Growth would take an estimated 60 to 100 years. As such, utility service providers would be able to monitor growth and adapt management, services, and facilities to serve increases in demand over time, assuming that funding keeps pace with growth. Given these long timeframes, it is also likely that technological innovations, behavioral changes, and more stringent building and energy codes may also mitigate impacts related to utilities. With application of such measures and the capital improvement projects discussed, along with regulatory requirements, no significant unavoidable adverse impacts would be anticipated.

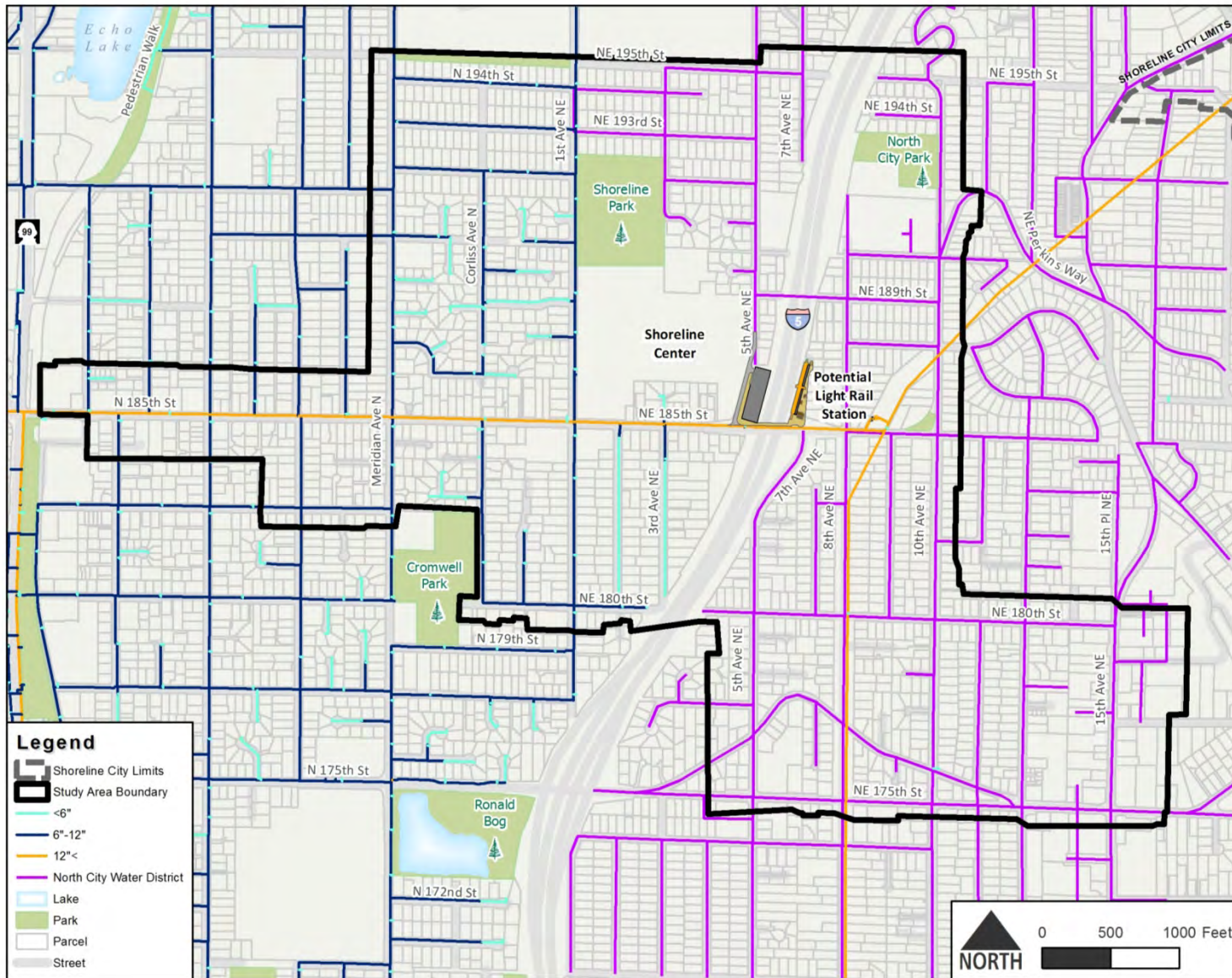


Figure 3.5-1 Existing Water Facilities in the Subarea

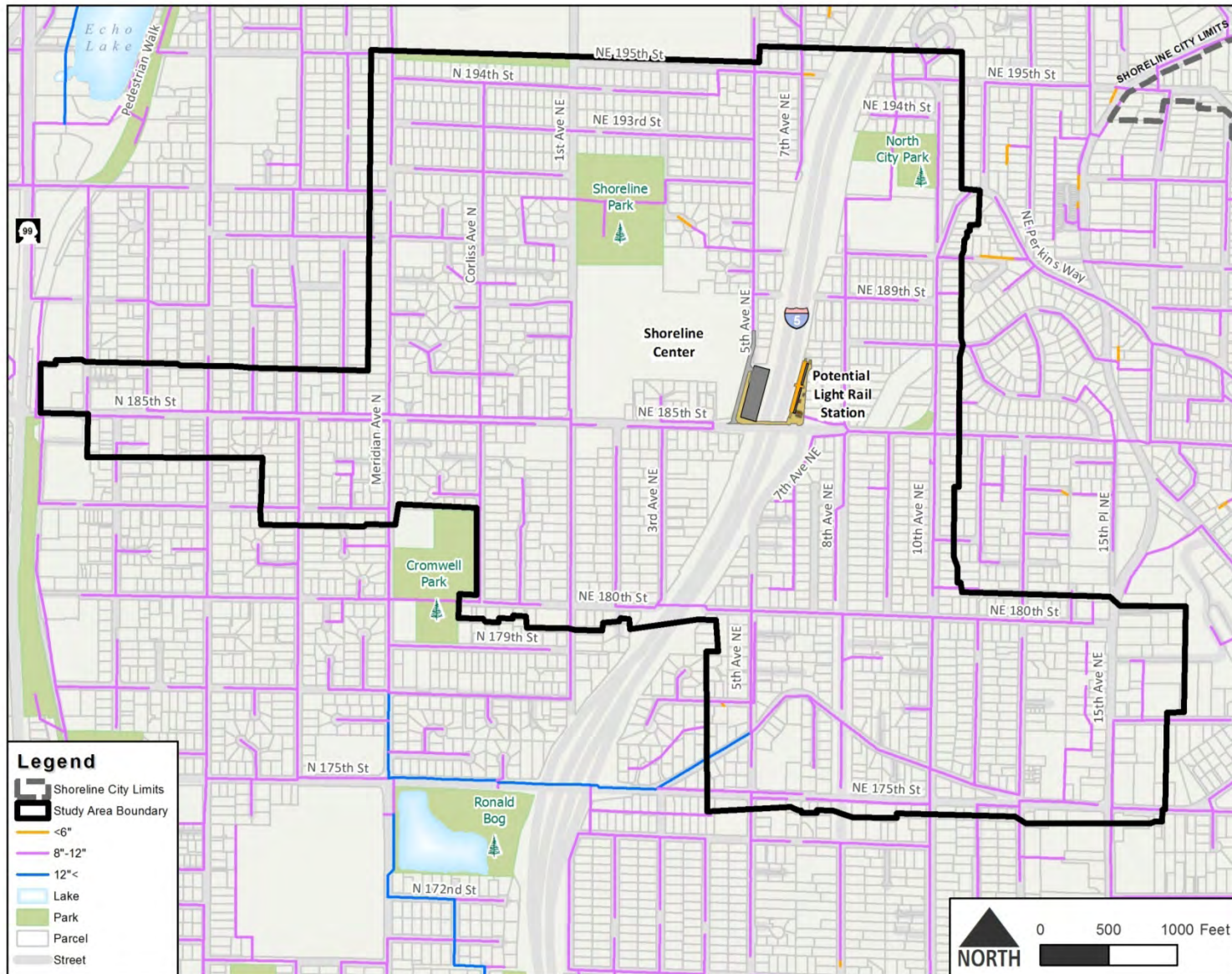


Figure 3.5-2 Existing Wastewater Facilities in the Subarea

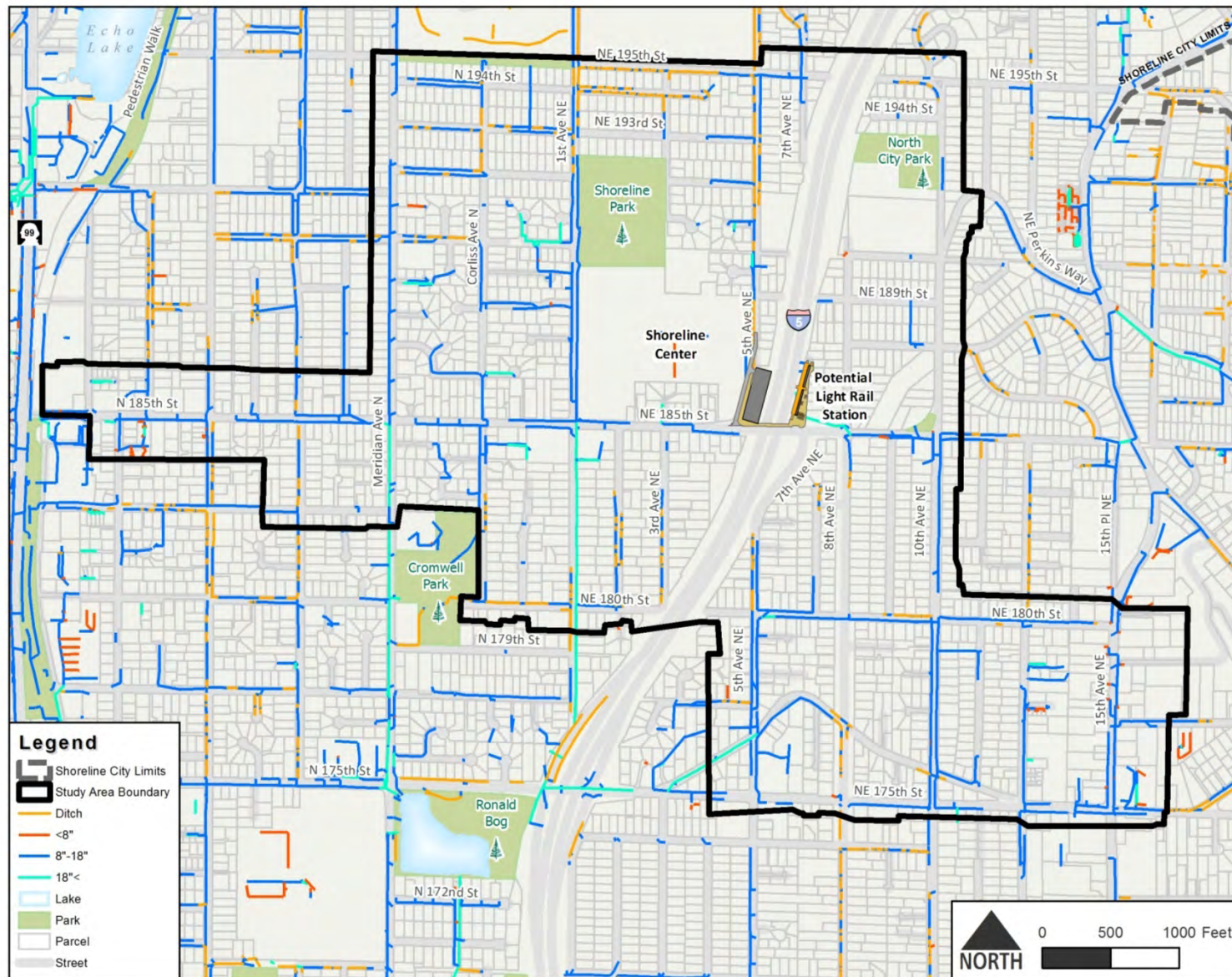


Figure 3.5-3 Existing Surface Water/Stormwater Facilities in the Subarea

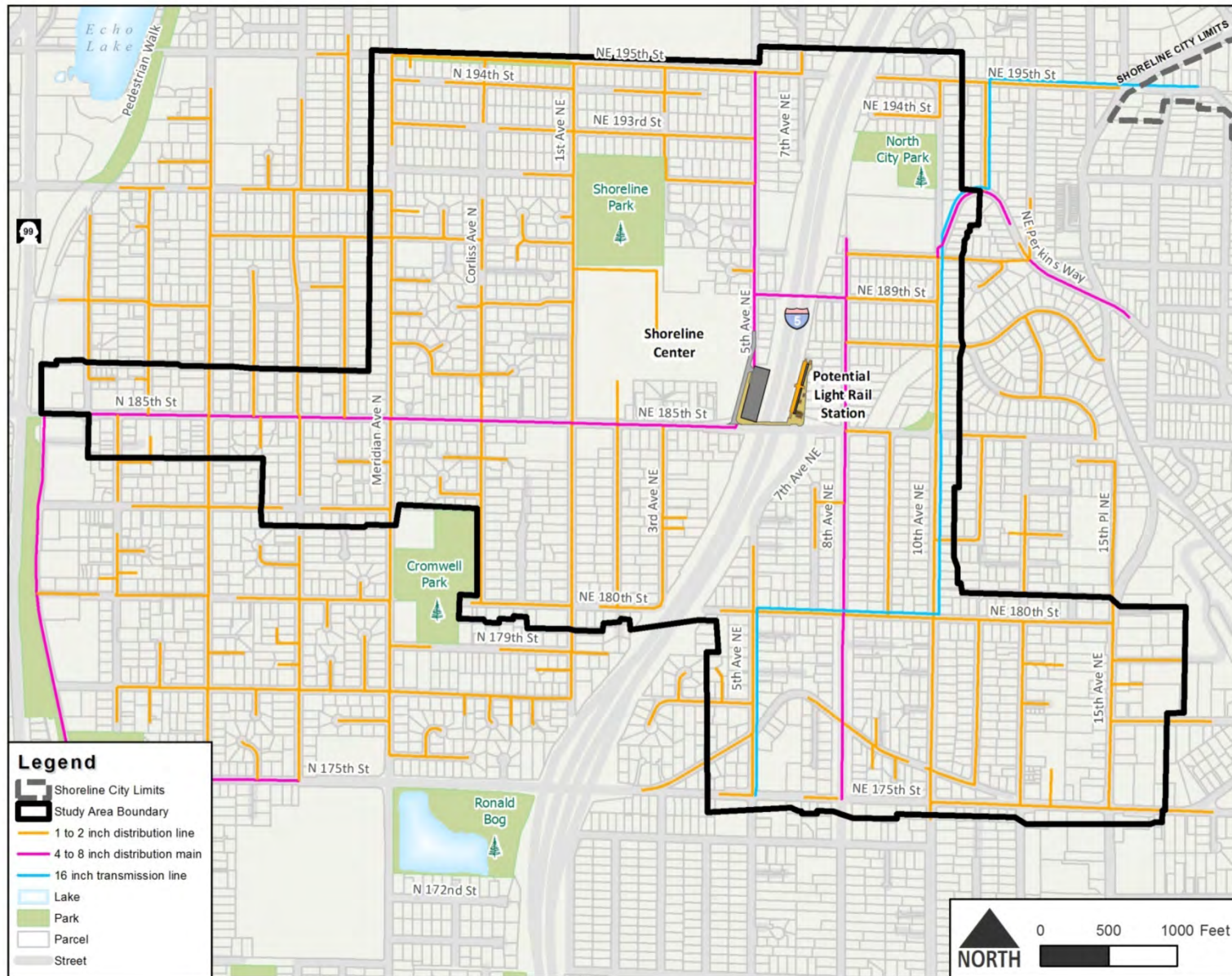


Figure 3.5-4 Existing Natural Gas Lines in the Subarea

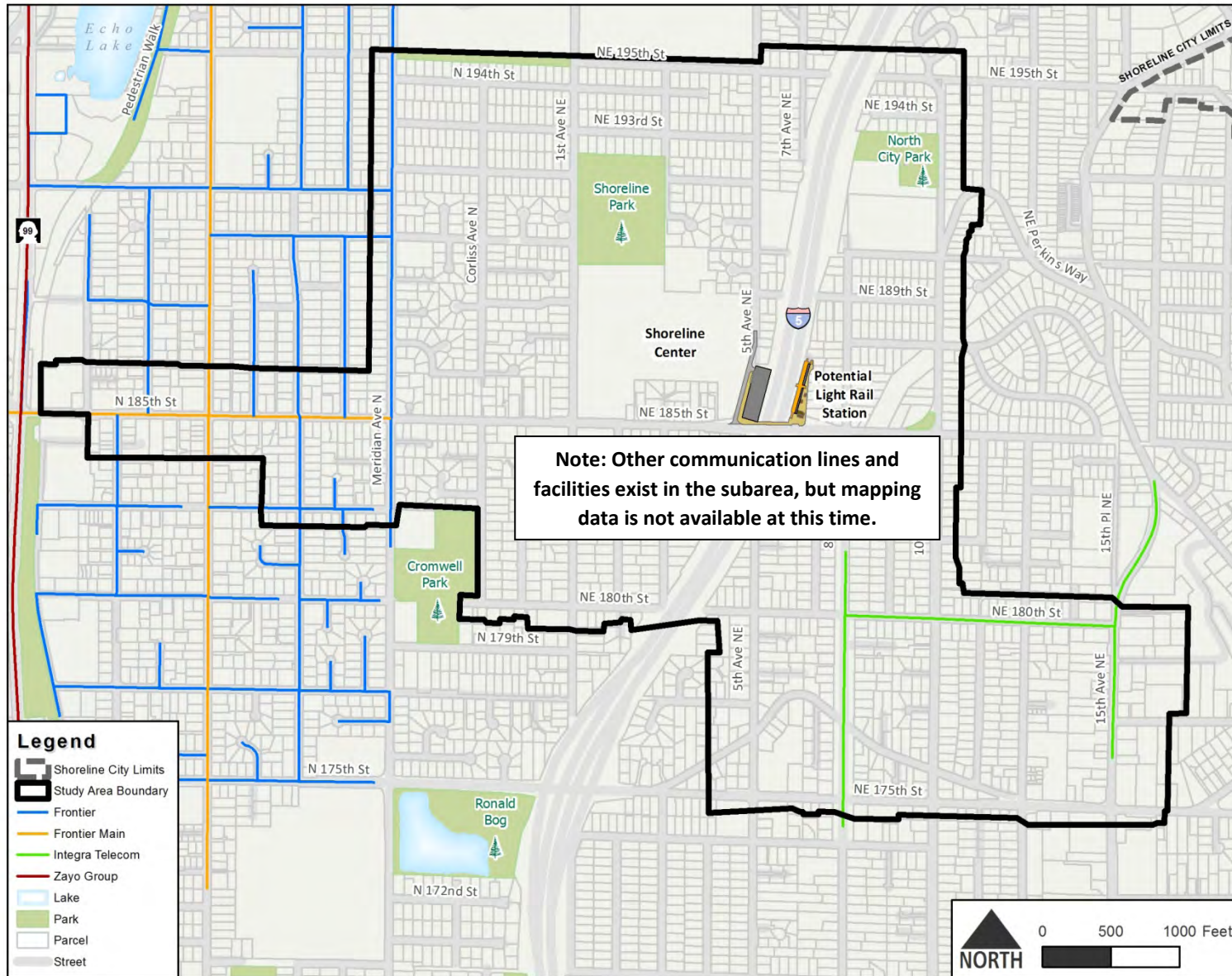


Figure 3.5-5 Communication Facilities (Partial) in the Subarea

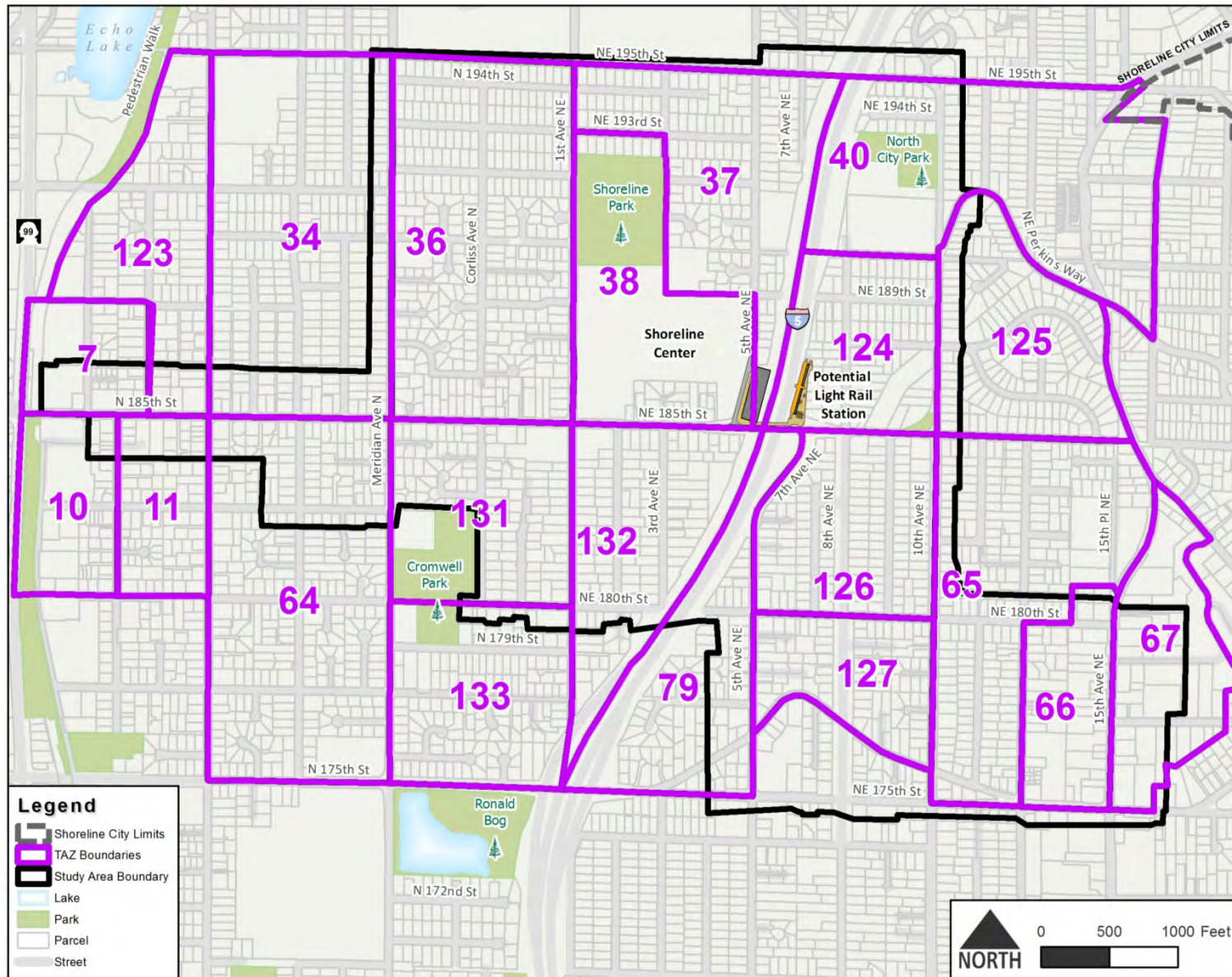


Figure 3.5-6 Traffic Analysis Zones (TAZs) in the Subarea

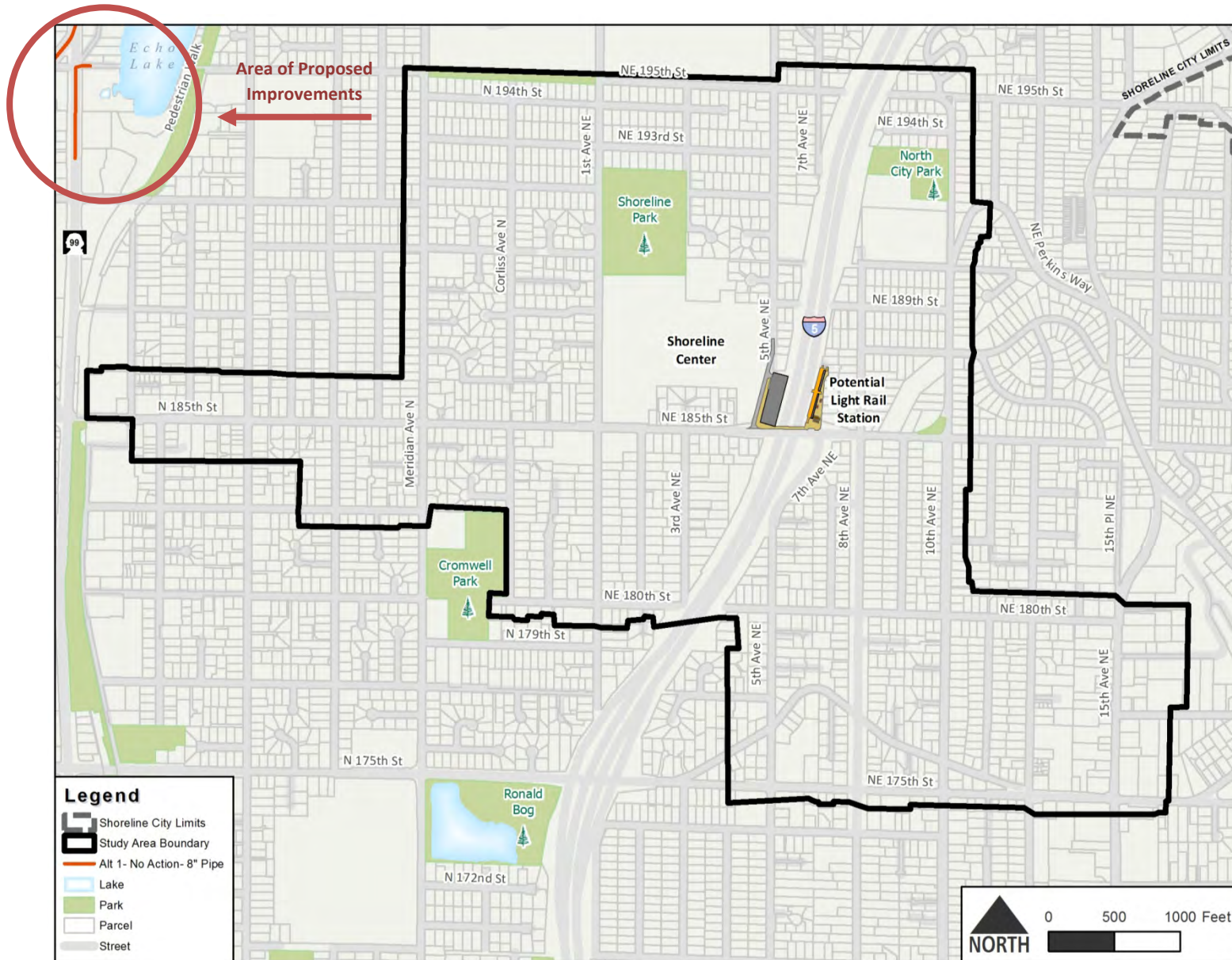


Figure 3.5-7 Planned Water Improvements in the Vicinity of the Subarea

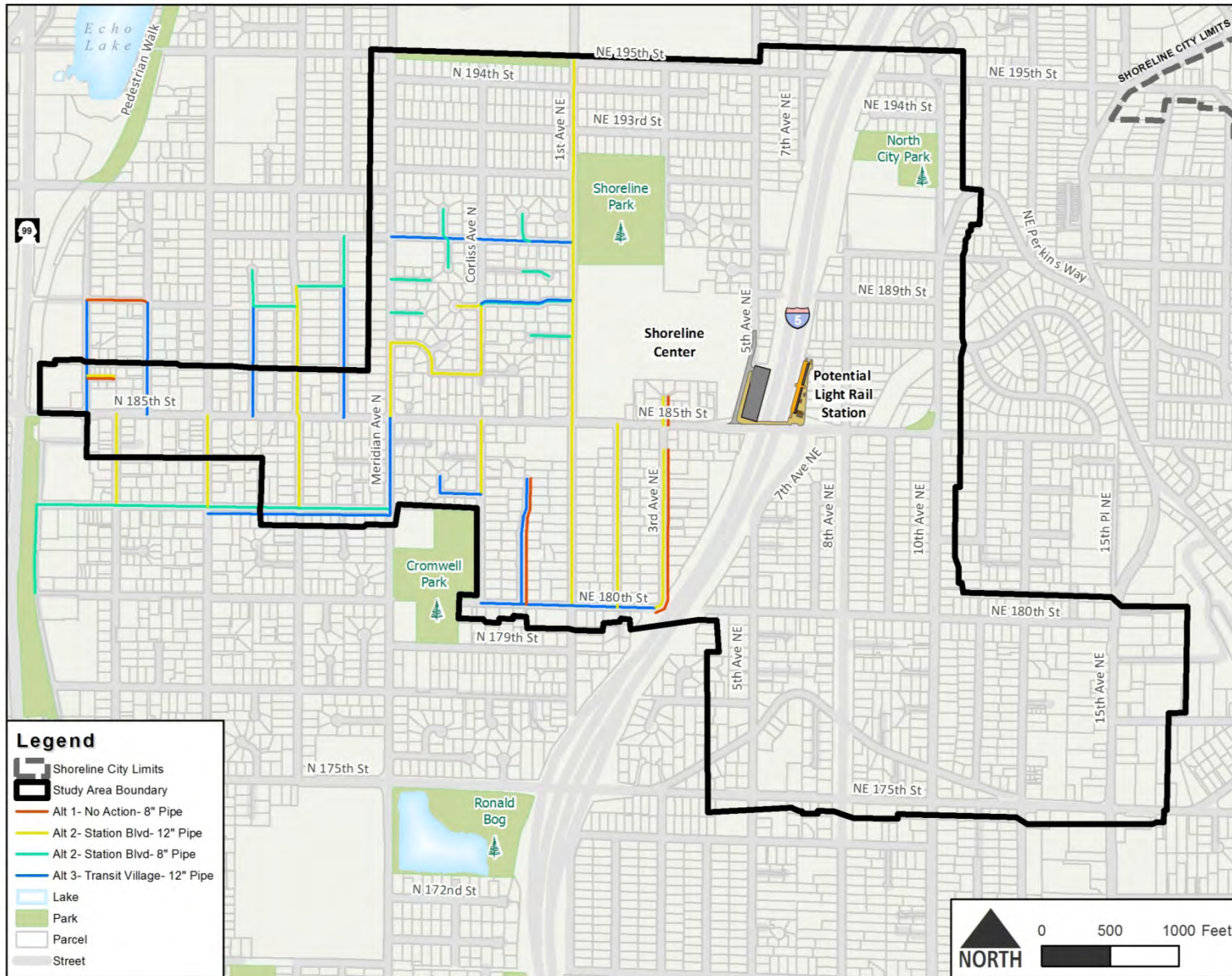


Figure 3.5-8 Other Recommended Future Water Improvements for Mitigation of the Action Alternatives

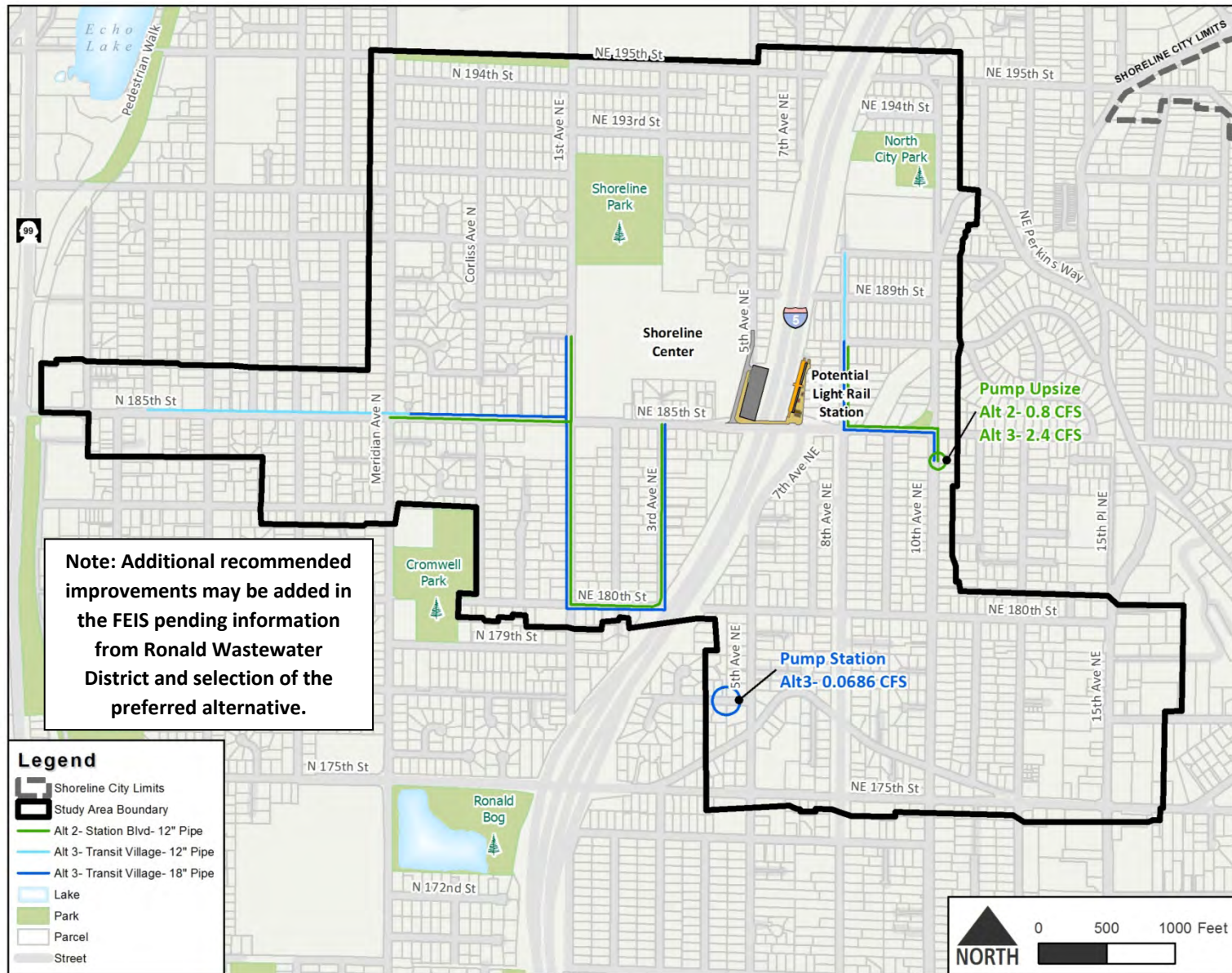


Figure 3.5-9 Recommended Future Wastewater Improvements for Mitigation of the Action Alternatives

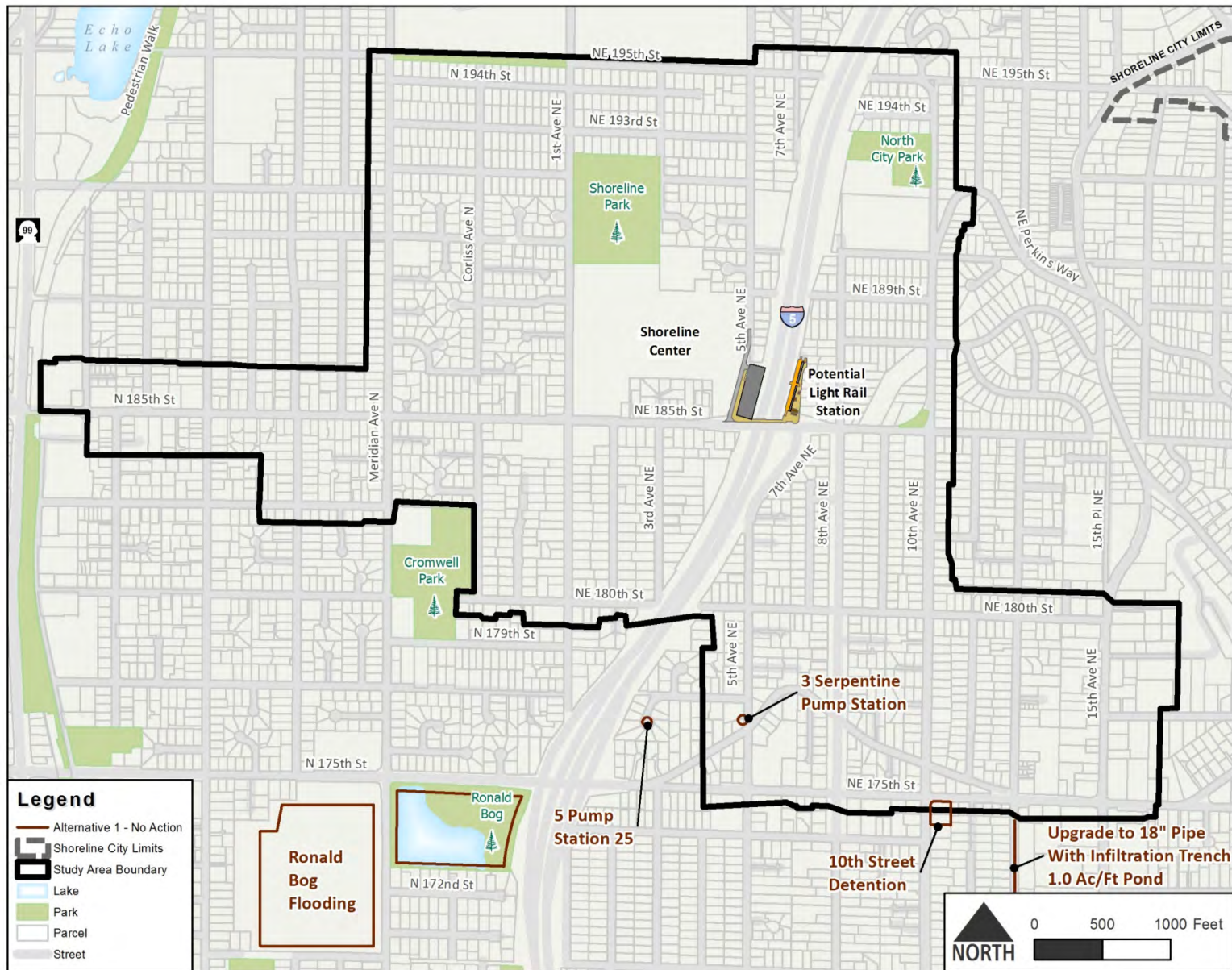


Figure 3.5-10 Planned and Recommended Surface Water/Storm Drainage Improvements in the Vicinity of the Subarea

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Chapter 4

References

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Chapter 4—References

The following references were cited and consulted in the development of the Draft Environmental Impact Statement (DEIS) for the 185th Street Station Subarea Planned Action, including printed and Internet references as well as personal communications. Personal communications occurred through phone calls, emails, or in person meetings documented by notes.

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4.2 Personal Communications

City of Shoreline planning and transportation staff. March 11, 2014 – Meeting with city staff regarding proposed analysis methodology.

Clark, Jay. GIS Technician. Administrative Services. City of Shoreline. April 11, 2014 – email GIS data of utilities operating within the City of Shoreline.

Clayton, Eric. Senior OSP Engineer. Integra Telecom. April 16, 2014 – email data from Integra telecom's service network.

Clouse, Denny. Operations Manager. North City Water District. April 10, 2014 – phone conversation regarding North City Water District distribution network and fire flow demands.

Cowan, Matt, Fire Chief. Shoreline Fire Department. April 21, 2014 – Information about Fire Department services.

Ledford Shawn, Chief of Police. Shoreline Police Department. April 25, 2014 – Information about police services and level of service.

Fallt, Jeremy. Network Engineer. Frontier Communications. April 15, 2014 – email data from Frontier Communications’ service network.

Ford, P.E., Jon. Senior Water System Engineer. Seattle Public Utilities. April 15, 2014 & May 14, 2014 – email data from Seattle Public Utilities 2012 ADD Fire Flow in Shoreline: August 30, 2012, and email regarding planned projects related to the subarea.

McConachie, Justin. Puget Sound Energy. May 16, 2014 – email regarding natural gas services and planned PSE projects related to the subarea.

McIntire, Alicia. City of Shoreline. April 23, 2014 – Provision of Point Wells Expanded Traffic Impact Analysis Report.

McIntire, Alicia. City of Shoreline. October 11, 2013 – Provision of Shoreline Traffic Model and related data.

Meredith, Rich. City of Shoreline. April 4, 2014 – Provision of additional Synchro network and traffic counts.

Kirkwood, Rick. City of Shoreline. April 10, 2014 – Information about City staff level per current population.

Putnam, Clayton. Planner – GIS/IT Analyst. Planning & Development Department. Ronald Wastewater District. May 9, 2014 – email Ronald Wastewater District GIS Data. May 14, 2014 – phone conversation regarding services and planned projects related to the subarea.

Redinger, Miranda. City of Shoreline. March 7, 2014 – Comments regarding proposed analysis methodology.

Redinger, Miranda. City of Shoreline. May, 2014 – Comments regarding Draft Environmental Impact Statement.

Recology CleanScapes Representative, Shoreline, WA. April 25, 2014 – Procedures for solid waste management and disposal.

Szafran, Steve. City of Shoreline. October 14, 2013 – Comment letter to Sound Transit regarding Lynnwood Link DEIS.

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Chapter 5

Distribution List

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Chapter 5—Distribution List

A notice of availability, compact disk, or copy of the Draft Environmental Impact Statement (DEIS) was sent to the following entities. A notice of availability also was published in the City's newspaper of record, the Seattle Times, and emailed to 185th Station Citizens Committee (185SCC) stakeholder list. Refer to the FACT SHEET at the beginning of the DEIS for how to access this DEIS online, obtain a compact disk, or copy of the DEIS.

5.1 Federal Agencies

National Marine Fisheries Service (Division of the National Oceanic and Atmospheric Administration and the US Department of Commerce)

US Army Corps of Engineers

5.2 Tribes

Muckleshoot Indian Tribe, Fisheries Division

Tulalip Tribes

Tribal Council

Natural Resources Division

5.3 State, Regional, and County Agencies and Organizations

Community Transit

Energy Facility Site Evaluation, Stephen Posner

King County Department of Development and Environmental Services

King County Historic Preservation Office, Director's Office, Department of Natural Resources and Parks

King County METRO

King County, Transit Division, Environmental Planning and Real Estate

Puget Sound Clean Air Agency

Puget Sound Partnership

Puget Sound Regional Council

Sound Transit, SEPA Responsible Official

Snohomish County, Planning and Development Services

Washington State Department of Archaeology and Historic Preservation

Washington State Department of Commerce

Washington State Department of Ecology, SEPA Unit

Washington State Department of Ecology, Critical Areas Coordinator, Shorelands, Environmental Assistance Program

Washington State Department of Fish and Wildlife

Washington State Department of Health, Environmental Health Division

Washington State Department of Health, Northwest Region, Drinking Water Operations

Washington State Department of Natural Resources, SEPA Center

Washington State Department of Transportation, Northwest Region

5.4 Public Services, Institutions, and Utilities

Comcast Cable

King County, Department of Permitting and Environmental Review, SEPA Official

King County, Wastewater Treatment Division, Environmental Planning—OAP

North City Water District

Recology CleanScapes, Inc., Chief Operating Officer

Ronald Wastewater District

Seattle City Light

Seattle/King County Health Department, SEPA Responsible Official

Seattle Public Utilities, SEPA Coordinator

Shoreline Fire Department

Shoreline Police Department

Shoreline Libraries (Locations on 175th and in Richmond Beach, King County Library System)

Shoreline School District, Capital Projects Director

Shoreline Water District

5.5 Community and Special Interest Groups and Organizations

185th Street Station Citizens Committee (185SCC)

145th Street Station Citizens Committee (145SCC)

Neighborhood Associations:

Ballinger Neighborhood Association

Briarcrest Neighborhood Association

Echo Lake Neighborhood Association*

Highland Terrace Neighborhood Association

The Highlands

Hillwood Community Network

Innis Arden Club, Inc.

Meridian Park Neighborhood Association*

City of Lake Forest Park, Planning and Building Department, SEPA Responsible Official

North City Neighborhood Association*

City of Lynnwood, Department of Community Development, SEPA Responsible Official

Parkwood Neighborhood Association

City of Mountlake Terrace, Planning and Systems, SEPA Responsible Official

Richmond Beach Neighborhood Association

Richmond Highlands Neighborhood Association

City of Lynnwood, Department of Community Development, SEPA Responsible Official

Ridgecrest Neighborhood Association*

Westminster Triangle Network

City of Seattle, Department of Planning and Development

** Denotes neighborhoods that are partially located within or are bordering the 185th Street Station Subarea.*

Town of Woodway, City Clerk

Thornton Creek Alliance

5.7 City Officials, Commissions, and Departments

Thornton Creek Legal Defense Fund (c/o Attorneys Paul A Kampmeier Smith & Lowney, PLLC)

City Council

5.6 Adjacent and Neighboring Jurisdictions

City Hall

City of Bothell, Department of Community Development SEPA Responsible Official

City Leadership Team/Department Directors

City of Edmonds, Development Services, SEPA Responsible Official

Shoreline Library and Library Board

City of Kenmore, Department of Community Development, SEPA Responsible Official

Parks, Recreation and Cultural Services Board

Planning Commission

Tree Board

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Appendix

APPENDIX CONTENTS:

- Acronyms
- Glossary
- Public and Stakeholder Involvement Information
- Scoping Notice

185th Street Station Subarea Planned Action DRAFT ENVIRONMENTAL IMPACT STATEMENT

Acronyms

ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
ADU	Accessory Dwelling Unit
AMI	Area Median Income
BMP	Best Management Practices
BAT	Bus Access and Transit
BRT	Bus Rapid Transit
BTU	British Thermal Unit
CB	Community Business (Existing Zoning Category)
cfs	Cubic Feet per Second
CIP	Capital Improvement Program
CPPs	Countywide Planning Policies (King County)
CPTED	Crime Prevention through Environmental Design
CRA	Community Renewal Areas
DEIS	Draft Environmental Impact Statement
DNS	Determination of Nonsignificance
DS	Determination of Significance
DSHS	Washington Department of Social and Health Services
EIS	Environmental Impact Statement
EPF	Essential Public Facilities
ERU	Equivalent Residential Unit (or REU)
FAR	Floor Area Ratio
FEIS	Final Environmental Impact Statement

FSS	Fire Suppression System
GIS	Geographic Information System
GMA	Growth Management Act
GMPC	Growth Management Planning Council
gpd	Gallons per Day
gpm	Gallons per Minute
HOV	High Occupancy Vehicle
IPCC	International Panel on Climate Change
ITE	Institute of Transportation Engineers
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development or Local Improvement District (depending on context)
LOS	Level of Service
MDD	Maximum Daily Demand
MG	Million Gallons
mgd	Million Gallons per Day
MRSC	Municipal Research and Services Center of Washington
MUP	Master Use Permit (Potential New Zoning Category)
MUR	Multi-Residential (Potential New Zoning Category)
MUTCD	Manual on Uniform Traffic Control Devices
MOU	Memorandum of Understanding
NACTO	National Association of City Transportation Officials
NB	Neighborhood Business (Existing Zoning Category)
NPDES	National Pollutant Discharge Elimination System
PCD	Planning & Community Development
PROS	Parks, Recreation, and Open Space Plan

PSE	Puget Sound Energy	TOD	Transit-Oriented Development
PSRC	Puget Sound Regional Council	TDR	Transfer of Development Rights
PTE	Property Tax Exemption	TMP	Transportation Master Plan
R-6	Residential, 6 Units per Acre (Existing Zoning Category)	VoIP	Voice over Internet Protocol
R-8	Residential, 8 Units per Acre (Existing Zoning Category)	VMT	Vehicle Miles Traveled
R-12	Residential, 12 Units per Acre (Existing Zoning Category)	WAC	Washington Administrative Code
R-18	Residential, 18 Units per Acre (Existing Zoning Category)	WSDOT	Washington State Department of Transportation
R-24	Residential, 24 Units per Acre (Existing Zoning Category)	NPDES	National Pollutant Discharge Elimination System
R-48	Residential, 48 Units per Acre (Existing Zoning Category)		
RCW	Revised Code of Washington		
RWD	Ronald Wastewater District		
SCL	Seattle City Light		
SEPA	State Environmental Policy Act		
SMC	Shoreline Municipal Code		
SOV	Single occupant vehicle		
SPU	Seattle Public Utilities		
SWD	Shoreline Water District		
SWM	Surface Water or Stormwater Management		
SWMP	Surface Water or Stormwater Management Plan		
SWPPP	Surface Water Pollution Protection Plan		
ST	Sound Transit		
TC	Town Center (Existing Zoning Categories: TC-1, TC-2, TC-3, or TC-4)		
TDM	Transportation Demand Management		
TIP	Transportation Improvement Plan		
TOC	Transit-Oriented Communities		

Glossary

Many of the definitions of terms in this glossary are from the City of Shoreline Comprehensive Plan. Some definitions have been adapted and edited slightly to focus on specific relationship to the 185th Street Station Subarea Planned Action Draft Environmental Impact Statement (DEIS). If definitions are not from the Comprehensive Plan, the source is listed. These definitions are for reference purposes to assist the review of the DEIS. These definitions are not intended to be used for regulatory purposes.

Absorption

In a real estate development context, absorption refers to the amount of increase in occupied commercial space or residential units which occurs in a given market area over a specified time period. Negative absorption means vacancies are occurring faster than new occupancies.

Access Time

The time required to walk, bicycle, or drive from the origin of the trip (for example, from home) to a (boarding) transit stop, plus the waiting time based on the frequency of transit service, and/or the transfer time and the walking or driving time from the transit (de-boarding) stop to the destination. For automobile trips, it is the time required to walk to and from parking places, and delays within parking facilities, if any.

Accessibility

Related to transportation: the ease by which an individual can reach desired activities in any location by use of the transportation system. Accessibility is also a frequent term used in conjunction with Americans with Disabilities Act (ADA) considerations. Calling a public facility “accessible” typically means it complies with ADA standards.

Accessory Dwelling Unit (ADU)

A separate, complete dwelling unit attached to or contained within the structure of the primary dwelling, or contained within a separate structure that is accessory to the primary dwelling unit on the premises.

Adequate Public Facilities

Facilities that have the capacity to serve development without decreasing levels of service below locally established minimums. *Source: Washington State Growth Management Act definitions*

Affordable Housing

Housing that is affordable for a family which earns 80 percent or below of the area median income (AMI). Housing costs, including utility costs, must comprise no more than 30 percent of gross family income in order to be considered affordable. For example, the 2011 AMI for Shoreline was \$66,476. Therefore, a household with that income would be making 100 percent of median; a household that made 50% of that amount (\$33,238) would be classified at 50 percent AMI; a family making 30 percent of that amount (\$19,943) would be classified at 30% AMI. Families who pay more than 30 percent of their income for housing are considered “cost-burdened” and may have difficulty affording necessities such as food, clothing, transportation, and medical care.

Alighting

Term describing the departure of passengers from a bus or transit vehicle. *Source: Lynnwood Link Extension DEIS*

Alignment

Horizontal geometric elements, which define the location of the light rail track or roadway. *Source: Lynnwood Link Extension DEIS*

Allowed Densities

Allowed densities mean that the density, expressed in dwelling units per acre, allowed under a county's or city's development regulations when considering the combined effects of all applicable development regulations. *Source: Washington State Growth Management Act definitions*

Alternatives

State Environmental Policy Act (SEPA) rules mandate consideration of a range of reasonable alternatives that could feasibly attain the proposal's objective, and that are within a jurisdictional agency's authority to

control. Alternatives are possible options or scenarios studied in an environmental impact statement. *Source: Adapted from the SEPA Handbook, Washington State Department of Ecology*

Amenity Zone

Area adjacent to the street curb where a variety of elements may be located, such as street trees, landscaping, furnishings (benches, trash receptacles, etc.), utility poles, light poles, signs, and other features. This area can vary in width but generally should be a minimum of 4 feet wide.

Arterial

A major thoroughfare used mainly for through traffic rather than access to adjacent property. Arterials generally have greater traffic-carrying capacity than collector or local streets and are designed for continuously moving traffic. *Source: Lynnwood Link Extension DEIS*

Average Daily Traffic (ADT)

The total volume of traffic during a given time period divided by the number of days in that time period, representative of average traffic in a one-day time period. *Source: Lynnwood Link Extension DEIS*

Best Management Practices (BMPs)

Defined by the Washington State Department of Ecology as physical, structural, and/or managerial practices that, when used singly, or in combination, prevent or reduce pollution of water. Types of BMPs include source control, runoff treatment, streambank erosion control, and other activities.

Bike Lane

A Bike Lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists. Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists. A bike lane is distinguished from a cycle track in that it has no physical barrier (medians, raised curbs, etc.) that restricts the encroachment of motorized traffic. Conventional bike lanes run

curbside when no parking is present, adjacent to parked cars on the right-hand side of the street or on the left-hand side of the street in specific situations. Bike lanes typically run in the same direction of traffic, though they may be configured in the contra-flow direction on low-traffic corridors necessary for the connectivity of a particular bicycle route. *Source: National Association of City Transportation Officials (NACTO)*

Bike-Shed/Bicycle-Shed Analysis

Similar to a “walk-shed” analysis, a bike-shed or bicycle-shed analysis evaluates the amount of time it takes people to bicycle to and from a high-capacity transit station or other origin/destination within a planning area (such as a station area/subarea). For example, a bike-shed analysis might show routes that could be traveled within 15 minutes to/from the station within a defined geographic area or travel shed. A typical speed of travel would be assumed for travel ways, usually 7 miles per hour for bicycle travel in urban areas. The analysis also typically includes time periods of delay at intersections and crossings. *Source: Otak, Inc.*

Bioretention Facility

A shallow landscaped depression with an engineered soil mix designed to filter runoff from a small contributing area, which can be in the form of a swale or cell; also often referred to as a rain garden. *Source: Lynnwood Link Extension DEIS*

Boarding

Term describing the arrival of passengers onto a bus or transit vehicle. *Source: Lynnwood Link Extension DEIS*

Build-Out

Hypothetical development of all parcels to the maximum extent allowed under current zoning.

Buffer

In a general planning context: transitional land uses of intermediate or low development intensity, open spaces, landscaped areas, fences, walls, berms or any combination thereof used to physically separate or

screen one use or property from another so as to visually shield or block noise, lights, or other nuisances. In an ecological context: a designated area contiguous to a critical area intended to protect the critical area or protect people and property from a hazard associated with the critical area.

Bus Rapid Transit

Bus rapid transit (BRT) is a term applied to public transportation systems using buses with enhanced amenities and with systems that provide faster, more efficient service than an ordinary bus line. Often this is achieved by making improvements to existing infrastructure, vehicles, and scheduling.

Capital Facilities

Structures, improvements, equipment, or other major assets, including land, which are provided by and for public purposes and services.

Capital Improvement Program/Plan (CIP)

Allocation of funds from various revenue sources for the development of capital facilities: to build needed roadways; to protect investment in existing buildings; to protect the health of citizens; to enhance the management of natural resources; to provide necessary capital resources for law, safety, and justice system; and to improve cultural and recreational opportunities for Shoreline citizens. Shoreline's CIP is a multi-year plan for capital expenditures needed to restore, improve, and expand infrastructure, which includes roads, sidewalks, trails, drainage, parks, and buildings owned and/or maintained by the City. The CIP details the work to be done for each project and an expected timeframe for completion. The CIP typically has a short-range planning horizon, six years for example. The CIP identifies projects and equipment purchases to be made, provides a planning schedule, and identifies options for financing the plan.

Carbon Emissions/Greenhouse Gas Emissions

Carbon emissions are a type of greenhouse gas emitted into the atmosphere produced by vehicles and industrial processes. *Source: Web Dictionary*

Channelization

The use of traffic markings or islands to direct traffic into certain paths; for example, a "channelized" intersection directs portions of traffic into a left turn lane through the use of roadway islands or striping that separates the turn lane from traffic going straight. *Source: Lynnwood Link Extension DEIS*

Circulation

The free movement or passage of a vehicle, pedestrian, bicycle, or other transportation mode through a given area. *Source: Lynnwood Link Extension DEIS*

Clustering/Cluster Development

Land development, such as in a subdivision that reduces the individual lot areas to create permanent open space or a reserve for future development while maintaining the overall zoned residential density; also may include clustering of buildings in a more compact area on one larger parcel to preserve open space on the site.

Commute Trip

A trip made from an employee's residence to a work site with a regularly scheduled weekday arrival time of 6:00 a.m. to 9:00 a.m.

Commute Trip Reduction Act

State legislation enacted in 1991 and incorporated into the Washington Clean Air Act. The law establishes goals for the reduction of commute trip vehicle miles traveled by the employees of large employers.

Complete Streets

Complete Streets are designed and operated to enable safe access for all users and all modes.

Comprehensive Plan

The Growth Management Act (GMA) requires certain cities and counties of Washington State to adopt comprehensive land use plans. A comprehensive plan is a generalized, coordinated land use policy statement of the governing body of a county or city that is adopted pursuant to the GMA. A comprehensive plan consists of a map or maps,

and descriptive text covering objectives, principles, and standards. Each comprehensive plan includes goals and policies for land use, housing, capital facilities, utilities, transportation, and the natural environment. Optional components include elements relating to economic development, community design, conservation, solar energy, recreation, and subarea plans. According to the GMA, the comprehensive plan must provide for adequate capacity to accommodate the city's share of projected regional growth. It must also ensure that planned and financed infrastructure can support planned growth at a locally acceptable level of service.

Concurrency/Concurrency Management System

The Growth Management Act requires jurisdictions to adopt and enforce ordinances that prohibit development approval if the development causes the level of service on a transportation facility to decline below the standards adopted in the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made "concurrent" with the development. Concurrent with development means that transportation improvements or strategies are in place at the time of development or that financial commitment is made to complete the improvements or strategies within six years. The Concurrency Management System of King County establishes a process to manage new development based on transportation impacts on levels-of-service and the concurrency of needed improvements or actions. Communities may also establish concurrency for capital facilities, utilities, and other public services.

Conservation Easement

A permanent legal restriction, requirement, or condition placed on the use or management of real property. Conservation easements are put in place by a landowner, but run with the title to the land and transfer to future owners. This tool can be used to preserve open space.

Consistency

Consistency means that no feature of a plan or regulation is incompatible with any other feature of a plan or regulation. Consistency is indicative of a capacity for orderly integration or operation with other elements in a system.

Contiguous Development

Development of areas immediately adjacent to one another.

Conveyance System—Drainage

Facilities, both natural and built, that collect, contain, and provide for the flow of surface and storm water from the highest points on the land down to a receiving water. The natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes, and wetlands. The built elements of the conveyance system include gutters, ditches, pipes, channels, and most retention/detention facilities.

Coordination

Consultation and cooperation among jurisdictions.

Corner Lot

A lot situated at the intersection of and fronting on two or more public street rights-of-way.

Cottage Housing or Clustered Housing

Detached single-family housing that has the following characteristics: 1) each unit is of a size and function suitable for a single person or small family; 2) each unit has the construction characteristics of a single family house; 3) the density of clustered housing is typically 7 to 14 units per acre but may be up to 18 units per acre or higher depending on the overall parcel size; 4) all units are located on a commonly owned piece of property and may have shared amenities (i.e. party room, tool shed, garden, orchard, workshop, parking areas; 5) the site is designed with a coherent concept in mind, including: shared functional open space, off-street parking, access within the site and from the site, and consistent landscaping.

Countywide Planning Policies (CPPs)

The Growth Management Act requires that counties, as regional governments within their boundaries, prepare countywide planning policies that establish a countywide framework from which county and city comprehensive plans are to be developed and adopted. This framework is to ensure that city and county comprehensive plans are

consistent. The “King County Countywide Planning Policies” were developed and recommended by the Growth Management Planning Council to serve as a blueprint for how King County and its cities should grow over the next 20 years. The Metropolitan King County Council adopted these policies in 1992. Since this time, amendments called “Phase II Countywide Planning Policies” have been made to the sections pertaining to affordable housing, economic development, and rural character. The County Council has adopted these Phase II amendments.

Crime Prevention through Environmental Design

Crime Prevention through Environmental Design (CPTED) is a multi-disciplinary approach to deterring criminal behavior through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts, and focus on the built environment.

Critical Areas

Areas that are ecologically important, generally unsuitable for development, and highly susceptible to negative environmental impacts. Critical areas include: critical aquifer recharge areas, geologically hazardous areas, frequently flooded areas, streams, wetlands, and fish and wildlife habitat conservation areas. These individual critical areas are defined in the Shoreline Municipal Code Title 20 (Development Code).

Cultural Resources

Cultural resources is a term used interchangeably with “lands, sites, and structures, which have historical or archaeological and traditional cultural significance.” (See Historic Preservation.)

Culverts

A pipe or concrete box structure that conveys water from open channels, swales, or ditches under a driveway, roadway, fill soil, or surface structure.

Cumulative

Increasing or enlarging by successive addition. Impacts resulting from a series of actions or events that individually would have less effect or no noticeable effect.

Cycle Track

A cycle track is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Cycle tracks have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. In situations where on-street parking is allowed cycle tracks are located to the curb-side of the parking (in contrast to bike lanes).

Cycle tracks may be one-way or two-way, and may be at street level, at sidewalk level, or at an intermediate level. If at sidewalk level, a curb or median separates them from motor traffic, while different pavement color/texture separates the cycle track from the sidewalk. If at street level, they can be separated from motor traffic by raised medians, on-street parking, or bollards. By separating cyclists from motor traffic, cycle tracks can offer a higher level of security than bike lanes and are attractive to a wider spectrum of the public. *Source: National Association of City Transportation Officials (NACTO)*

Density

The number of housing units (also dwelling units) per acre.

Density Incentives/ Bonuses

Additional units exceeding the number of units permitted on a site by zoning (sometimes referred to as “base density”) in exchange for public benefits provided by the developer. King County has incorporated use of density incentives with standard urban subdivision, mobile home park, and multifamily development projects (King County Code, Title 21A).

Development and Redevelopment

An area that is developed as a tract of land with built structures. Redevelopment typically refers to development that converts an older, previously developed area into a new use or development.

District Energy

District energy systems, also called community energy systems, produce electricity, hot water, steam, and/or chilled water at a central plant or series of plants and then distribute the energy through underground pipes and wires to adjacent buildings connecting to the system. Electricity is used to energize lights, appliances, equipment, and machinery, while hot and chilled water and steam are used for space heating and cooling and a variety of commercial and processing needs. From a sustainability standpoint, district energy systems are typically more efficient, less costly, and result in less greenhouse gas emissions than conventional energy systems. *Source: National Energy Center for Sustainable Communities*

Domestic Water System

A domestic water system means any system providing a supply of potable water which is deemed adequate pursuant to RCW [19.27.097](#) for the intended use of a development.

Drainage

Collection, conveyance, containment, and/or discharge of surface and stormwater runoff.

Drainage Basin

A sub-unit of a watershed that is defined by hydrology and topography. An area that drains to common outlet or an identifiable water body, such as a creek, wetland, river, or stream. In King County, 72 drainage basins are contained with 6 major watersheds.

Duplex

A building containing two complete dwelling units. Depending on how they are configured, duplexes are considered single family attached dwellings or multi-family dwellings. Accessory Dwelling Units are not considered duplexes.

Dwelling Unit

A unit that accommodates one household. The unit can be a single-family house, an accessory dwelling unit, or one unit of a duplex, triplex, townhome, apartment building, or condominium. The growth targets in King County are measured in dwelling units.

EcoDistrict

Ecodistricts are neighborhoods or districts with a broad commitment to accelerate neighborhood scale sustainability. EcoDistricts commit to achieving ambitious sustainability performance goals, guiding district investments and community action, and tracking the results over time.

Ecological Function

Physical, chemical, and biological processes or attributes of a species, habitat, or ecosystem. For example, the ecological functions of wetlands include food chain support, water quality maintenance, flood storage, and wildlife habitat.

Environmental Impact Statement

An environmental impact statement (EIS) is a document that includes analysis of probable significant adverse environmental impacts of a proposal, reasonable alternatives, and possible mitigation measures. An EIS is prepared when the lead agency has determined a proposal is likely to result in significant adverse environmental impacts. A draft environmental impact statement (DEIS) is developed and issued for public and agency comment with initial analysis of alternatives and potential impacts. Then, a final environmental impact statement (FEIS) is developed and issued to respond to comments and address any additional analysis that may be needed. The FEIS documents the decision for the proposed action. *Source: Adapted from the SEPA Handbook and SEPA Glossary of Terms, Washington State Department of Ecology*

Essential Public Facility

Facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities as defined in RCW 47.06.140, state and local correctional facilities, solid waste handling facilities; and in-patient facilities, including substance

abuse facilities, mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.09.020 (RCW 36.70A.200).

Fair Housing Ordinance

King County's Fair Housing Ordinance prohibits housing discrimination against persons on the basis of race, color, religion, national origin, age, sex, marital status, parental status, use of subsidy (Section 8), sexual orientation, disability or the use of a trained service animal.

Floor Area Ratio (FAR)

A ratio which expresses the relationship between the amount of gross floor area permitted in a structure to the area of the lot on which the structure is located. The FAR is the gross floor area of all buildings and structures on a lot divided by the total area of the site/lot/parcel.

Flow

When used in reference to surface water management, this term refers to the rate of water discharged from a source expressed in cubic feet of water per minute.

Front Yard Setback

The required minimum distance separating a building from the public street right-of-way or the edge of a sidewalk which extends beyond a right-of-way, whichever is closer.

Green Streets

City rights-of-way that are designed to serve as vehicular facilities to provide a citywide system that links parks, open spaces, recreation areas, trails, schools, and shopping areas. Green streets are intended to accommodate bicycle and pedestrian travel with more emphasis on streetscape design, including generous sidewalks separated from the vehicular lanes by landscaping, and wide vehicle lanes or striped bicycle lanes that provide safe bicycle use. Green Streets may also incorporate drainage facilities for improving water quality and landscape treatments designed to enhance or restore natural habitat. They can transform impervious street surfaces into landscaped green spaces that capture stormwater runoff and let water soak into the ground as plants and soil

filter pollutants. Green Streets convert stormwater from a waste directed into a pipe, to a resource that replenishes groundwater supplies. Green streets can create attractive streetscapes and urban green spaces, provide natural habitat, and help connect neighborhoods, schools, parks, and business districts.

Growth Management Act (GMA)

In 1990, the Washington State Legislature passed the State Growth Management Act (ESHB 2929). The Act calls for urban counties and cities in the state to develop comprehensive plans to guide growth management decisions for at least the next decade. Amendments to the Act in 1991 require that counties, working with the cities within their boundaries, develop Countywide Planning Policies to provide a common vision of the future to serve as the framework for all comprehensive plans throughout the county.

Growth Management Planning Council (GMPC)

Established by an interlocal agreement, this is a 15-member council of elected officials from Seattle, suburban cities, and King County. The GMPC has been responsible for the preparation and recommendation of the Countywide Planning Policies to the Metropolitan King County Council, which then adopts the policies and sends them to the cities for ratification.

Growth Targets

The Growth Management Act and the Countywide Planning Policies require King County and its cities to plan for a 20-year population and employment growth target for each jurisdiction, based on designation of the Urban Growth Area, Urban Centers, and the criteria of the Countywide Planning Policies.

Habitat

The environments in which organisms normally live; habitat components include food, water, cover (security, breeding, thermal), range, and connectivity.

High-Capacity Transit

A system of public transportation services within an urbanized region operating principally on exclusive rights-of-way; examples include light rail transit or express buses on exclusive bus ways and their supporting services. *Source: Lynnwood Link Extension DEIS*

High Occupancy Vehicle (HOV)

A vehicle containing two or more occupants including carpools, vanpools, and transit vehicles.

Historic Preservation

Historic Preservation is defined in the National Historic Preservation Act of 1966 as identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, and education and training regarding the foregoing activities or any combination of the foregoing activities. "Lands, sites, and structures, that have historical, archaeological, or traditional cultural significance" are the tangible and material evidence of the human past, aged fifty years or older, and include archaeological sites, historic buildings and structures, districts, landscapes, and objects.

Home Occupation

Any activity carried out for gain by a resident and conducted as a customary, incidental, and accessory use in the resident's dwelling unit.

Household

See "dwelling unit."

Hydrology

Hydrology refers to the properties, distribution, discharge, re-charge, and movement of surface and subsurface water.

Impact Fees

Impact fees are charges assessed by local governments to new development projects that provide the opportunity to recover the costs of providing the public facilities required to serve the new development. Impact fees are only used to fund facilities, such as roads, schools, and

parks, that are directly associated with the new development. They may be used to pay the proportionate share of the cost of public facilities that benefit the new development; however, impact fees cannot be used to correct existing deficiencies in public facilities. In Washington, impact fees are authorized for those jurisdictions planning under the Growth Management Act (RCW 82.02.050 - .110), as part of "voluntary agreements" under RCW 82.02.020, and as mitigation for impacts under the State Environmental Policy Act (SEPA - Ch. 43.21C RCW). GMA impact fees are only authorized for: public streets and roads; publicly owned parks, open space, and recreation facilities; school facilities; and fire protection facilities in jurisdictions that are not part of a fire district.

Impervious/Impermeable Surfaces

Impervious or impermeable surfaces are not easily penetrated by water. For instance, paved surfaces are impervious because they are not easily penetrated by rain.

Incentives (Economic Development)

Components of economic development policy that seek to encourage growth in traditionally impoverished or underdeveloped areas. Incentives come in the various policy forms, but traditionally focus on tax incentives and infrastructure improvements. Development Incentives come from various levels of government on the local, state and national level. *Source: Wikipedia*

Infill

Development or redevelopment on properties or groups of properties within or surrounded by existing built-up areas.

Jobs-to-Housing Ratio and Jobs-to-Housing Balance

The jobs-to-housing ratio refers to the ratio of jobs per household across a jurisdiction (city, county, or region). A jobs-to-housing balance is a target set that brings jobs and housing into balance within a specific geographic area. Jobs and housing are "balanced" at approximately 1.5 jobs per household. Jobs-to-housing ratio or balance is "a means to address travel demand by improving accessibility to jobs, as well as to goods, services, and amenities" (PSRC, Vision 2040). Shoreline does not currently meet this target in that there are .72 jobs per household

(based on the 2010 census). The creation of new jobs through economic development in Shoreline can help alleviate the mismatch between jobs and housing, reducing commute times and creating more opportunities for residents to work and shop within their own community.

Land Use Map

The official land use map for a comprehensive plan that designates the general location and extent of the uses of land for housing, commerce, industry, open space, public facilities, and other land uses, as required by the Washington State Growth Management Act.

Land Use Pattern/Land Development Pattern

The use, types, and intensity of development; land use/development patterns have a direct relationship to transportation and trip demand, as well as average trip length; therefore, land use patterns also have a direct affect on energy consumption. *Source: Adapted from Lynnwood Link Extension DEIS*

Lead Agency

Under SEPA, the lead agency is responsible for completing the environmental review of a proposal and issuing the necessary SEPA documents, so that all permitting agencies can make informed decisions. *Source: SEPA Glossary of Terms, Washington State Department of Ecology*

Leadership in Energy and Environmental Design (LEED)

Leadership in Energy and Environmental Design (LEED) consists of a suite of rating systems developed by the United States Green Building Council (USGBC) for the design, construction and operation of high-performance green buildings, homes and neighborhoods.

Level of Service

Level of Service (LOS) is a term that describes the amount, type, or quality of facilities that are needed in order to serve the community at a desired and measurable standard. Under the Washington State Growth Management Act, LOS means an established minimum capacity of public facilities or services that must be provided per unit of demand or other

appropriate measure of need. Level of service standards are synonymous with locally established minimum standards.

An example would be assigning a certain number of police officers per capita. (For example, in Shoreline, the policy on level of service for police is 0.85 officers per 1,000 residents and a response time of 5 minutes or less to all high priority calls and within 30 minutes to all calls, according to the City of Shoreline Comprehensive Plan, 2012.) LOS standards vary based not only on the type of service being provided but also by the quality of service desired by the community. A community can decide to lower, raise, or maintain the existing levels of service for each type of capital facility and public service provided. This decision will affect both the quality of the service provided, as well as the amount of new investment or facilities that will be needed to serve the community.

Level of Service for Transportation

Transportation level of service (LOS) describes the operational condition of the travel stream and acceptable adequacy requirements. Such standards may be expressed in terms such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, convenience, geographic accessibility, and safety. Transportation LOS is often a qualitative measure, graded A (best) through F (worst), describing the operational conditions of the city's transportation system.

Light Rail Transit

A mode of mass transportation comprising light rail vehicles, which travel on steel tracks and are powered by electricity from overhead wires. This mode is characterized by its ability to operate in at-grade and/or grade-separated environments. *Source: Lynnwood Link Extension DEIS*

Link

The name of Sound Transit's light rail system; may also refer to a segment of a transportation system or roadway.

Living-Wage Jobs

A living wage is a level of income that allows the earner to afford adequate shelter, food, and other necessities for a satisfactory standard of living. Often minimum wages are insufficient to provide for this standard, given local cost of living. Living-wage jobs are capable of supporting a family. For the purposes of the planning in Shoreline, the term means jobs that pay at least 80 percent of the annual average wage of King County in a given year.

Local Improvement District

Local improvement districts (LIDs) can provide a means of assisting benefitting properties in financing needed capital improvements through the formation of special assessment districts. LIDs permit improvements to be financed and paid for over a period of time through assessments on the benefitting properties. (*MRSC Website*)

Low Impact Development

Low Impact Development (LID) describes a design approach to managing stormwater runoff and land development strategy applied at the parcel and subdivision scale. LID emphasizes conservation and use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely mimic predevelopment hydrologic functions. The approach attempts to closely replicate pre-development hydrology of watersheds through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source. Low impact development may also be called green stormwater infrastructure and low impact side development. Techniques and treatments used include:

- Permeable pavement that allows stormwater to filter through the medium around each paver and down to a system of modular blocks.
- Bio-retention boxes and stormwater planters are landscaped concrete containers that allow stormwater to flow through special filter media, which captures and immobilizes pollutants.
- Green roofs and green walls designed to incorporate living elements, such as climbing plants, into roof structures and

retaining walls, not only improve the appearance of the structures, but also soak up runoff.

- Rain gardens are bio-retention areas that are graded and landscaped more informally, mimicking natural processes, and are typically larger than bio-retention boxes and stormwater planters.

Low Income Household

A low income household is at or below the US Department of Health and Human Services poverty guidelines.

Market Forces

Economic factors affecting the price, demand, and availability of a commodity; in relation to subarea planning, market factors will influence the demand for certain types of land uses the plan may propose. *Source: Adapted from Web Dictionary*

Master Development Plan

A plan that establishes site specific development standards for an area designated Campus or Essential Public Facility as defined in the comprehensive plan. Master Development Plans incorporate proposed development, redevelopment, and/or minor expansion of uses as authorized in the Development Code.

Master Use Permit (MUP)

A potential new zoning designation under consideration that would apply to Alternative 3 in the DEIS that would allow more flexibility than found in a standard development. An MUP can apply creativity in features such as variety in the type, design, and arrangement or structures; a mix of land uses; conservation of natural land features; and efficient use of open space. This designation might include bonus density provisions that would allow additional density (units per acre) and increased building height in exchange for the provision of certain community amenities. Refer to Section 3.1 of the DEIS for more information. *Source: Otak, Inc.*

Median Household Income

The midpoint between all households with an income above the median and all households with an income below the median.

Mitigation/Mitigation Measures

Mitigation can involve avoiding, minimizing, rectifying (repairing), reducing, eliminating, compensating, or monitoring of environmental impacts. Mitigation measures are the elements proposed to mitigate impacts. *Source: Adapted from the Glossary of SEPA Terminology, Washington DOE*

Mixed Use

A development with combined commercial and residential uses, either in the same building or adjacent buildings.

Mixed Use Residential (MUR)

A potential new zoning designation under consideration that would apply to Alternative 3. Typical transit-oriented development, mixed use building types would be allowed within MUR-zoned areas. These buildings would typically include active ground floor uses below residential and/or office uses above. Refer to Section 3.1 of the DEIS for more information. *Source: Otak, Inc.*

Modes of Travel/Multi-Modal Transportation

Modes of travel include various types of transportation including single-occupant vehicles, transit, carpooling, bicycling, walking, and other modes. Multi-modal transportation involves multiple modes within a link, system, or network.

Mode Split

The percentage of total trips by various modes of travel. For example, a mode split objective might call for a minimum of 40 percent of all trips to be made by transit.

Municipal Research and Services Center of Washington

The Municipal Research and Services Center (MSRC) of Washington is a private, non-profit organization based in Seattle, Washington. MSRC's mission is supporting effective local government in Washington through trusted consultation, research, training, and collaboration. Its vision statement is excellence in local government fostering great communities. MRSC serves Washington local governments by providing: (1) dependable advice from a multidisciplinary team of professional consultants; (2) a comprehensive website; (3) access to thousands of sample documents; (4) timely print and electronic newsletters; (5) informative publications; and (6) access to the largest local government library collection in the Northwest

Multi-Family

A building containing two or more complete dwelling units, including units that are located one over the other. Multi-family buildings include duplexes, townhomes, garden apartments, and mid- and high-rise apartments. Accessory Dwelling Units are not considered multi-family housing.

Multi-Modal Transportation Planning

Multi-modal transportation planning refers to decision-making that considers various modes (walking, cycling, automobile, public transit, etc.), and connections among modes so each can fill its optimal role in the overall transport system.

Neighborhood Business Centers

Shopping areas offering convenience goods and services to local residents. They primarily contain retail stores and offices.

Node

In the context of planning and economic development, **nodes** are often characterized as discrete areas that have compact, mixed use development; access to transit and major arterials; and high quality urban design.

Non-Point Pollution

Pollution which enters any waters of the State from any dispersed land-based or waterbased activities, including but not limited to atmosphere

disposition; surface water runoff from agricultural lands, urban areas, or forest lands;; subsurface or underground sources , or discharges from boats or marine vessels.

Non-Motorized Transportation

Pedestrian, bicycle, and equestrian travel, and the facilities needed to make it safe and convenient.

Open Space

Public open space includes parks and natural areas. Private open space includes natural areas or designated open space tracts, golf courses, and cemeteries. The Growth Management Act requires cities and counties to identify open space corridors within and between urban growth areas, which include lands useful for recreation, wildlife habitat, trails, and connections between environmentally sensitive areas.

Parcel/Property Aggregation

Several parcels of land grouped together or considered as a whole. In relation to subarea planning, it may be recommended that parcel aggregation occur in order to create larger sites for redevelopment opportunities. *Source: Adapted from Web Dictionary*

Placemaking

Placemaking is a multi-faceted approach to the planning, design, and management of public spaces. Placemaking capitalizes on a local community's assets, inspiration, and potential, ultimately creating good public spaces that promote people's health, happiness, and well-being. Placemaking is both a process and a philosophy.

Planned Action

A development project for which impacts have been addressed by an Environmental Impact Statement (EIS) associated with a plan for a specific geographic area before individual projects are proposed. A planned action involves detailed SEPA review and preparation of EIS documents in conjunction with sub-area plans. *(MRSC, Municipal Research Services Center of Washington website)*

Planned Unit Development (PUD)

A development type that allows more flexibility than found in a standard development. A PUD may contain features such as variety in the type, design, and arrangement or structures; a mix of land uses; conservation of natural land features; and efficient use of open space.

Preferred Alternative

An alternative that has been identified as preferred by the Lead Agency in an EIS. The preferred alternative of proposed zoning changes for the 185th Street Station Subarea Plan will be identified in the final environmental impact statement (FEIS). As the Lead Agency, the City of Shoreline will determine the Preferred Alternative based on outcomes from the draft environmental impact statement (DEIS), including public comment and technical analysis. The Planning Commission will initially make recommendations for a preferred alternative, which will be forwarded to the City Council for confirmation. The preferred alternative may be one of the alternatives studied in the DEIS, a hybrid of two or more of these alternatives, or a new alternative. The FEIS will provide additional analysis to support the preferred alternative as needed.

Priority Needs Process

Because community needs (e.g., transportation) exceed funding resources, a priority needs process is created. The process rates each improvement project and assigns it a score. High score projects are funded first.

Public-Private Partnership

A relationship between public and private agencies/entities whereby the parties involved work together on a project--such a project could be to construct a project (e.g., a capital facility) or to jointly administer a development. A wide range of other types of projects can be entered into by the partnership.

Public Services

Services provided for the public, which can be provided by a variety of public, non-profit, and private entities. For the purposes of analysis of potential impacts in a DEIS the primary focus is on public services

provided by public entities, such as school districts, municipal or district parks and recreation, police, and other agencies. "Public service obligations" means obligations imposed by law on utilities to furnish facilities and supply service to all who may apply for and be reasonably entitled to service.

Public Spaces

Those public and private lands designed for public use and gatherings, such as parks, plazas, walkways, and sidewalks

Puget Sound Regional Council (PSRC)

The designated metropolitan planning organization for Shoreline, and responsible for regional growth management and transportation planning in the four-county region which includes King, Pierce, Snohomish, and Kitsap Counties. PSRC's General Assembly includes mayors, county executives, and council and commission members from the four counties. The Council also includes as members the ports of Everett, Seattle, and Tacoma; the State Department of Transportation; and the Transportation Commission. The PSRC prepares Multi-county Planning Policies for the four-county region.

Rain Garden

Planted depressions that allow rainwater runoff from impervious areas, like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed. This reduces rain runoff by allowing stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished groundwater). They can be designed for specific soils and climates. The purpose of a rain garden is to improve water quality in nearby bodies of water. Rain gardens can cut down on the amount of pollution reaching creeks and streams by up to 30 percent. *Source: Wikipedia*

Regional Detention Facility

A stormwater quantity control structure designed to correct the existing excess surface water runoff problems of a basin or sub-basin.

Neighborhood Traffic Safety Program

A program created by the City of Shoreline to help address safety concerns on residential streets stemming from higher-speed cut-through traffic. The program includes enhanced enforcement and education along with engineering solutions such as traffic calming (speed humps, traffic circles, narrowed lanes, etc.).

Retail Sales Leakage

While Shoreline is home to many retail establishments, residents often leave the city to shop. Retail "sales leakage" refers to a deficit in sales made in the city compared with the amount of spending on retail goods by Shoreline residents. Refer to Section 3.2 of the DEIS for more information.

Retention/Detention Facility (R/D)

A type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, and/or infiltration into the ground; or to hold surface and stormwater runoff for a short period of time, and then release it to the surface and stormwater management system.

Rezone

A change to the zoning classification of a current parcel or area, accomplished according to City regulations and through a public review process.

Runoff

Waste water originating from rainfall and other precipitation and is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands, as well as shallow groundwater.

Sanitary Sewer Systems

A variety of systems with facilities that are used in the collection, transmission, storage, treatment, or discharge of any waterborne waste, whether domestic in origin or a combination of domestic, commercial, or industrial waste. These also can include approved on-site disposal facilities, but these are only considered sanitary sewer systems if they are designed to serve urban densities.

Scoping

Scoping is the initial step in the Environmental Impact Statement (EIS) process. The purpose of scoping is 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. Scoping also provides notice to the public, interested agencies, tribes, and others that an EIS is being prepared, and initiates their involvement in the process. Source: *SEPA handbook, Washington Department of Ecology*

Scoping Notice

During the process of Scoping, the Lead Agency issues a Scoping Notice, which is published for public notification and states the Lead Agency's determination of significance and intent to complete an EIS.

Sharrow

A sharrow is a shared lane markings used to indicate a shared lane environment for bicycles and automobiles. Shared lane markings reinforce the legitimacy of bicycle traffic on the street and recommend proper bicycle positioning. A shared lane marking is not a facility type; it is a pavement marking. Sharrows:

- Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist's impacting the open door of a parked vehicle,
- Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lane,
- Alert road users of the lateral location bicyclists are likely to occupy within the traveled way,
- Encourage safe passing of bicyclists by motorists, and
- Reduce the incidence of wrong-way bicycling.

Source: *National Association of City Transportation Officials (NACT) and Manual on Uniform Traffic Control Devices (MUTCD)*

Shoreline Municipal Code

The Shoreline Municipal Code (SMC) contains all laws adopted by the City of Shoreline. This document includes or incorporates by reference

all regulations, rules, and procedures pertaining to the entire range of City responsibilities and initiatives. Chapters of the SMC relating to planning include: Land Use and Development, Subdivisions, Building and Construction, Environment, Vehicles and Traffic, Streets, Sidewalks, and Public Places.

Significant Unavoidable Adverse Impact

A reasonable likelihood of more than a moderate adverse impact on the environment. As used in the State Environmental Policy Act (SEPA), "significance" involves context and intensity and does not lend itself to a formula or quantifiable text. The context may vary with the physical setting. Intensity depends on the magnitude and duration of an impact. The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.

Single Family Attached Housing

One dwelling unit that is attached to at least one other dwelling unit by common or abutting walls, with each dwelling unit located on a separate (fee simple) lot or on a common parcel. Examples could include duplexes, triplexes, or townhomes.

Single Family Detached Housing

A building containing one dwelling unit that is not attached to any other dwelling by any means and is typically located on a separate (fee simple) lot surrounded by a private yard. Includes manufactured homes.

Slope

The inclination of the land surface from the horizontal plane—percentage of slope is the vertical distance divided by the horizontal distance, multiplied by 100. Slope is also measured in degrees (90 degrees being vertical) or as a ratio. A 100 percent slope would be 45 degrees or a 1:1 ratio.

Solid Waste Management/Solid Waste Handling Facility

Management includes transfer, recycling, disposal, preparation for reuse, composting, and other means of treating solid waste materials

disposed by the community; solid waste handling facilities are for the transfer or ultimate disposal of solid waste, including landfills and municipal incinerators.

Sound Transit (ST)

State legislation of 1992 allowed the creation of Regional Transit Authority (RTA), as an agency in King, Snohomish, and Pierce Counties. The RTA was formed in 1993 and renamed to Sound Transit in 1999. Its Board is made up of local elected officials from the 3e counties and the State Department of Transportation Secretary. ST has the responsibility to collect and distribute new tax revenues for regional rail transit, and to build and operate a regional rail transit system. ST also distributes funds to local transit agencies to provide feeder services for the rail system. Its funding depends on local voter approval of a regional high-capacity transit plan and funding.

State Environmental Policy Act (SEPA)/SEPA Rules

An act of legislation adopted by the State of Washington and defined in the Revised Code of Washington (RCW) [Chapter 43.21C RCW](#). SEPA Rules are described in [Chapter 197-11 of the Washington Administrative Code \(WAC\)](#), and these rules have been rules adopted by the Department of Ecology to implement the Act. Following SEPA procedures provides a way to identify possible environmental impacts that may result from governmental decisions. These decisions may be related to issuing permits for private projects, constructing public facilities, or adopting regulations, policies, or plans. Information provided during the SEPA review process helps agency decision-makers, applicants, and the public understand how a proposal will affect the environment. This information can be used to change a proposal to reduce likely impacts, or to condition or deny a proposal when adverse environmental impacts are identified. *Source: SEPA website, Washington State Department of Ecology*

Storm Drain/Drainage System

The system of gutters, pipes, streams, or ditches used to carry surface and stormwater from surrounding lands to streams, lakes, or Puget Sound.

Storm Drains

The enclosed conduits that transport surface and stormwater runoff toward points of discharge (sometimes called storm sewers).

Stormwater/Surface Water

Water that is generated by rainfall, and is often routed into drain systems in order to prevent flooding. Also, water originating from rainfall and other precipitation that is found in drainage facilities, rivers, streams, springs, seeps, ponds, lakes, and wetlands, as well as shallow ground water.

Stormwater/Surface Water Management System

Drainage facilities and any other natural features which collect, store, control, treat, and/or convey surface and stormwater.

Street Functional Classification

A hierarchy of streets based upon the degree to which they provide through movement and land access functions. Categories include principal arterial, minor arterial, collector arterial, and primary and secondary local streets. Certain land use policies and street standards are based on these functional classifications.

Strip Commercial

An area occupied by small and medium sized commercial businesses that are generally organized in a linear fashion along an arterial street.

Study Areas

Defined geographic areas that are the focus of analysis and planning, also sometimes called specific area or subarea planning. In Shoreline, two types of study areas are recognized for light rail station subarea planning:

- **Land Use Study Areas** encompass parcels that may be appropriate for different uses and zoning than previously allowed, based on their proximity to future light rail stations. Land within the study area will be analyzed with regard to appropriate uses, bulk, densities, design and transition

standards, and how zoning changes and neighborhood transition may be predictably phased over time.

- **Mobility Study Areas** represent properties and roadways that may be impacted by additional traffic generated by future light rail stations. Land within the study area will be analyzed with regard to enhanced pedestrian and bicycle connectivity to stations. Certain roadways extending beyond the study area boundaries will be analyzed with regard to traffic improvements or calming, and infrastructure for modes of travel that provide an alternative to single-occupancy vehicles.

Subarea

A subarea is a defined geographic area that is the focus of analysis and planning with the specific outcome of a subarea plan. The subarea encompasses both the land use and mobility study areas, and typically may have boundaries that match the broadest overlapping boundaries of these study area.

Subarea Planning

Subarea plans provide detailed land use plans for local geographic areas. This level of planning brings the policy direction of the comprehensive plan to a smaller geographic area. These plans are meant to implement the comprehensive plan, and be consistent with City policies, development regulations, and Land Use Map. *Source: Shoreline Comprehensive Plan*

Subdivision

Land that has been divided into legal lots, or the process of dividing land into lots.

Sufficient Land Capacity for Development

The comprehensive plan and development regulations provide for the capacity necessary to accommodate all the growth in population and employment that is allocated to that jurisdiction through the process outlined in the county-wide planning policies, including zoning actions.

Sustainable Development/Triple-Bottom-Line Sustainability

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability can be evaluated through a “triple-bottom-line approach that incorporates an expanded spectrum of values and criteria for measuring organizational (and societal) success related to social equity (people), the environment (planet), and economic factors (prosperity). There are many definitions of sustainability and sustainable development. All of them emphasize:

- Living within the limits
- Understanding the interconnections among society, environment, and economy
- Equitable distribution of resources and opportunities

Source: Adapted from the Shoreline Comprehensive Plan, 2012 and sustainablemeasures.com

Swale

A shallow natural or constructed drainage feature. Swales are vegetated low-lying areas that can help filter pollutants as they collect, percolate, and/or slow direct stormwater. A swale and berm (raised earthen area) combination can be an attractive and functional landscape feature that helps detain and percolate runoff that would otherwise rush into streets, storm drains, and waterways.

Third Places

Third places are the places in between home and work that people frequent. The term is in the concept of community building, where the “first place” is the home and those that one lives with. The “second place” is the workplace—where people may actually spend most of their time. “Third places” are anchors of community life, and facilitate and foster broader, more creative interaction. All societies already have informal meeting places; what is new in modern times is the intentionality of seeking them out as vital to current societal needs.

Townhouse

A one-family dwelling in a row or configuration of at least 3 such units, in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more vertical common fire-resistant walls.

Townhomes may be located on a separate (fee simple) lot or several units may be located on a common parcel. Townhomes may be considered single-family attached dwellings or multi-family dwellings.

Transfer of Development Rights (TDR)

Permits an owner of real property to sell or exchange the development rights associated with that property to another owner in return for compensation. A program in which the unused portion of a “sending” property’s zoned capacity, expressed as dwelling units per acre or floor area, is transferred to the developer of a “receiving” site who is allowed to add the additional capacity to the zoned limit of that site. TDR’s can be used to prevent the demolition of affordable housing units or to protect sensitive resources, open space, or historical properties. By designating appropriate receiving areas and criteria for sending sites, local governments can meet identified community goals with market mechanisms.

Transit-Oriented Communities

Transit-Oriented Communities (TOCs) are mixed-use residential or commercial areas within a walkable, compact neighborhood or subarea surrounding a transit access point. TOCs are designed to maximize access to public transport, and often incorporate features to encourage transit ridership. A TOC typically has a center with a transit station, surrounded by relatively high density development, with progressively lower-density development spreading outward from the center. TOCs generally are located within ½ mile from a transit stop, as this is considered to be an appropriate scale for pedestrians.

Transit-Oriented Development

Transit-oriented development (TOD) may occur on a site or within a district that is part of a transit-oriented community or neighborhood. TOD is commonly defined as high-density, mixed-use development within walking distance (typically within ¼ to ½ mile) of a transit station. TOD provides a range of benefits including increased transit ridership, reduced regional congestion and pollution, and healthier, more walkable neighborhoods. TODs that provide a mix of both affordable and market-rate housing contribute to a vibrant, livable, walkable environment that encourages transit use and makes it possible to live a

high quality of life without complete dependence on a car for mobility or survival. *Source: adapted from transitorienteddevelopment.org and mitod.org*

Transportation Demand Management (TDM) or Demand Management

Strategies for the reduction of automobile trips, particularly trips taken in single-occupant vehicles—TDM encourages public transportation over automobile use. TDM can include policies, programs, and actions implemented to reduce automobile and single-occupant vehicle trips, and to change travel behavior to make more efficient use of existing facilities to meet travel demand. Examples of demand management strategies include:

- (a) Shift demand outside of the peak travel time;
- (b) Shift demand to other modes of transportation;
- (c) Increase the average number of occupants per vehicle;
- (d) Decrease the length of trips; and
- (e) Avoid the need for vehicle trips.

The use of high-occupancy vehicles (public transit, car-pooling, and van-pooling) and spreading travel to less congested time periods through alternative work hour programs, are two specific examples of TDM actions.

Transportation Facilities and Services

Physical assets of the transportation system that are used to provide mobility, including roads, transit, bridges, traffic signals, ramps, buses, bus garages, park and ride lots, and passenger shelters.

Triplex

A building containing 3 complete dwelling units, each of which has direct access to the outside or to a common hall. Depending on configuration, triplexes may be considered single-family attached dwellings on separate (fee simple) lots, or multi-family dwellings on a common lot.

Truck Route

A roadway, usually a highway or major arterial, which is identified by federal, state, or local governments as an appropriate route for heavy commercial vehicle transport.

Unemployment Rate

The percentage of the civilian labor force that is unemployed and actively seeking employment, based on claims made to the State for Unemployment Insurance.

Universal Design

Universal design is an approach to the design of all products and environments to be as usable as possible by as many people as possible regardless of age, ability, or situation.

Urban Growth Area (UGA)

The Growth Management Act requires King County's Comprehensive Plan to designate an Urban Growth Area (UGA), where most future urban growth and development is to occur to limit urban sprawl, enhance open space, protect rural areas, and more efficiently use human services, transportation, and utilities. The comprehensive plan designates an UGA that includes areas and densities sufficient to permit the urban growth that is projected to occur in the county for the succeeding 20-year period.

Utilities or Public Utilities

Enterprises or facilities serving the public by means of an integrated system of collection, transmission, distribution, and processing facilities through more or less permanent physical connections between the plant of the serving entity and the premises of the customer. Included are systems for the delivery of natural gas, electricity, Telecommunications services, and water, and for the disposal of sewage.

Vehicle Miles Traveled (VMT)

A vehicle mile represents one vehicle traveling for one mile. This number is derived by counting the number of cars and the number of

miles each car travels over a fixed period of time. This measure is frequently used by transportation planners.

Visioning

A process of citizen involvement to determine values and ideals for the future of a community and to transform those values and ideals into manageable and feasible community goals.

Walk-Shed or Ped-Shed Analysis

A "walk-shed" or "ped-shed" analysis evaluates the amount of time it takes people to walk to and from a high-capacity transit station other origin/destination (such as a neighborhood center) within a planning area (such as a station area/subarea). For example, a walk-shed analysis might show routes that could be traveled within 5 and 10 minutes to/from a station within a defined geographic area or travel shed. A typical speed of travel would be assumed for travel ways, usually 3 miles per hour for walking in urban areas. The analysis also typically includes time periods of delay at intersections and crossings. *Source: Otak, Inc.*

Walkability/Walkable Area

Walkability is a measure of how friendly an area is to walking. Walkability has many health, environmental, and economic benefits. Factors influencing walkability include the presence or absence and quality of sidewalks or other pedestrian rights-of-way, traffic and road conditions, land use patterns, building accessibility, and safety, among others. Walkability is an important element of sustainable urban design. *Source: adapted from Wikipedia*

Water Reclamation/Water Re-Use

Using treated wastewater in place of drinking water for commercial irrigation and industrial processes.

Watershed

An aggregation of individual drainage basins, a watershed is an area that eventually drains to a larger water body, such as Lake Washington or Puget Sound. The six major watersheds in King County are Cedar River, Green River, Skykomish River, Snoqualmie River, White River, and Puget

Sound. These watersheds contain a total of 72 individual drainage basins.

Zoning

The delineation of specific types of land uses through zoning categories and the establishment of regulations governing the use, placement spacing, and size of land and buildings within those categories. Areas of zoning may be called zoning districts.

Zoning Map

The map or maps that delineate a city's adopted zoning, including the boundaries of each zoning category and delineation of zoning districts.

Public and Stakeholder Involvement Information Links

The City of Shoreline has completed extensive public and stakeholder outreach to support the development of the 184th Street Station Subarea Plan, Planned Action, and this DEIS. These efforts are summarized in Chapter 1 of this DEIS.

A link to the Public and Stakeholder Involvement Plan for Station Subarea Planning is provided below. In addition, the links below provide access to summarizing documents on the results of specific public/community and stakeholder engagement efforts, as well as other information.

- Public and Stakeholder Involvement Plan: <http://www.shorelinewa.gov/home/showdocument?id=14595>
- Visioning Workshop Comments: <http://www.shorelinewa.gov/government/departments/planning-community-development/planning-projects/light-rail-station-area-planning/visioning-workshop-comments>
- Frequently Asked Questions: http://cosweb.ci.shoreline.wa.us/uploads/attachments/pds/lightrail/Light_Rail_FAQs.pdf
- Design Dialogue Workshops: <http://www.shorelinewa.gov/government/departments/planning-community-development/planning-projects/light-rail-station-area-planning/design-dialogue-workshops>
- Walking Tours: <http://www.shorelinewa.gov/government/departments/planning-community-development/planning-projects/light-rail-station-area-planning/185th-walking-and-biking-tour>

Scoping Notice

The scoping notice for the 185th Street Station Subarea Planned Action Draft Environmental Impact Statement is provided on the following page.

**DETERMINATION OF SIGNIFICANCE AND SCOPING NOTICE
REQUEST FOR COMMENTS ON SCOPE OF ENVIRONMENTAL IMPACT STATEMENT (EIS)
185TH STREET LIGHT RAIL STATION SUBAREA PLAN**

Application Name: 185th Street Light Rail Station Subarea Plan

Applicant/Contact: Steven Szafran, AICP
Senior Planner
Planning & Community Development Department
City of Shoreline
17500 Midvale Ave N
Shoreline, WA 98133
206-801-2512

Date of Issuance: January 16, 2014

Description of Proposal, and Location: The City of Shoreline proposes to adopt a subarea plan for the area around the 185th Street light rail station. The 185th Street Light Rail Station Subarea is generally located ½ mile around the proposed light rail station at 185th Street and Interstate 5. The current land uses within the Subarea are primarily low-density single-family homes designated for Low Density Residential in the City's Comprehensive Plan and zoned Residential - 6 units per acre (R-6). In addition to single-family homes, the area has two large school sites owned by the Shoreline School District, a utility corridor owned by Seattle City Light, three parks owned by the City of Shoreline, and multiple churches. The subarea plan would enact goals and policies identified in the City's Comprehensive Plan, including changing land use designations and zoning categories to increase development potential around the planned light rail station; creating transition standards; establish bulk, height, and other zoning regulations; identifying transportation facilities for transit, pedestrian, and bicycles to support redevelopment; identifying opportunities for active and passive open space requirements; creating affordable housing opportunities and incentives; and assessing utilities and identifying potential deficiencies.

Lead Agency and EIS Required: The City of Shoreline, as lead agency, has determined this proposal is likely to have a significant adverse impact on the environment. An Environmental Impact Statement (EIS) is required under RCW 43.21C.030(2)(c) and will be prepared. The City intends to designate the 185th Street Light Rail Station Subarea Plan as a planned action as defined under WAC 197-11-164 and will prepare a Planned Action EIS. Future projects developing under the Planned Action will not require individual environmental review at the time of permit application if they are consistent with the range of alternatives and mitigation studied in the EIS.

EIS Alternatives: The City intends to study three land use alternatives to be comparatively evaluated in the Planned Action EIS: one No Action Alternative (SEPA required) and two action alternatives. The No Action alternative would assume that the 185th Street Light Rail Station Subarea Plan would not be adopted and that existing comprehensive plan and zoning regulations would remain in place. Preliminarily, the two action alternatives would include variations of the proposal to designate the 185th Street Light Rail Subarea for a mix of residential and supportive commercial uses. The two action alternatives will be developed based upon input from the public, city officials, agencies, consultants, and participants at the Design Dialogue workshop to be held on February 20, 2014 at Shoreline City Hall Council Chambers.


Elements of the Environment to be Addressed: The lead agency has identified the following topic areas for analysis in the Planned Action EIS: Land Use, Housing, Transportation, Parks and Recreation, and Utilities.

Scoping Comments: Agencies, affected tribes, and members of the public are invited to comment on the scope of the Planned Action EIS. You may comment on EIS Alternatives, issues that should be evaluated in the EIS, probable significant adverse impacts, mitigation measures, and licenses or other approvals that may be required. The method and deadline for providing scoping comments is:

Written Comments: Provide written comments on the scope of the Planned Action EIS no later than 5:00 p.m. on March 6, 2014. Comments may be sent to the Lead Agency Contact Person, Steven Szafran, AICP, Senior Planner at the City of Shoreline Planning & Community Development Department, 17500 Midvale Ave N, Shoreline, WA 98133 or via e-mail at sszafran@shorelinewa.gov.

Scoping Meeting/ Design Dialogue Workshop: Written comments on the Determination of Significance and/or scope of the Planned Action EIS may also be submitted at the 185th Street Light Rail Station Subarea Plan Design Dialogue Workshop on Monday, February 20, 2014, at Shoreline City Hall Council Chambers from 6:30 – 9:00 p.m. Shoreline City Hall is located at 17500 Midvale Avenue N, Shoreline, WA 98133.

Responsible Official: Rachael Markle, AICP, SEPA Official
Planning & Community Development Director
City of Shoreline
Department of Planning & Community Development
17500 Midvale Ave N
Shoreline, WA 98133
206-801-2531

Signature:  Date: 1-14-14

Appeal: There is no administrative appeal of this determination. The SEPA Threshold Determination may be appealed with the decision on the underlying action to superior court. If there is not a statutory time limit in filing a judicial appeal, the appeal must be filed within 21 calendar days following the issuance of the underlying decision in accordance with State law.