



185th Street Station Subarea Planned Action

FINAL ENVIRONMENTAL IMPACT STATEMENT

DECEMBER 2014



185th Street Station Subarea Plan

Planned Action Final Environmental Impact Statement

Prepared for:



Prepared by:



December 2014

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FACT SHEET

Project Title

185th Street Station Subarea Plan (a Planned Action of the City of Shoreline)

Proposed Action and Alternatives

Four alternatives are qualitatively compared and analyzed in this 185th Street Station Subarea Planned Action Final Environmental Impact Statement (FEIS):

- Alternative 4—Preferred Alternative adopts a broader extent of land use change than the alternatives previously analyzed in the Draft Environmental Impact Statement (DEIS). Upon completion of the DEIS, the City of Shoreline selected this preferred alternative to be studied in the FEIS based on the results of the environmental analysis, public and agency comments, recommendations of the Planning Commission, and a decision by the City Council that more capacity and flexibility to accommodate future growth in the station subarea should be considered. The Preferred Alternative includes many of the same features of Alternative 3—Previous Most Growth, but proposes a greater extent of zoning change and an overall higher level of growth than Alternative 3.

The potential impacts of this additional growth have been analyzed in this FEIS as required by the State

Environmental Policy Act (SEPA) for Planned Actions. Mitigation measures have been identified to address the probable impacts identified. With implementation of these mitigation measures, no significant unavoidable adverse impacts are anticipated with the implementation of Alternative 4—Preferred Alternative.

Discussions around increasing redevelopment capacity under Alternative 4 have focused on the opportunity to maximize flexibility for redevelopment in the subarea. This alternative also would provide the most capacity to meet Shoreline's overall housing growth targets over the long term and in the coming decades. Alternative 4 offers the potential to realize a greater level of redevelopment that is consistent with local and regional plans and policies for high-capacity transit station subareas, with a diversity of housing choices to fit varying income levels and household sizes.

- Under Alternative 4, changes to land use patterns would occur more broadly than that proposed under Alternative 3 or 2. As an outcome of community workshops, there was a strong interest in framing potential growth along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor—an important connecting route between Shoreline's Town Center (Aurora Avenue N) and North City. Alternative 4 maximizes redevelopment along this corridor and within the subarea to the north and south of this corridor within a one-half mile walking distance. With the proposed extent of redevelopment under Alternative 4, a broader extent of improvements would

be expected to occur over time in the subarea than under the other action alternatives.

- Alternative 3—Previous Most Growth, which was labeled as “Alternative 3—Most Growth” in the DEIS, would adopt a new framework for land use and supporting improvements. Alternative 3 proposes more extensive changes in zoning with higher densities and affecting a larger area than under Alternative 2, but less than Alternative 4. As under Alternative 4, the area of change under Alternative 3 is focused along the N-NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor and to the north and south of the corridor.
- Alternative 2—Some Growth proposes less zoning change than Alternatives 4 and 3, with rezoning focused more compact to the N-NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor.
- Alternative 1—No Action would retain existing planning and zoning provisions in the station subarea.

The City and community members 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 supports Shoreline Comprehensive Plan goals and policies, and implements the City’s Vision 2029.

The three action alternatives, Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, and Alternative 2—Some Growth, all grew out of the design concept that emerged from the community workshop series, which was to create a “main street corridor.” This concept has been analyzed in varying degrees of intensity in each of the potential growth scenarios.

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 FEIS 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.

With the completion of this FEIS, the City of Shoreline intends to finalize and adopt the *185th Street Station Subarea Plan* and a supporting Planned Action Ordinance. The City also intends to amend its current Comprehensive Plan and other applicable plans as well as the Shoreline Development Code, as required to support the plan and ordinance.

With adoption of the Planned Action Ordinance for the Subarea Plan, future development applications that are consistent with the Planned Action would not be subject to further environmental review under SEPA, because of the extent of environmental analysis already provided. The Planned Action process is intended to emphasize quality environmental review of

early planning efforts and provide the opportunity for early public input to shape decisions.

Under the No Action Alternative, SEPA review and compliance would be required on a per-project basis in the future depending on the extent of redevelopment proposed. While the No Action Alternative would occur under the current adopted Comprehensive Plan and Development Code, it would not be consistent 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 to be constructed by Sound Transit, is planned to be 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. As such, for this FEIS, 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 (multimodal transportation). These boundaries were reviewed and adopted by City Council for use in the planning and environmental analysis process. Refer to **Figure 1-3** 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, with 185th Street as a central spine from the Aurora Avenue N (SR 99) corridor to 15th Avenue NE corridor. 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 1.3.2.

Proponent

City of Shoreline

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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. For projects located within the proposed MUR-85' zone, with proponents choosing to proceed through a development agreement, additional public review would be part of that process.

The Planned Action Ordinance would be expected to help catalyze redevelopment and revitalization in the light rail station subarea. Property owners and potential developers would be encouraged to redevelop by the more predictable development process that takes place under the Planned Action process. This FEIS helps 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 FEIS, 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 FEIS, additional environmental analysis would not be required.

As mentioned previously, some project proponents may choose to proceed through a development agreement process, which would involve additional public review, but offers the opportunity for density and height bonuses with the provision of elements such as affordable housing, green building, the provision of public park space, and underground parking.

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 Final Environmental Impact Statement Issuance

November 26, 2014

Public Comments/Due Date

The City of Shoreline will accept written comments on or before the public hearing on **January 15, 2015**. The public hearing will be held on the full Subarea Plan package (including the FEIS) by the Planning Commission in the Council Chambers of City Hall (17500 Midvale Avenue N, Shoreline, WA 98133), from 7:00 pm to 9:00 pm.

If mailing comments via the US Postal Service, comments must be postmarked by Midnight, January 14, 2015. If providing written comments via hand or commercial delivery, comments must be submitted by 5:00 pm, January 15, 2015. Address comments 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

Type and Timing of Subsequent Environmental Review

The City has prepared this FEIS, which analyzes a new alternative, Alternative 4—Preferred Alternative, as well as the potential to phase zoning, and contains responses to comments received on the DEIS (Chapter 4 of this FEIS). The City is also preparing a Subarea Plan and Planned Action Ordinance and accompanying amendments to the Comprehensive Plan and zoning provisions. The Planned Action Ordinance includes a list of mitigation measures and updated Development Code regulations to support implementation of the Planned Action. Together these documents constitute the Subarea Plan package and all will be subject to the January 15, 2015 public hearing.

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, at the **February 23, 2015** City Council meeting.

Previous Relevant Environmental and Planning Documents

Prior relevant environmental review was conducted in the DEIS for this Planned Action, as well as the following EISs, including the City's Comprehensive Plan and subsequent amendments:

- *185th Street Station Subarea Planned Action Draft Environmental Impact Statement*, June 2014
- *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 FEIS.

Location of Background Information

See “Contact Persons” above.

Availability of this FEIS and Copies for Purchase

This FEIS is posted on the City’s home webpage for the project: www.shorelinewa.gov/185FEIS, 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 Shoreline Libraries (345 NE 175th Street, Shoreline, WA 98133 and 19601 21st Ave NW, Shoreline, WA 98177).

Copies of this FEIS (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

FINAL ENVIRONMENTAL IMPACT STATEMENT



Chapter 1—Environmental Summary

1.1 Introduction

This chapter of the Final Environmental Impact Statement (FEIS) for the 185th Street Station Subarea Plan summarizes the background, purpose, and location of the Planned Action subarea, mitigation measures, and significant avoidable adverse impacts. The State Environmental Policy Act (SEPA) process is further described below in Section 1.4 and in Chapter 2. The summary in this chapter is intentionally brief. Readers should consult individual sections in Chapter 3 of this FEIS for detailed information concerning the affected environment, analysis of potential impacts, and mitigation measures.

1.2 Changes from the Draft Environmental Impact Statement and Alternative 4—Preferred Alternative

1.2.1 Differences between the FEIS and DEIS

This FEIS presents new analysis related to Alternative 4—Preferred Alternative. This analysis was not reflected in the Draft Environmental Impact Statement (DEIS) because the City of Shoreline intended to review the analysis of the alternatives in the DEIS, gather public and agency comments, and then identify a preferred alternative based on the DEIS analysis.

Refer to the next page and Chapter 2 for background behind identifying Alternative 4—Preferred Alternative for analysis in this FEIS.

Subject matter with the heading “Alternative 4—Preferred Alternative” and discussion of the potential to phase zoning is new in this FEIS and was not included in the DEIS. Alternative 4—Preferred Alternative proposes a greater level of change in population, density, and urban form than the two previous action alternatives analyzed in the DEIS. As such, previous “most growth” alternative (Alternative 3) has been relabeled as Alternative 3—Previous Most Growth. Alternative 2—Some Growth and Alternative 1—No Action are labeled the same as in the DEIS.

This FEIS also makes a greater distinction between potential impacts of growth anticipated during the twenty year planning horizon of this document, and the build-out timeframes of each alternative, which vary (See Table 2-1 in Chapter 2). A standard growth rate of between 1.5 percent and 2.5 percent was used to calculate impacts at twenty-year and build-out timeframes. As such, all action alternatives would have similar impacts, and therefore require similar mitigations, for the twenty-year timeframe. The City bases prioritization of capital projects on this timeframe. The end build-out timeframe for each action alternative differs based on the amount of rezoning proposed.

Because phased zoning of Alternative 4—Preferred Alternative would be the same as other action alternatives in the twenty-year timeframe, and the same as Alternative 4—Preferred Alternative at the build-out timeframe, there is minimal discussion of impacts specific to Phase I zoning identified in **Figure 3.1-5**.

Other differences between this FEIS and the DEIS include more information about mitigations related to Land Use Patterns, Plans, and Policies, as well as Population, Housing, and Employment. These are based on Development Code regulations discussed by the Planning Commission during their August, September, October, and November 2014 meetings (materials available at

<http://www.shorelinewa.gov/government/departments/planning-community-development/planning-commission/meeting-agendas-and-minutes/-toggle-allpast>).

Some of these regulations deal with new zoning designations that are proposed as part of the subarea plan, including dimensional, design, and transition standards, and allowed uses (See 3.1.2 in Chapter 3 for more information about proposed designations). Some regulations deal with incentives for affordable housing, green building, and other amenities desired by the community.

Another distinction between this FEIS and the DEIS is that new zoning categories are emphasized (where applicable), whereas the DEIS used both existing and proposed designations. As such, maps of potential zoning scenarios have been updated to reflect this change, along with other minor modifications intended to make them easier to read.

Much of the information in background and affected environment descriptions in the FEIS remains the same as presented in the DEIS, but has been retained in this document to provide supporting information for the analysis of the new alternative, Alternative 4—Preferred Alternative. This also provides the reader with the analytical content all in one

document so that there is not a need to reference between the DEIS and FEIS in review.

In the analysis of potential environmental impacts, Alternative 4—Preferred Alternative is listed first, followed by common impacts associated with all action alternatives. Analysis of Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action are listed afterwards, in that order. The analysis of potential impacts of Alternatives 3, 2, and 1 remain generally the same in this FEIS as presented in the DEIS.

1.2.2 Responses to DEIS Comments

Responses to comments received during the public review period of the DEIS from agencies and members of the public are included in the FEIS. This information is provided in Chapter 4.

1.2.3 FEIS Review Guide—Companion Document to the FEIS

A Review Guide for the FEIS has been created to assist reviewers with finding key areas of analysis and important information presented in the FEIS document. This Review Guide is available for download at the same location as the FEIS:

www.shorelinewa.gov/185FEIS.

1.2.4 Background on Development of Alternative 4—Preferred Alternative

Development of alternatives resulted from an extensive community engagement process that began in spring of 2013

with visioning and continued through the entire development of the subarea plan. A summary of all visioning workshops is available at:

<http://shorelinewa.gov/government/departments/planning-community-development/planning-projects/light-rail-station-area-planning/visioning-workshop-comments>.

Figures 1-1 and 1-2 illustrate the subarea planning and alternatives development and analysis process.

Public input was received at multiple community Design Workshops. The proposed framing of redevelopment along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor as a “main street” or “signature boulevard” was a direct result from public input received. This community-driven concept is shown in all three of the action alternatives studied in the FEIS: Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, and Alternative 2—Some Growth to varying degrees, and reflected in proposed Development Code regulations. A summary of the first series of Design Workshops is available at <http://www.shorelinewa.gov/home/showdocument?id=16054>. Public involvement is described in greater detail later in this chapter.

Other factors that influenced creation of the potential zoning scenarios analyzed in this FEIS were the Market Assessment authored by BAE Urban Economics (See Chapter 3.1.1), and existing local, regional, and state policies (See Chapter 2).

Alternative 4—Preferred Alternative was identified for further study in this FEIS following multiple deliberations by the Planning

Commission and City Council in the following meetings, which were open to the public:

- July 10, 2014—Planning Commission Public Hearing for review of comments on the DEIS and development of recommendations to City Council for a preferred alternative to be studied in the FEIS
- August 11, 2014—City Council discussion of comments on DEIS and potential options for a preferred alternative to be studied in the FEIS
- August 25, 2014—Further deliberation related to selection of a preferred alternative to be studied in the FEIS (Alternative 4—Preferred Alternative).
- September 29, 2014—Joint meeting of Planning Commission and City Council; City Council supported analysis of phased zoning in the FEIS

The Shoreline City Council considered public comments on the DEIS, and potential modifications to proposed zoning to define a preferred alternative to be studied in the FEIS in their August 11 and 25, 2014 meetings. After evaluation of several options, City Council selected Alternative 4—Preferred Alternative to be studied in this FEIS. Additional Planning Commission and City Council meetings are scheduled for the FEIS, Subarea Plan, and Planned Action Ordinance review and adoption. (Refer to the full list of Planning Commission and City Council meetings later in this chapter for additional information.)

Alternative 4—Preferred Alternative was developed in response to additional changes in zoning that the community brought

forward during the DEIS comment period, as well as Planning Commission and City Council discussions that recommended studying increased zoning capacity in the FEIS (greater than under Alternative 3, the previous “Most Growth” alternative).

Discussions around increasing redevelopment capacity under Alternative 4—Preferred Alternative focused on the opportunity to maximize flexibility for redevelopment in the subarea. Alternative 4 also would provide the most capacity to meet Shoreline’s overall housing growth targets over the long term and 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. Alternative 4 also expands employment and economic development opportunities in the subarea, with new neighborhood-supporting retail and commercial uses and services.

Discussions in the September 29, 2014 joint meeting examined potential benefits of having a more predictable pattern for growth to guide planning and implementation over the next few decades. As such, the City Council also decided to study the potential of phasing zoning over time. On October 2, 2014, the Planning Commission refined boundaries of a potential Phase 1 zoning area. For more information about potential Phase 1 zoning and a map of the boundary for Phase 1 under consideration, refer to Section 3.1 of this FEIS.

City Council meeting packets for August 11, 2014, August 25, 2014, and September 29, 2014 and additional information about the creation of Alternative 4—Preferred Alternative are available at: www.cityofshoreline.com/government/shoreline-city-council/past-meeting-documents.

1.2.5 Concurrent Projects

Other concurrent projects, such as potential redevelopment at Point Wells under evaluation by Snohomish County, have been considered in this analysis as relevant (including potential transportation impacts from traffic generated by Point Wells concurrently with traffic generated related to the 185th Street Station Subarea Plan). The DEIS for the 145th Street Station Subarea Planned Action is currently in development, and while it is a separate analysis from the 185th Street Station Subarea Planned Action, the results of the analyses for the two subareas will be considered concurrently by the City and other service providers in identification of capital improvement needs and other mitigation required to address redevelopment in both subareas.

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

1.3.1 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 FEIS analyzes alternatives associated with the NE 185th Street Station Subarea. The 185th Street Station Subarea Plan has been shaped by public and stakeholder engagement, resulting in a range of alternatives for transit-oriented land uses and zoning in the subarea to be

studied. Community input has also helped to shape Development Code regulations to support the Planned Action related to public space enhancements and community amenities. Input has also influenced multimodal transportation and utility system improvement recommendations.

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.

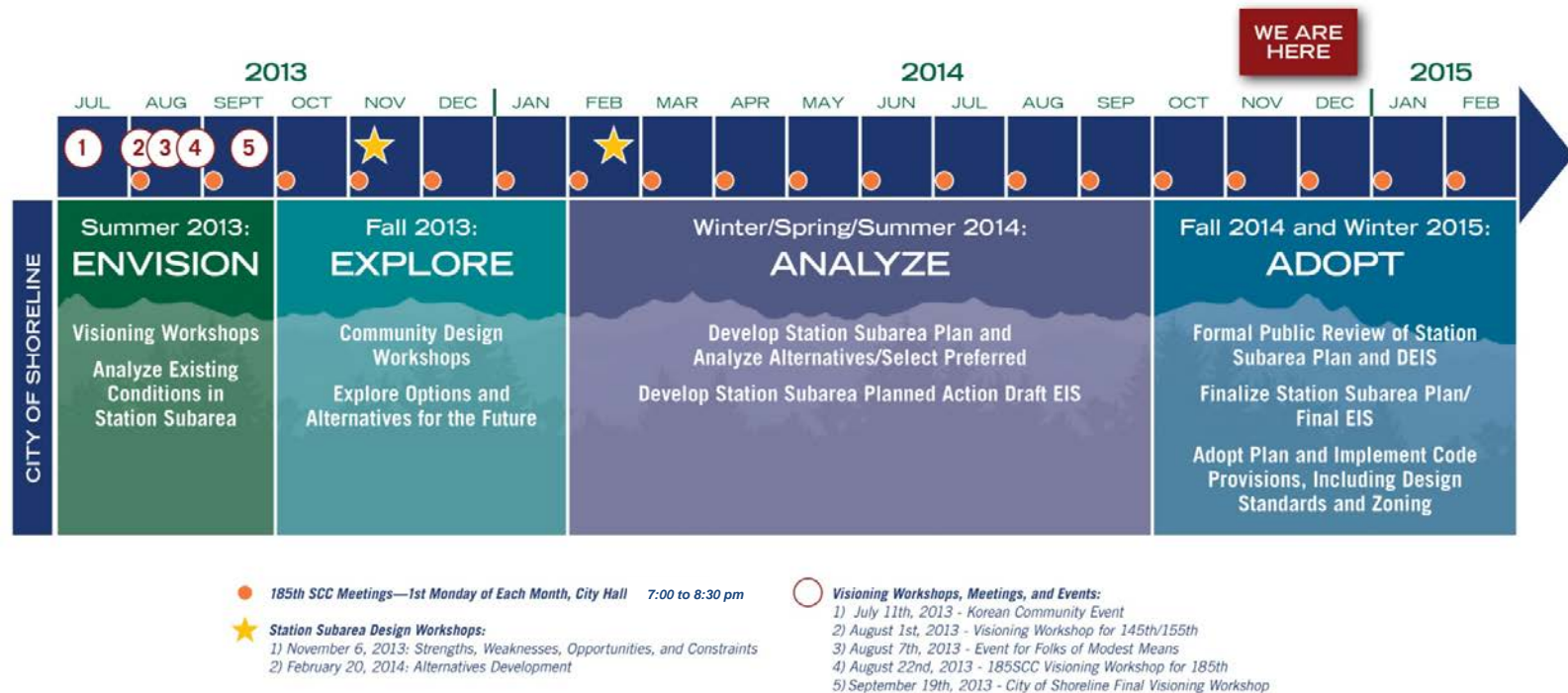


Figure 1.1 Subarea Planning Process/Timeline

Figure 1.2 DEIS and FEIS/185th Street Station Subarea Plan Adoption Process

The City will adopt the 185th Street Station Subarea Plan and a supporting Planned Action Ordinance and amend its current Comprehensive Plan and Shoreline Development Code (Title 20) regulations and standards, as appropriate to support the adopted subarea plan and ordinance. With adoption of the Planned Action Ordinance for the Subarea Plan, future development applications that are consistent with the Planned Action would not be subject to further environmental review under the State Environmental Policy Act (SEPA), because of the extent of environmental analysis already completed. The Planned Action process is intended to emphasize quality environmental review of early planning efforts and provide the opportunity for early public input to shape decisions.

What Happens after Adoption of the Subarea Plan?

With adoption of the subarea plan and Planned Action, the City of Shoreline will set the stage for potential redevelopment. The extent and timing of redevelopment that occurs will be influenced by market forces, homeowner and property owner decisions about what do with their properties, and other factors.

This plan does not require that homeowners or property owners redevelop or sell their properties—that decision will be theirs.

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.

Throughout the process, the public has expressed concerns about how transition and change could impact their neighborhoods and quality of life. This FEIS addresses these questions and issues by examining potential impacts through quantitative measures and recommending mitigations in the form of capital projects or development regulations, and by acknowledging uncertainties inherent in rezoning and redevelopment processes.

1.3.2 Subarea 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 two light rail stations to potentially be built in Shoreline. A park-and-ride structure, also to be constructed by Sound Transit, is planned 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 the DEIS and FEIS, 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: one that delineates a land use focus and the other that delineates a mobility (multimodal transportation) focus. These study area boundaries were then reviewed and adopted by City Council as an amendment to the Comprehensive Plan.

Refer to **Figure 1-3** for a depiction 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 Ridgcrest 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 in the North City subarea. The 185th Street Station Subarea extends approximately one-half mile to the north and south of the 185th corridor.

1.3.3 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 subareas will provide opportunities for growth 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. Regional benefits from locating housing and jobs in proximity to high-capacity transit include less traffic congestion, pollution, reduced greenhouse gas emissions, less energy consumption, and lower household costs devoted to transportation.

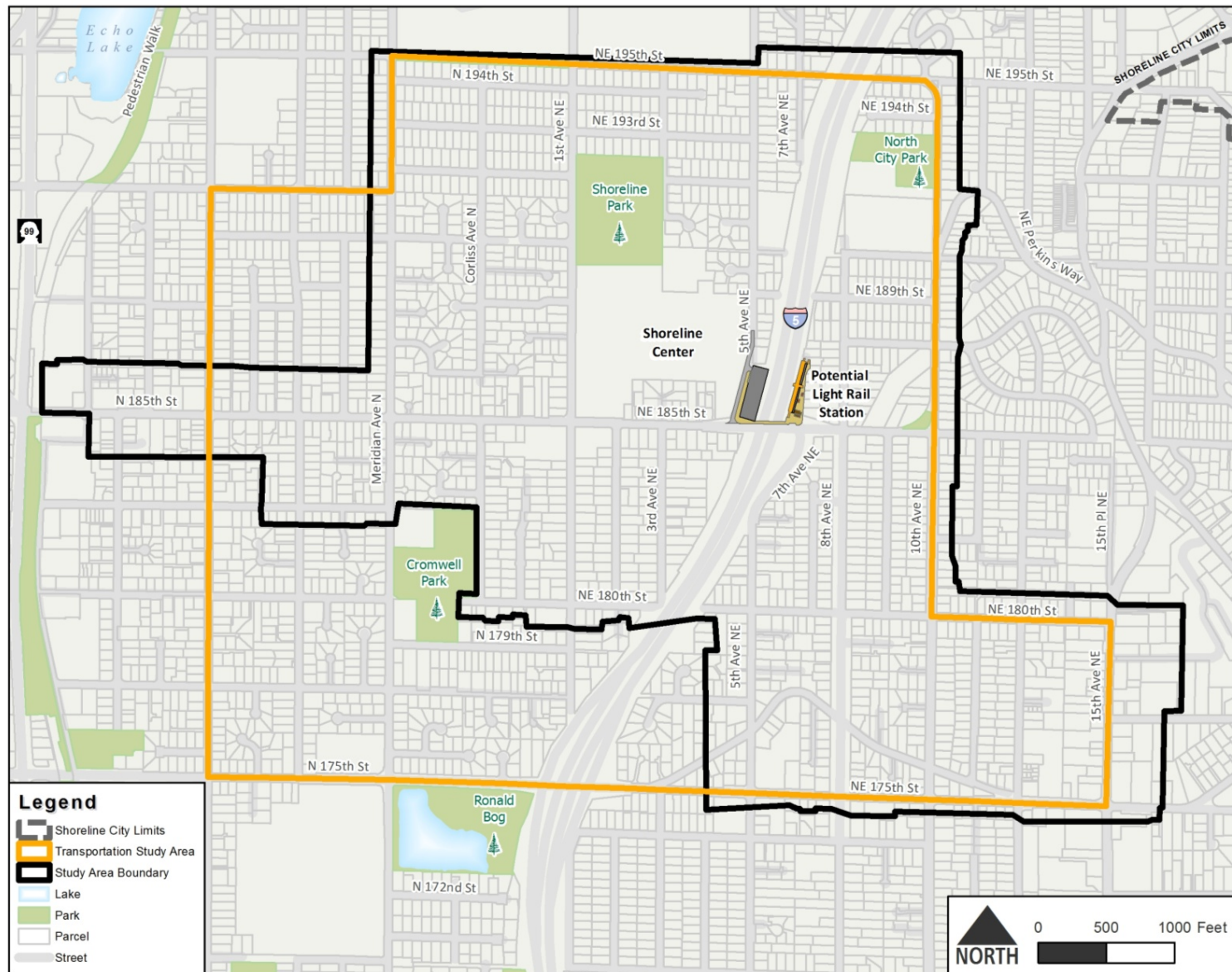


Figure 1-3 Land Use (Black) and Mobility (Gold) Study Area Boundaries

1.4 State Environmental Policy Act Process

1.4.1 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 subarea plans and Planned Actions).

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 agreements 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.

This FEIS identifies 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.

1.4.2 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 FEIS for the 185th Street Station Subarea. In addition, the City of Shoreline Comprehensive Plan, Town Center Subarea Plan, North City Subarea 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 FEIS.

1.5 Organization of this Document

This FEIS 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 alternatives (Alternative 4—Preferred Alternative, Alternative 3 Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action). 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 4—Preferred Alternative, as well as Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action related to the 185th Street Station Subarea. It also summarizes public review opportunities and relevant local and regional policy direction.
- **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, for twenty-year and build-out timeframes.

Recommended mitigation measures to reduce impacts to less than significant levels are also discussed.

- **Chapter 4—Responses to Draft Environmental Impact Statement Comments:** This chapter lists the comments received on the DEIS and provides formal responses from the lead agency, City of Shoreline.
- **Chapter 5 – References:** This chapter contains a list of all documents and personal communications referenced in the analyses contained in Chapter 3.
- **Chapter 6 – Distribution List:** This chapter contains a list of all government agencies and community groups who will receive notices of availability or copies of the FEIS.

1.6 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 environmental impact statements (draft and final), accessible via: www.shorelinewa.gov/lightrail and www.shorelinewa.gov/185FEIS.

The information on the webpages provides background information on the subarea plan and environmental impact statements, 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 environmental impact statements. Information related to the Planned Action Ordinance and Subarea Plan also is posted on the webpages.

- **DEIS 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 EIS. Surface water runoff and management also was added (as part of the Utilities section).
- **Community Workshops/Public Meetings.** 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. A public and stakeholder Design Workshop series was held in November 2013. Participants were engaged in planning exercises to graphically illustrate potential options for organization of land uses in the subarea. The City also hosted a second

Design Workshop series on February 20, 2014, which served as an opportunity for “scoping” (determining which elements and potential zoning scenarios would be studied in the EIS), and presented SketchUp modeling of possibilities for how the subarea could redevelop, based on their ideas from the November workshops. (SketchUp models are included in Section 3.1 of this FEIS.)

- **DEIS Comment Period and Public Meeting.** The 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 were invited to submit comments on the alternatives, and identified environmental impacts and mitigation measures. A public meeting was held on June 3, 2014 to introduce components of the DEIS, including potential impacts and mitigation measures, prior to release of the full document.
- **Post DEIS Planning Commission and City Council Meetings.** Several meetings were held by Planning Commission and City Council focused on the development of a preferred alternative to be studied in the FEIS. As a result of these meetings, the City selected Alternative 4—Preferred Alternative (and potential phasing thereof) to be studied in this FEIS. The FEIS also provides responses to comments received on the analysis in the DEIS. The Planning Commission also held meetings that addressed needed Development Code regulations to support the Planned Action. Meetings included the following:

- July 10, 2014 Planning Commission public hearing on the DEIS and recommendation of preferred alternative to be studied in the FEIS
 - August 7, 2014 Planning Commission meeting about potential Development Code regulations
 - August 11, 2014 City Council meeting about selecting a Preferred Alternative zoning scenario
 - August 25, 2014 City Council meeting about selecting a Preferred Alternative zoning scenario
 - September 4, 2014 Planning Commission meeting about potential Development Code regulations
 - September 18, 2014 Planning Commission meeting about potential Development Code regulations
 - September 29, 2014 Joint Planning Commission and City Council meeting about the potential to phase zoning
 - October 2, 2015 Planning Commission meeting about potential Development Code regulations
 - October 16, 2014 Planning Commission meeting about potential Development Code regulations
 - November 6, 2014 Planning Commission meeting about potential Development Code regulations
 - November 20, 2014 Planning Commission meeting focused on an introduction to the FEIS
- **Ongoing Planning Commission and City Council Meetings.** The Planning Commission and City Council

will continue to hold meetings on the subarea plan development and design standards associated with the Planned Action Ordinance through adoption of the plan and ordinance (scheduled for February 2015) as follows:

- December 4, 2014 Planning Commission meeting about subarea plan and Planned Action Ordinance
- December 18, 2014 Planning Commission meeting about any unfinished items
- January 15, 2015 Public Hearing on full Subarea Plan package, including Development Code regulations and zoning provisions
- February 9, 2015 City Council meeting—Study session on full 185th Street Subarea Plan package
- February 23, 2015 City Council meeting—Potential adoption of 185th Street Subarea Plan

Planning Commission and City Council meeting materials, including packets, minutes or summaries, and other information are available on the following web pages by meeting date.

Planning Commission:

<http://www.shorelinewa.gov/government/departments/planning-community-development/planning-commission/meeting-agendas-and-minutes/-toggle-allpast>

City Council:

<http://www.shorelinewa.gov/government/shoreline-citycouncil/live-and-video-council-meetings>

This FEIS, the Subarea Plan (which includes zoning), and the Planned Action Ordinance (which includes Development Code regulations) will all be the subject of a public hearing before the Planning Commission from 7:00 pm to 9:00 pm on Thursday, January 15, 2015 in the Council Chambers at City Hall (17500 Midvale Avenue N). See the Fact Sheet for additional information about how to submit comments.

Refer to the City's webpages: www.shorelinewa.gov/lightrail and www.shorelinewa.gov/185FEIS for a schedule of upcoming meetings and other important information related to the subarea planning and environmental analysis process.

1.7 Objectives and Alternatives

Objectives

Washington's State Environmental Policy Act 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 were developed based on community input and adopted City policies 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 existing and future 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 multimodal 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.

Brief Descriptions of Alternatives

This FEIS evaluates four alternatives that establish a range of land use patterns and development types within the 185th Street Station Subarea. These include Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action. For more information about land use and redevelopment characteristics related to the alternatives, refer to Chapter 3, Section 3.1 of this FEIS. For more information about population and growth rate assumptions, refer to Chapter 3, Section 3.2. For each alternative, the FEIS analyses potential impacts at build-out as well as resulting from expected growth over the next twenty years (up to 2035).

Alternative 4—Preferred Alternative

Alternative 4—Preferred Alternative would transform the 185th Street Station Subarea from primarily single family housing to a new village of mixed land uses with an emphasis on different forms of multifamily housing over ground floor active uses in the areas surrounding the light rail station. This new framework for land use and supporting improvements would involve more extensive changes in zoning, higher densities, and encompassing

a larger area than under the previous two action alternatives considered in the DEIS, Alternative 2—Some Growth and Alternative 3—Previous Most Growth.

The area of proposed zoning change is larger than previously analyzed in the vicinity surrounding the proposed light rail station, but still focuses the potential redevelopment generally along the N-NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor. Alternative 4—Preferred Alternative extends more area of MUR-85' zoning to the west of Interstate 5, and north and northwest of the Shoreline Center site than Alternative 3 showed. Other zoning changes that increased density above that previously proposed under Alternative 3 are scattered throughout the subarea. Many of these were proposed by individuals that live within these blocks.

Alternative 4—Preferred Alternative would increase the population of the subarea to 56,529 at full build-out with approximately 23,554 households and 15,340 jobs. Full build-out assumes that all rezoned areas in the full Alternative 4 proposal would be built out to at least their baseline allowable zoning, including a portion of the Town Center Subarea, all of the North City Subarea, and the Shoreline Center.

For Alternative 4, it is anticipated that full build-out would take approximately 80 to 125 years (2094 to 2139) to be realized at an estimated annual rate of growth between 1.5 percent and 2.5 percent.

Land use assumptions under Alternative 4 estimate that more residential use would occur than employment and commercial use compared with Alternative 3. This is due to some of the

proposed density being spread throughout the subarea, rather than being concentrated at the Shoreline Center site, where it was presumed that there would be more commercial and employment use in redevelopment. As such, Alternative 4 would realize the most housing of any of the alternatives, but less employment/jobs than under Alternative 3.

The City is considering adopting the new zoning proposed under Alternative 4—Preferred Alternative for a “Phase 1” geographic portion of the subarea. Phase 1 zoning would help to focus development activity over the next several decades along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor.

Alternative 3—Previous Most Growth

Under Alternative 3—Previous Most Growth, the 185th Street Station Subarea would transition from current land uses to an area of mixed land uses surrounding the light rail station. This framework for land use and supporting improvements would change zoning over a larger area than under Alternative 2, but smaller than under Alternative 4. The area of proposed zoning change surrounds the proposed light rail station and focuses 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.

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-NE 185th Street/10th Avenue NE/NE 180th Street connecting corridor between Shoreline’s Town Center (Aurora Avenue N) 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 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, current zoning and development regulations in the station subarea would not change. There would not be opportunities for transit-oriented development with more people living and working in proximity to the light rail station. As such, 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. The aging housing stock in the subarea, which primarily consists of ramblers constructed during the post World War II era, is another important consideration. It is anticipated that many of these homes would be demolished over time and replaced with larger homes. This means that the bulk of houses could increase and prices would generally be higher. This type of redevelopment would not yield a substantial increase in population in the station subarea, and as such is inconsistent with adopted policies in the Comprehensive Plan and other local, regional, state, and federal guiding policies.

Under Alternative 1—No Action, population in the subarea would be expected to increase to a total of 8,734 people within the next twenty years (by 2035) or sooner. Compared to the 2014 estimated population of the subarea of 7,944, redevelopment over time under Alternative 1 would add 790 people to the subarea. A total of 3,639 households and 1,736 jobs would be expected in the subarea by 2035 or sooner. Compared to the 2014 levels of 3,310 households and 1,448 jobs, this would result in an estimated net increase of 329 new households and 288 new jobs in the subarea by 2035.

1.8 Summary of Potential Impacts and Mitigation Measures

Table 1-1, starting on page 1-18 summarizes the potential environmental impacts and mitigation measures for each element of the environment evaluated in Chapter 3 of the FEIS. The summary addresses impacts and mitigation measures for all alternatives (Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action) for the next twenty years (up to 2035) and build-out.

Generally speaking, the purpose of an EIS is to identify and recommend mitigations for potential *adverse* impacts. However, it is important to note that the primary intent of light rail station subarea planning is to facilitate positive impacts, such as reduced regional traffic congestion, reduced carbon emissions, greater housing choice, more local businesses, increased water quality, improved walkability, and other characteristics identified by the community as desirable.

Table 1.1 Summary of Impacts and Mitigation Measures (Continues through Page 1-44)

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
SUMMARY OF IMPACTS				
3.1 Land Use Patterns, Plans, and Policies	<p>Would result in the greatest extent of change, covering the most geographic area</p> <p>Current land use patterns would be altered from predominantly single family to mixed use, multifamily, and attached single family, along with some neighborhood supporting retail and employment uses (less than under Alternative 3, more than under Alternative 2)</p> <p>Some preserved areas of single family in the subarea, but less than under Alternative 3 and 2</p> <p>Intensity of land use including density, building height, and mass of urban form would be greater under this alternative than under Alternatives 3 and 2. Potential impacts to land use compatibility between new and existing land uses would require the most mitigation</p>	<p>Less overall change proposed than under Alternative 4, more than Alternative 2</p> <p>Current land use patterns would be altered from predominantly detached single family to mixed use, multifamily and attached single family, along with some neighborhood-supporting retail and employment uses, more than Alternative 4 or 2</p> <p>Some preserved areas of single family in the subarea, more than under Alternative 4 but less than Alternative 2</p> <p>Intensity of land use would be greater than Alternative 2, but less than Alternative 4 overall; potential impacts to land use compatibility between new and existing land uses would require mitigation</p>	<p>Less overall change proposed than under Alternatives 4 and 3</p> <p>Current land use patterns would be altered from predominantly detached single family to mixed use, multifamily and attached single family, along with some neighborhood-supporting retail and employment uses</p> <p>More preserved areas of single family in the subarea than under Alternatives 4 and 3</p> <p>Intensity of land use would be less than Alternatives 4 and 3; potential impacts to land use compatibility between new and existing land uses in the subarea would require mitigation, but less than under Alternatives 4 and 3</p>	<p>Land use patterns would remain consistent with current conditions and the level of change in urban form would be minimal; however, 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 although there would be ongoing infill redevelopment of single family homes, added accessory dwelling units, and conversion to attached single family as 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 for land use that supports high-capacity transit (see Chapter 2 of the FEIS for more information)</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES				
3.1 Land Use Patterns, Plans, and Policies	<ul style="list-style-type: none"> Incremental change over many decades, which allows time to implement mitigations mentioned below and monitor actual impacts Proactive planning and capital investment to support implementation of adopted subarea plan, including coordination with partner organizations and utility providers Updates to Shoreline Development Code regulations and standards to encourage best design practices and features that enhance the neighborhood and provide suitable transitions between uses Implementation of phased zoning that targets incentives to a smaller area could provide more focus and predictability for the initial decades of change 	<ul style="list-style-type: none"> Incremental change over many decades Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time Updates to Shoreline Development Code regulations and standards to encourage best design practices and features that enhance the neighborhood and provide suitable transitions between uses 	<ul style="list-style-type: none"> Incremental change over many decades Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time Updates to Shoreline Development Code regulations and standards to encourage best design practices and features that enhance the neighborhood and provide suitable transitions between uses 	<ul style="list-style-type: none"> Alternative 1—No Action is not considered a viable alternative because it does not meet the basic purpose and need for the Planned Action and is not consistent with adopted plans and policies at the local, regional, state, and federal levels

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
S U M M A R Y O F I M P A C T S				
3.2 Population, Housing, and Employment	<p>The population growth projected at a 1.5 percent to 2.5 percent annual growth rate would be the same under all action alternatives for the first twenty years</p> <p>At full build-out would provide the most capacity for affordable housing and housing choices over the long term of all the alternatives</p> <p>Would provide fewer employment opportunities than under Alternative 3, but still provides significant capacity for employment growth to help meet City's targets and balance the jobs-to-housing ratio</p>	<p>The population growth projected at a 1.5 percent to 2.5 percent annual growth rate would be the same under all action alternatives for the first twenty years</p> <p>At full build-out would provide less capacity for affordable housing and housing choices than under Alternative 4 but more than under Alternative 2</p> <p>Provides most capacity for employment opportunities than other action alternatives and would help meet City's employment growth targets and balance the jobs-to-housing ratio (refer to Section 3.2 for more detail about the assumed level of employment for Alternative 3, which was greater than Alternative 4 due to potential bonus height and density at the Shoreline Center site rather than spread throughout all MUR-85' zoning)</p>	<p>The population growth projected at a 1.5 percent to 2.5 percent annual growth rate would be the same under all action alternatives for the first twenty years</p> <p>At full build-out would provide the least capacity for affordable housing and housing choices over the long term of any of the action alternatives</p> <p>Would provide fewer employment opportunities than under Alternatives 4 and 3, but still would offer some capacity for employment growth over time</p>	<p>Would not contribute significantly to the City meeting assigned growth targets or regional projections for housing and employment</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES				
3.2 Population, Housing, and Employment	<ul style="list-style-type: none"> Incremental growth over many decades, which allows time to implement mitigations mentioned below and monitor actual impacts Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan Updates to Shoreline Development Code regulations and standards to guide design, encourage a greater level of housing affordability and more housing choices, and provide for additional uses Potential implementation of phased zoning to provide more focus and predictability for initial decades of growth 	<ul style="list-style-type: none"> Incremental growth over many decades Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time Updates to Shoreline Development Code regulations and standards to encourage a greater level of housing affordability and more housing choices 	<ul style="list-style-type: none"> Incremental growth over many decades Proactive planning and capital investment to support implementation of the adopted Station Subarea Plan over time Updates to Shoreline Development Code regulations and standards to encourage a greater level of housing affordability and more housing choices 	<ul style="list-style-type: none"> Alternative 1—No Action is not considered a viable alternative because it does not meet the basic purpose and need for the Planned Action and is not consistent with adopted plans and policies at the local, regional, state, and federal levels

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
S U M M A R Y O F I M P A C T S				
3.3 Multimodal Transportation Note: NB: Northbound SB: Southbound EB: Eastbound WB: Westbound	<p>By 2035: 1,140 to 2,190 new households and 502 to 928 new employees would generate additional trips in the subarea, as would access to and from the planned park-and-ride structure for the light rail station</p> <p>The most heavily traveled routes for traffic would be N-NE 185th Street, Meridian Avenue N, and NE 175th Street from Meridian to Interstate 5; volumes on N-NE 185th Street may reach 20,000 vehicles per day (compared to current daily volumes of 9,700)</p> <p>At Build-Out: 23,554 new households and 15,340 new employees would generate additional trips (to the total of 20,111 peak PM trips)</p>	<p>By 2035: 1,140 to 2,190 new households and 502 to 928 new employees would generate additional trips in the subarea, as would access to and from the planned park-and-ride structure for the light rail station</p> <p>The most heavily traveled routes for traffic would be N-NE 185th Street, Meridian Avenue N, and NE 175th Street from Meridian to Interstate 5; volumes on N-NE 185th Street would increase to a similar level as under Alternative 4</p> <p>At Build-Out: 15,548 new households and 27,050 new employees would generate additional trips (to the total of 20,370 peak PM trips)</p>	<p>By 2035: 1,140 to 2,190 new households and 502 to 928 new employees would generate additional trips in the subarea, as would access to and from the planned park-and-ride structure for the light rail station</p> <p>The most heavily traveled routes for traffic would be N-NE 185th Street, Meridian Avenue N, and NE 175th Street from Meridian to Interstate 5; volumes on N-NE 185th Street would increase, but not as much as under Alternative 4 or 3</p> <p>At Build-Out: 7,296 new households and 9,750 new employees would generate additional trips (to the total of 12,310 peak PM trips)</p>	<p>By 2035: 328 new households and 288 new employees would generate additional trips in the subarea, as would access to and from the planned park-and-ride structure for the light rail station; 5,350 peak PM trips anticipated</p> <p>The most heavily traveled routes for traffic would be N-NE 185th Street, Meridian Avenue N, and NE 175th Street from Meridian to Interstate 5</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES				
3.3 Multimodal Transportation	<p>By 2035 or earlier: Implement Transportation Master Plan (TMP) planned improvements and Lynnwood Link DEIS outlined projects</p> <ul style="list-style-type: none"> • N-NE 185th Street: two-way left-turn lane • Meridian Ave N: two-way left-turn lane • N 185th St/Meridian Ave N: 500 foot NB and SB add/drop lanes w/ second through lane and receiving lane; 50 foot EB right-turn pocket • Expanded turn pocket lengths for Meridian Ave N and 175th St intersection • Intersection improvements at 15th Avenue NE and NE 175th St Intersection <p>By 2035: Transportation demand management strategies and actions to minimize traffic congestion along N-NE 185th Street, Meridian Avenue N, and other key corridors</p>	<p>By 2035 or earlier: Implement Transportation Master Plan (TMP) planned improvements and Lynnwood Link DEIS outlined projects</p> <ul style="list-style-type: none"> • N-NE 185th Street: two-way left-turn lane • Meridian Ave N: two-way left-turn lane • N 185th St/Meridian Ave N: 500 foot NB and SB add/drop lanes w/ second through lane and receiving lane; 50 foot EB right-turn pocket • Expanded turn pocket lengths for Meridian Ave N and 175th St intersection • Intersection improvements at 15th Avenue NE and NE 175th St Intersection <p>By 2035: Transportation demand management strategies and actions to minimize traffic congestion along N-NE 185th Street, Meridian Avenue N, and other key corridors</p>	<p>By 2035 or earlier: Implement Transportation Master Plan (TMP) planned improvements and Lynnwood Link DEIS outlined projects.</p> <ul style="list-style-type: none"> • N-NE 185th Street: two-way left-turn lane • Meridian Ave N: two-way left-turn lane • N 185th St/Meridian Ave N: 500 foot NB and SB add/drop lanes w/ second through lane and receiving lane; 50 foot EB right-turn pocket • Expanded turn pocket lengths for Meridian Ave N and 175th St intersection • Intersection improvements at 15th Avenue NE and NE 175th St Intersection <p>By 2035: Transportation demand management strategies and actions to minimize traffic congestion along N-NE 185th Street, Meridian Avenue N, and other key corridors</p>	<p>By 2035 or earlier: Implement Transportation Master Plan (TMP) planned improvements and Lynnwood Link DEIS outlined projects</p> <ul style="list-style-type: none"> • N-NE 185th Street: two-way left-turn lane • Meridian Ave N: two-way left-turn lane • N 185th St/Meridian Ave N: 500 foot NB and SB add/drop lanes w/ second through lane and receiving lane; 50 foot EB right-turn pocket • Expanded turn pocket lengths for Meridian Ave N and 175th St intersection • Intersection improvements at 15th Avenue NE and NE 175th St Intersection <p>By 2035: Timing adjustments and phase changes for NB and SB movements at N 175th Street and Meridian Ave N; NE 175th Street and I-5 ramps (WSDOT jurisdiction) would require additional mitigation</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Ongoing expansion of the bicycle and pedestrian network along with transit service priority measures • Develop specific N-NE 185th corridor plan to prepare for redevelopment, including determining need for potential acquisition of additional right-of-way • Continue to monitor traffic volumes on N-NE 185th Street on a bi-annual basis to identify changes in congestion patterns • Employ access management strategies for new development to reduce the number of curb cuts and access points along N-NE 185th Street • Expand signal coordination and other intelligent transportation systems (ITS) strategies • Consistent with the TMP, reconfigure the N 185th Street/Meridian Avenue N intersection 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Ongoing expansion of the bicycle and pedestrian network along with transit service priority measures • Develop specific N-NE 185th corridor plan to prepare for redevelopment and potential right-of-way acquisition • Continue to monitor traffic volumes on N-NE 185th Street on a bi-annual basis to identify changes in congestion patterns • Employ access management strategies for new development to reduce the number of curb cuts and access points along N-NE 185th Street • Expand signal coordination and other intelligent transportation systems (ITS) strategies • Consistent with the TMP, reconfigure the N 185th Street/Meridian Avenue N intersection 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Ongoing expansion of the bicycle and pedestrian network along with transit service priority measures • Develop specific N-NE 185th corridor plan to prepare for redevelopment and potential right-of-way acquisition • Continue to monitor traffic volumes on N-NE 185th Street on a bi-annual basis to identify changes in congestion patterns • Employ access management strategies for new development to reduce the number of curb cuts and access points along N-NE 185th Street • Expand signal coordination and other intelligent transportation systems (ITS) strategies • Consistent with the TMP, reconfigure the N 185th Street/Meridian Avenue N intersection 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Provide protected/permitted phasing for NB and SB left-turn movements at N 185th Street and Meridian Avenue N • Signalization of the intersections along N-NE 185th Street at 5th Avenue NE and 7th Avenue NE may be necessary depending on actual station and parking garage access volumes with implementation of light rail service in 2023 • As traffic volumes approach the capacity of N-NE 185th Street, evaluate adding lane capacity from Aurora Avenue N to 7th Avenue NE • Consistent with the TMP, reconfigure the N 175th Street/Meridian Avenue N intersection • NE 175th Street and I-5 ramps are within WSDOT jurisdiction and may require additional mitigation 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Provide protected/permitted phasing for NB and SB left-turn movements at N 185th Street and Meridian Avenue N • Signalization of the intersections along N-NE 185th Street at 5th Avenue NE and 7th Avenue NE may be necessary depending on actual station and parking garage access volumes with implementation of light rail service in 2023 • As traffic volumes approach the capacity of N-NE 185th Street, evaluate adding lane capacity from Aurora Avenue N to 7th Avenue NE • Consistent with the TMP, reconfigure the N 175th Street/Meridian Avenue N intersection • NE 175th Street and I-5 ramps are within WSDOT jurisdiction and may require additional mitigation 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Provide protected/permitted phasing for NB and SB left-turn movements at N 185th Street and Meridian Avenue N • Signalization of the intersections along N-NE 185th Street at 5th Avenue NE and 7th Avenue NE may be necessary depending on actual station and parking garage access volumes with implementation of light rail service in 2023 • As traffic volumes approach the capacity of N-NE 185th Street, evaluate adding lane capacity from Aurora Avenue N to 7th Avenue NE • Consistent with the TMP, reconfigure the N 175th Street/Meridian Avenue N intersection • NE 175th Street and I-5 ramps are within WSDOT jurisdiction and may require additional mitigation 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued:</p> <ul style="list-style-type: none"> Consistent with the TMP, add bicycle lanes along 1st Avenue NE from the 195th Street trail to NE 185th Street Consistent with the TMP, reconstruct 5th/7th Avenue NE with full sidewalk coverage and bicycle lane provision from NE 175th Street NE to NE 185th Street and 5th Avenue NE from NE 185th Street to NE 195th Street Continue to monitor traffic volumes on Meridian Avenue N on a bi-annual basis to identify changes in congestion patterns Consistent with the TMP, convert Meridian Avenue N to a three-lane profile with a two-way left-turn lane and bicycle lanes Consistent w/ TMP, install sidewalks on both sides of 10th Avenue NE from NE 175th St to NE 195th St 	<p>2035, Continued:</p> <ul style="list-style-type: none"> Consistent with the TMP, add bicycle lanes along 1st Avenue NE from the 195th Street trail to NE 185th Street Consistent with the TMP, reconstruct 5th/7th Avenue NE with full sidewalk coverage and bicycle lane provision from NE 175th Street NE to NE 185th Street and 5th Avenue NE from NE 185th Street to NE 195th Street Continue to monitor traffic volumes on Meridian Avenue N on a bi-annual basis to identify changes in congestion patterns Consistent with the TMP, convert Meridian Avenue N to a three-lane profile with a two-way left-turn lane and bicycle lanes Consistent w/ TMP, install sidewalks on both sides of 10th Avenue NE from NE 175th St to NE 195th St 	<p>2035, Continued:</p> <ul style="list-style-type: none"> Consistent with the TMP, add bicycle lanes along 1st Avenue NE from the 195th Street trail to NE 185th Street Consistent with the TMP, reconstruct 5th/7th Avenue NE with full sidewalk coverage and bicycle lane provision from NE 175th Street NE to NE 185th Street and 5th Avenue NE from NE 185th Street to NE 195th Street Continue to monitor traffic volumes on Meridian Avenue N on a bi-annual basis to identify changes in congestion patterns Consistent with the TMP, convert Meridian Avenue N to a three-lane profile with a two-way left-turn lane and bicycle lanes Consistent w/ TMP, install sidewalks on both sides of 10th Avenue NE from NE 175th St to NE 195th St 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Consistent with the TMP, install sidewalks on both sides of NE 180th Street from 15th to 10th Ave NE • Perkins Way: although future traffic volumes are forecast to be within the capacity of the roadway, evaluate bicycle facilities to improve connections from northeast of the station • Work with Sound Transit on the design of the light rail station and park-and-ride structure to integrate these facilities into the neighborhood and ensure that adequate spaces are provided for all uses (bus transfers/layovers, kiss and ride, shuttle spaces, bike parking ,etc.) to avoid spill over into the neighborhood • Work with Sound Transit on the N-NE 185th Street bridge improvements with a focus on multimodal access and safety 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Consistent with the TMP, install sidewalks on both sides of NE 180th Street from 15th to 10th Ave NE • Perkins Way: although future traffic volumes are forecast to be within the capacity of the roadway, evaluate bicycle facilities to improve connections from northeast of the station • Work with Sound Transit on the design of the light rail station and park-and-ride structure to integrate these facilities into the neighborhood and ensure that adequate spaces is provided for all uses (bus transfers/layovers, kiss and ride, shuttle spaces, bike parking ,etc.) to avoid spill over into the neighborhood • Work with Sound Transit on the N-NE 185th Street bridge improvements with a focus on multimodal access and safety 	<p>2035, Continued:</p> <ul style="list-style-type: none"> • Consistent with the TMP, install sidewalks on both sides of NE 180th Street from 15th to 10th Ave NE • Perkins Way: although future traffic volumes are forecast to be within the capacity of the roadway, evaluate bicycle facilities to improve connections from northeast of the station • Work with Sound Transit on the design of the light rail station and park-and-ride structure to integrate these facilities into the neighborhood and ensure that adequate spaces is provided for all uses (bus transfers/layovers, kiss and ride, shuttle spaces, bike parking ,etc.) to avoid spill over into the neighborhood • Work with Sound Transit on the N-NE 185th Street bridge improvements with a focus on multimodal access and safety 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> Consider implementation of a residential parking zone (RPZ) to help discourage long-term parking within residential areas by light rail station or retail customers Consider time limits and restrictions on specific streets to help limit spillover into residential areas and improve parking turnover near commercial use Provide parking location signage directing drivers to available off-street parking locations to improve vehicle circulation and efficient utilization of parking Consider changes in parking rates (variable parking pricing) based on time period and demand to manage available supply 	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> Consider implementation of a residential parking zone (RPZ) to help discourage long-term parking within residential areas by light rail station or retail customers Consider time limits and restrictions on specific streets to help limit spillover into residential areas and improve parking turnover near commercial use Provide parking location signage directing drivers to available off-street parking locations to improve vehicle circulation and efficient utilization of parking Consider changes in parking rates (variable parking pricing) based on time period and demand to manage available supply 	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> Consider implementation of a residential parking zone (RPZ) to help discourage long-term parking within residential areas by light rail station or retail customers Consider time limits and restrictions on specific streets to help limit spillover into residential areas and improve parking turnover near commercial use Provide parking location signage directing drivers to available off-street parking locations to improve vehicle circulation and efficient utilization of parking Consider changes in parking rates (variable parking pricing) based on time period and demand to manage available supply 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> • If existing parking facilities are being used efficiently, City or property owners may consider adding off-street parking to ease the pressure off of on-street supply <p>Traffic calming:</p> <ul style="list-style-type: none"> • Monitor the need for traffic calming on non-arterial streets to discourage cut-through traffic working through the Neighborhood Traffic Safety Program <p>Transit service improvements:</p> <ul style="list-style-type: none"> • As part of the transit service integration plan currently under development, provide specific focus on the N-NE 185th Street corridor to ensure transit vehicles can operate efficiently through the study area. 	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> • If existing parking facilities are being used efficiently, City or property owners may consider adding off-street parking to ease the pressure off of on-street supply <p>Traffic calming:</p> <ul style="list-style-type: none"> • Monitor the need for traffic calming on non-arterial streets to discourage cut-through traffic working through the Neighborhood Traffic Safety Program <p>Transit service improvements:</p> <ul style="list-style-type: none"> • As part of the transit service integration plan currently under development, provide specific focus on the N-NE 185th Street corridor to ensure transit vehicles can operate efficiently through the study area. 	<p>2035, Continued: Parking management strategies:</p> <ul style="list-style-type: none"> • If existing parking facilities are being used efficiently, City or property owners may consider adding more off-street parking to ease the pressure on the on-street supply <p>Traffic calming:</p> <ul style="list-style-type: none"> • Monitor the need for traffic calming on non-arterial streets to discourage cut-through traffic working through the Neighborhood Traffic Safety Program <p>Transit service improvements:</p> <ul style="list-style-type: none"> • As part of the transit service integration plan currently under development, provide specific focus on the N-NE 185th Street corridor to ensure transit vehicles can operate efficiently through the study area. 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Continued: Transit service improvements:</p> <ul style="list-style-type: none"> Strategies the City may employ include construction of signal priority systems, queue jumps, and bus bulbs. Target potential chokepoints along N-NE 185th Street for these improvements, such as Meridian Avenue N and/or 5th Avenue NE. Evaluate the potential signalization of NE 185th Street and 7th Avenue NE to allow for efficient access of busses into and out of the light rail station. <p>Pedestrian & Bicycle Facilities (In addition to above):</p> <ul style="list-style-type: none"> Evaluate potential improvements on N-NE 185th from the Interurban Trail to the station including cycle tracks Coordinate with Sound Transit on bike facilities at the station 	<p>2035, Continued: Transit service improvements:</p> <ul style="list-style-type: none"> Strategies the city may employ include construction of signal priority systems, queue jumps, and bus bulbs. Target potential chokepoints along N-NE 185th Street for these improvements, such as Meridian Avenue N and/or 5th Avenue NE. Evaluate the potential signalization of NE 185th Street and 7th Avenue NE to allow for efficient access of busses into and out of the light rail station. <p>Pedestrian & Bicycle Facilities (In addition to above):</p> <ul style="list-style-type: none"> Evaluate potential improvements on N-NE 185th from the Interurban Trail to the station including cycle tracks Coordinate with Sound Transit on bike facilities at the station 	<p>2035, Continued: Transit service improvements:</p> <ul style="list-style-type: none"> Strategies the city may employ include construction of signal priority systems, queue jumps, and bus bulbs. Target potential chokepoints along N-NE 185th Street for these improvements, such as Meridian Avenue N and/or 5th Avenue NE. Evaluate the potential signalization of NE 185th Street and 7th Avenue NE to allow for efficient access of busses into and out of the light rail station. <p>Pedestrian & Bicycle Facilities (In addition to above):</p> <ul style="list-style-type: none"> Evaluate potential improvements on N-NE 185th from the Interurban Trail to the station including cycle tracks Coordinate with Sound Transit on bike facilities at the station 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>2035, Pedestrian and Bicycle Facilities, Continued:</p> <ul style="list-style-type: none"> • Require bike parking and pedestrian and bicycle facilities as part of redevelopment projects • Work with Sound Transit to identify potential locations for a shared use path (pedestrian/bicycle) along the right-of-way secured for the light rail alignment on the east side of I-5; this trail could provide a dedicated north-south connection from the NE 195th Street pedestrian and bicycle bridge to the station • See Perkins Way recommendation above • Install bike lanes on 10th Avenue NE • Consider opportunity to implement bike sharing program and additional bike storage near station 	<p>2035, Pedestrian and Bicycle Facilities, Continued:</p> <ul style="list-style-type: none"> • Require bike parking and pedestrian and bicycle facilities as part of redevelopment projects • Work with Sound Transit to identify potential locations for a shared use path (pedestrian/bicycle) along the right-of-way secured for the light rail alignment on the east side of I-5; this trail could provide a dedicated north-south connection from the NE 195th Street pedestrian and bicycle bridge to the station • See Perkins Way recommendation above • Install bike lanes on 10th Avenue NE • Consider opportunity to implement bike sharing program and additional bike storage near station 	<p>2035, Pedestrian and Bicycle Facilities, Continued:</p> <ul style="list-style-type: none"> • Require bike parking and pedestrian and bicycle facilities as part of redevelopment projects • Work with Sound Transit to identify potential locations for a shared use path (pedestrian/bicycle) along the right-of-way secured for the light rail alignment on the east side of I-5; this trail could provide a dedicated north-south connection from the NE 195th Street pedestrian and bicycle bridge to the station • See Perkins Way recommendation above • Install bike lanes on 10th Avenue NE • Consider opportunity to implement bike sharing program and additional bike storage near station 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>To Serve Build-Out Growth:</p> <ul style="list-style-type: none"> • Additional through-lanes along N/NE 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 between N 175th Street and N 205th Street 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 	<p>To Serve Build-Out Growth:</p> <ul style="list-style-type: none"> • Additional through-lanes along N/NE 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 between N 175th Street and N 205th Street 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 	<p>To Serve Build-Out Growth:</p> <ul style="list-style-type: none"> • Additional through lanes in the EB and WB direction along NE 185th street from Aurora • Additional through-lanes in the northbound and southbound direction along Meridian Avenue N between N 175th Street and N 205th Street if transportation demand strategies are unsuccessful • 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: <ul style="list-style-type: none"> ○ NE 185th Street and 5th Avenue NE ○ NE 185th Street and 7th Avenue NE 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>To Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ NE 185th Street and 5th Avenue NE ○ NE 185th Street and 7th Avenue NE ○ NE 185th Street and 10th Avenue NE • Signalization or roundabout conversion of the following intersection: <ul style="list-style-type: none"> ○ NE 180th Street and 10th Avenue NE 	<p>To Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ NE 185th Street and 5th Avenue NE ○ NE 185th Street and 7th Avenue NE ○ NE 185th Street and 10th Avenue NE • Signalization or roundabout conversion of the following intersection: <ul style="list-style-type: none"> ○ NE 180th Street and 10th Avenue NE 	<p>To Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> • Signalization or roundabout conversion of the following intersections: <ul style="list-style-type: none"> • 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 <p>Other Mitigation Measures:</p> <ul style="list-style-type: none"> • Continue to support transit service mitigation measures as needed • Implement programs such as bike sharing and car sharing, working with service providers 	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.3 Multimodal Transportation	<p>To Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> Widening of the 5th Avenue NE and NE 175th Street intersection 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 <p>Other Mitigation Measures:</p> <ul style="list-style-type: none"> Continue to implement traffic calming measures along non-arterial streets to prevent cut-through traffic , working through the Neighborhood Traffic Safety Program Continue to support transit service mitigation measures as needed Implement programs such as bike sharing and car sharing programs working with service providers Continue to require and implement pedestrian and 	<p>To Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> Widening of the 5th Avenue NE and NE 175th Street intersection 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 <p>Other Mitigation Measures:</p> <ul style="list-style-type: none"> Continue to implement traffic calming measures along non-arterial streets to prevent cut-through traffic , working through the Neighborhood Traffic Safety Program Continue to support transit service mitigation measures as needed Implement programs such as bike sharing and car sharing, working with service providers Continue to require and implement pedestrian and 	<p>Other Mitigation Measures, to Serve Build-Out, Cont'd:</p> <ul style="list-style-type: none"> Continue to implement traffic calming measures along non-arterial streets to prevent cut-through traffic , working through the Neighborhood Traffic Safety Program Continue to support transit service mitigation measures as needed Implement programs such as bike sharing and car sharing , working with service providers Continue to require and implement pedestrian and bicycle facilities and improvements 	

	bicycle facilities and improvements	bicycle facilities and improvements		
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	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
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SUMMARY OF IMPACTS

3.4 Public Services SCHOOLS Note: student population numbers shown are total, from existing and new households, and based on current ratio of students at each level PARKS, RECREATION, AND OPEN SPACE Note: Neighborhood parks can range in size from less than one acre to five acres or more and are meant to serve populations located within one-half mile.	By 2035: 723-893 elementary students 223-276 middle school students 522-646 high school students At Build-Out: 7,891 elementary students 2,439 middle school students 5,703 high school students	By 2035: 723-893 elementary students 223-276 middle school students 522-646 high school students At Build-Out: 2,526 elementary students 780 middle school students 1,825 high school students	By 2035: 723-893 elementary students 223-276 middle school students 522-646 high school students At Build-Out: 1,185 elementary students 366 middle school students 857 high school students	By 2035: 591 elementary students 183 middle school students 427 high school students
	By 2035: Population increase of 2,916 to 5,399 people would generate demand for one new neighborhood park At Build-Out: Would generate demand for nine to ten new neighborhood parks and possibly other facilities to be monitored and evaluated over time	By 2035: Population increase of 2,916 to 5,399 people would generate demand for one new neighborhood park At Build-Out: Would generate demand for six new neighborhood parks and possibly other facilities to be monitored and evaluated over time	By 2035: Population increase of 2,916 to 5,399 people would generate demand for one new neighborhood park At Build-Out: Would generate demand for two new neighborhood parks	By 2035: Current level of parks, recreation, and open space would serve 20-year growth

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
SUMMARY OF IMPACTS, CONTINUED				
3.4 Public Services	By 2035: 2.5 to 4.6 new commissioned officers, as well as more equipment, vehicles and facilities/space	By 2035: 2.5 to 4.6 new commissioned officers, as well as more equipment, vehicles and facilities/space	By 2035: 2.5 to 4.6 new commissioned officers, as well as more equipment, vehicles and facilities/space	By 2035: One new commissioned officer, as well as more equipment, vehicles and facilities/space
POLICE	At Build-Out: Up to 41 new commissioned officers, as well as more equipment, vehicles and facilities/space	At Build-Out: Up to 25 new commissioned officers, as well as more equipment, vehicles and facilities/space	At Build-Out: Up to 8 new commissioned officers, as well as more equipment, vehicles and facilities/space	
FIRE AND EMERGENCY SERVICES	By 2035: 292 to 675 additional annual calls (staff, equipment, and facilities to support increase) At Build-Out: Increase to an additional 4,859 to 6,089 annual calls	By 2035: 292 to 675 additional annual calls (staff, equipment, and facilities to support increase) At Build-Out: Increase to an additional 2,937 to 3,671 annual calls	By 2035: 292 to 675 additional annual calls (staff, equipment, and facilities to support increase) At Build-Out: Increase to an additional 957 to 1,196 annual calls	By 2035: 79 to 99 additional annual calls (staff, equipment, and facilities to support increase)
SOLID WASTE	By 2035: 3,418 to 6,327 more people;* 32,813 to 60,739 additional pounds of waste management per week	By 2035: 3,418 to 6,327 more people;* 32,813 to 60,739 additional pounds of waste management per week	By 2035: 3,418 to 6,327 more people;* 32,813 to 60,739 additional pounds of waste management per week	By 2035: 616 more people;* 5,914 additional pounds of waste management per week
*Residents and employees				
Based on current per customer and per capita waste generation levels; likely to be lower in coming decades	At Build-Out: 62,477 more people;* 599,779 additional pounds of waste management per week	At Build-Out: 55,973 more people;* 537,341 additional pounds of waste management per week**	At Build-Out: 17,868 more people;* 171,533 additional pounds of waste management per week**	

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
S U M M A R Y O F I M P A C T S , C O N T I N U E D				
3.4 Public Services				
CITY/MUNICIPAL SERVICES	By 2035: 2,916 to 5,399 more people would require 7.35 to 13.61 FTE City employees At Build-Out: 48,585 more people would require 122 FTE City employees	By 2035: 2,916 to 5,399 more people would require 7.35 to 13.61 FTE City employees At Build-Out: 29,371 more people would require 74 FTE City employees	By 2035: 2,916 to 5,399 more people would require 7.35 to 13.61 FTE City employees At Build-Out: 9,566 more people would require 24 FTE City employees	By 2035: 790 more people would require 1.99 FTE City employees
MUSEUM, LIBRARY, POSTAL, AND HUMAN SERVICES	By 2035: 5.3 percent to 9.9 percent increase in demand for services At Build-Out: 88.7 percent increase in demand for services; a new library or satellite library may be needed	By 2035: 5.3 percent to 9.9 percent increase in demand for services At Build-Out: 53.6 percent increase in demand for services; a new satellite library may be needed	By 2035: 5.3 percent to 9.9 percent increase in demand for services At Build-Out: 17.5 percent increase in demand for services; a new satellite library may be needed	By 2035: 1.4 percent increase in demand for services

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES				
3.4 Public Services SCHOOLS PARKS, RECREATION, AND OPEN SPACE POLICE FIRE AND EMERGENCY SERVICES SOLID WASTE CITY/MUNICIPAL SERVICES MUSEUM, LIBRARY, POSTAL, AND HUMAN SERVICES	<p>Provide outreach to and coordination with service providers (City and non-City) to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p> <p>Increases in households and businesses would result in increased tax and fee revenue to help offset cost of providing additional services and facilities</p> <p>Consider the need for potential increases in fees for services to address growth</p> <p>In some cases, behavioral changes may help to offset some demand for services (e.g., less waste generated, more recycling, etc.)</p>	<p>Provide outreach to and coordination with service providers (City and non-City) to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p> <p>Increases in households and businesses would result in increased tax and fee revenue to help offset cost of providing additional services and facilities</p> <p>Consider the need for potential increases in fees for services to address growth</p> <p>In some cases, behavioral changes may help to offset some demand for services (e.g., less waste generated, more recycling, etc.)</p>	<p>Provide outreach to and coordination with service providers (City and non-City) to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p> <p>Increases in households and businesses would result in increased tax and fee revenue to help offset cost of providing additional services and facilities</p> <p>Consider the need for potential increases in fees for services to address growth</p> <p>In some cases, behavioral changes may help to offset some demand for services (e.g., less waste generated, more recycling, etc.)</p>	<p>Modest increases in households and businesses would result in increased revenue to help offset cost of providing additional services and facilities, but demand would be lower than under action alternatives</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
S U M M A R Y O F I M P A C T S				
3.5 Utilities	At Build-Out:	At Build-Out:	At Build-Out:	At Build-Out:
WATER	5,120,637 total gallons per day Compared to 669,180 current usage	4,136,504 total gallons per day compared to 669,180 current usage	1,942,446 total gallons per day compared to 669,180 current usage	746,595 gallons per day compared to 669,180 current usage
WASTEWATER	661% increase in demand for service compared to current service level	508% increase in demand for service compared to current service level	92% increase in demand for service compared to current service level	11% increase in demand for service compared to current service level
SURFACE WATER	37% increase in surface water/303.10 cfs (to be attenuated through flow management and water quality treatment)	21% increase in surface water/271.60 cfs (to be attenuated through flow management and water quality treatment)	12% increase in surface water/250.58 cfs (to be attenuated through flow management and water quality treatment)	Minimal increase in surface water/224.70 cfs (to be attenuated through flow management and water quality treatment)
ELECTRICITY	699% increase in demand for electricity; undergrounding	611% increase in demand for electricity; undergrounding	234% increase in demand for electricity; undergrounding	135% increase in demand for electricity
NATURAL GAS	Major increase in demand	Major increase in demand	Moderate increase in demand	Minor increase in demand
COMMUNICATIONS (Phone, Internet, Cable)	Major increase in demand	Major increase in demand	Moderate increase in demand	Minor increase in demand
	Note: Only impacts at build-out were characterized in the analysis; then mitigation/capital projects were estimated as a percent growth of build-out to identify those needed in the next twenty years to support growth.			

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES				
3.5 Utilities WATER <p>See Chapter 3.5 for a more detailed description of water system improvement needs.</p>	<p>By 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plans to address potential growth as a result of rezoning Evaluate/verify long-term storage and facilities needs Upgrade 8,610 linear feet (LF) of 12" water mains, valves, and hydrants in the North City Water District Upgrade 3,030 LF of 12" water mains and 1,480 of 8" water mains, as well as valves and hydrants in the Seattle Public Utilities (SPU) system <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Upgrade 36,969 LF of 12" and 317 LF 8" mains, as well as valves & hydrants in the North City Water District 	<p>By 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plans to address potential growth as a result of rezoning Evaluate/verify long-term storage and facilities needs Upgrades would be needed to a similar level as under Alternative 4; work with service providers to confirm <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Upgrades would be needed to a similar level as under Alternative 4; work with service providers to confirm 	<p>By 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plans to address potential growth as a result of rezoning Evaluate/verify long-term storage and facilities needs Fewer upgrades would be needed than under Alternative 4 or 3; work with service providers to confirm <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Fewer upgrades would be needed than under Alternative 4 or 3; work with service providers to confirm 	<p>By 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.5 Utilities WATER, CONTINUED AND WASTEWATER <p>See Chapter 3.5 for a more detailed description of wastewater system improvement needs.</p>	<p>WATER—To Serve Build-Out, Continued:</p> <ul style="list-style-type: none"> Upgrade 30,515 LF of 12" and 5,485 LF of 8" mains, as well as valves and hydrants in the SPU system <p>WASTEWATER by 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plan to address potential growth as a result of rezoning Upgrade 9,450 LF of 18" or larger mains, and 648 LF of 12" to 15" mains; upsize lift station #15 <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Upgrade 30,777 LF of 18" or larger and 26,584 LF of 12" to 15" mains and other facilities Upsize Lift Stations # 8, 14, and 15 Implement already planned 	<p>WASTEWATER by 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plan to address potential growth as a result of rezoning Fewer upgrades would be needed than Alternative 4; work with service provider to confirm <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Upgrade 19,093 LF of 18" or larger and 11,314 of 12" to 15" mains and other facilities Upsize Lift Stations # 8, 14, and 15 	<p>WASTEWATER by 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements and update service planning and comprehensive plan to address potential growth as a result of rezoning Fewer upgrades would be needed than under Alternative 4 or 3; work with service provider to confirm <p>To Serve Build-Out:</p> <ul style="list-style-type: none"> Upgrade 11,230 LF of 12" to 15" mains and other facilities Upsize Lift Stations #15 	<p>WASTEWATER by 2035:</p> <ul style="list-style-type: none"> Utility providers would need to implement already planned improvements

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.5 Utilities SURFACE WATER See Chapter 3.5 for more detailed descriptions.	By 2035: <ul style="list-style-type: none"> As the service provider, the City would need to implement already planned improvements, including comprehensive plan items and update plans to address potential growth Upgrade 2,617 LF of 24" pipe, 20,422 of 18" pipe, and 4,257 of 12" pipe Upsize MC03 pump station Encourage and implement low impact development (LID) and green stormwater infrastructure to higher level than required by DOE Explore sub-basin regional approach to stormwater management to reduce costs and incentivize redevelopment 	By 2035: <ul style="list-style-type: none"> As the service provider, the City would need to implement already planned improvements, including comprehensive plan items and update plans to address potential growth Fewer upgrades would be needed than Alternative 4; more than Alternative 2 Upsize MC03 pump station Encourage and implement low impact development and green stormwater infrastructure to higher level than required by DOE Explore sub-basin regional approach to stormwater management to reduce costs and incentivize redevelopment 	By 2035: <ul style="list-style-type: none"> As the service provider, the City would need to implement already planned improvements, including comprehensive plan items and update plans to address potential growth Fewer upgrades would be needed than Alternative 4 or 3 Upsize MC03 pump station Encourage and implement low impact development and green stormwater infrastructure to higher level than required by DOE Explore sub-basin regional approach to stormwater management to reduce costs and incentivize redevelopment 	By 2035: As the service provider, the City would need to implement already planned improvements, including comprehensive plan items

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.5 Utilities SURFACE WATER, CONTINUED	<p>To Serve Build-Out</p> <ul style="list-style-type: none"> • Upgrade 4,317 LF of 24" pipe, 35,673 of 18" pipe, and 11,302 of 12" pipe • Upsize MC03 & Serpentine pump stations • Continue to encourage greater levels of LID and green stormwater infrastructure than required • Implement sub-basin/regional facilities 	<p>To Serve Build-Out</p> <ul style="list-style-type: none"> • Upgrade 17,251 LF of 18" and 22,136 LF of 12" pipe • Upsize MC03 & Serpentine pump stations • Continue to encourage greater levels of LID and green stormwater infrastructure than required • Implement sub-basin/regional facilities (at a lower level than under Alternative 4) 	<p>To Serve Build-Out</p> <ul style="list-style-type: none"> • Upgrade 8,700 LF of 18" and 15,261 LF of 12" pipe • Upsize MC03 pump station • Continue to encourage greater levels of LID and green stormwater infrastructure than required • Implement sub-basin/regional facilities (at a lower level than under Alternative 4 or 3) 	
ELECTRICITY, NATURAL GAS, AND COMMUNICATIONS (Phone, Internet, Cable)	<p>To Serve 2035 and Build-Out Growth:</p> <p>Provide outreach to and coordinate with service providers to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p>	<p>To Serve 2035 and Build-Out Growth:</p> <p>Provide outreach to and coordinate with service providers to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p>	<p>To Serve 2035 and Build-Out Growth:</p> <p>Provide outreach to and coordinate with service providers to proactively plan for additional facilities and services from the outset of adoption of rezoning to address needs, which will increase incrementally over many decades</p>	<p>Continue along current service planning path; increases in households and businesses would result in increased fee revenue to help offset cost of providing additional services and facilities</p>

	Alternative 4— Preferred Alternative	Alternative 3—Previous Most Growth	Alternative 2—Some Growth	Alternative 1—No Action
MITIGATION MEASURES, CONTINUED				
3.5 Utilities ELECTRICITY, NATURAL GAS, AND COMMUNICATIONS (Phone, Internet, Cable), CONTINUED	Increases in households and businesses would result in increased fee revenue to help offset cost of providing additional services and facilities Consider the need for potential increases in fees for services to address growth Explore district energy options and incentivize green building Behavioral changes may offset some demand for services	Increases in households and businesses would result in increased fee revenue to help offset cost of providing additional services and facilities Consider the need for potential increases in fees for services to address growth Explore district energy options and incentivize green building Behavioral changes may offset some demand for services	Increases in households and businesses would result in increased fee revenue to help offset cost of providing additional services and facilities Consider the need for potential increases in fees for services to address growth Explore district energy options and incentivize green building Behavioral changes may offset some demand for services	

1.9 Significant Areas of Controversy and Uncertainty, and Issues to be Resolved or Monitored

In summary, adoption of the 185th Street Station Subarea Planned Action, which would implement the zoning alternative selected by Shoreline City Council. Adoption of the Planned Action also would provide additional housing and employment options, increasing the number of people living and working in proximity to the light rail station. Under any action alternative, the plan would be facilitated by changes in land use and zoning, as well as

development provisions such as building height requirements, 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. This represents a significant change from the current single-family character of the subarea, and as such, many residents have concerns about how transition will impact their future and quality of life.

While new development would result in a variety of neighborhood and transportation improvements, along with

development of parks and public spaces, a greater variety of housing choices to fit various incomes, and other community amenities, there are several areas of uncertainty and issues to be resolved as the plan moves into implementation, both in the twenty-year and build-out timeframes.

The purpose of this EIS analysis is not to presume that all impacts of change can be mitigated or predicted, but to identify potential issues and determine solutions that can minimize adverse consequences and facilitate improvements. The analysis acknowledges that there will be some undesirable conditions related to the transition that happens over time in the subarea. While uncertainty exists and people are naturally skeptical of change, especially if they feel it was imposed upon them, the City and community have worked hard to create an ambitious long-range vision, and developed mechanisms to bring it to fruition.

The topics described below and on the following pages have been identified as areas that may be unpredictable, and should therefore be monitored closely over time.

Changes in Neighborhood Character

The station subarea would change from a predominantly single family neighborhood to a more urban neighborhood with a mix of densities. The future character of the subarea would include single family housing around the periphery, transitioning to various types of attached single family, and then to multifamily and mixed use in areas surrounding the station and along the N-NE 185th Street/10th Avenue N/NE 180th Street corridor.

Major areas of concern include how transitions in the character of the neighborhood, and physical transitions between different land uses, would be managed. While the proposed changes in zoning and land use mix would alter the look and feel of the subarea, this change would occur incrementally over many decades. This long timeframe does create a level of uncertainty, but also provides the ability to implement improvements to support growth. While it is beyond the timeframe that most property owners and residents plan for, it can facilitate discussions about long-range household goals and preferences, and hopefully provide additional options such as more housing for aging Baby Boomers and Millennials, two key consumer groups, as well as housing for all Shoreline citizens.

Many residents have expressed excitement about the coming of light rail and changes that it could bring to the neighborhood, including additional restaurants and sidewalks. Many have expressed their hope that increased demand and property values could enable them to sell their houses, which in some cases are underwater following the Great Recession. Other residents in the subarea have expressed their disapproval regarding this level of change and have questioned why the coming of light rail should be accompanied by significant upzoning. Some want to know whether they should make planned improvements to their homes, or invest in another area where single-family character is more likely to be preserved.

The City acknowledges that even though a decision to stay or sell is entirely up to the property owner, those who feel as if their neighborhood is changing beyond their comfort level may still feel forced out. The City also acknowledges that even for those

who support change, transitions and construction can be uncomfortable and unpleasant.

The Pace of Redevelopment, Market Forces, and Complexity of Property Aggregation

An area of uncertainty relates to unknowns about the timeframe in which change would occur and the pace of growth and development. While the FEIS has projected an average annual growth range of 1.5 percent to 2.5 percent, the actual rate of growth may fluctuate from year to year.

There also are questions about how much redevelopment the market might support over time, and the overall quality of development. There is added complexity involved in the need to aggregate enough parcels for larger scale redevelopment. There also are unknowns about when and where specific redevelopment might occur in the subarea.

Many single family homeowners will prefer to stay or purchase within the subarea, and single family use could continue for many years without redevelopment. It is possible that creating new areas for mid-rise multifamily and mixed-use development would unlock pent-up demand for such products, which may support initial growth along the 185th Street corridor. It is not likely that market forces and the process of parcel aggregation would facilitate development of seven story buildings in the near-term. However, allowing for greater choice and flexibility as represented in the Preferred Alternative reduces certainty about where initial and subsequent phases of redevelopment would occur.

Possible Real Estate Speculation as Well as Uncertainty about the Future

Property owners have expressed concerns that real estate investors may be interested in purchasing single family homes and holding them as rentals until the time is right for redevelopment in the future. Many homeowners in both station subareas have already received letters offering fair market value, possibly because investors believe that properties would be less expensive before zoning changes or light rail service is operational. This type of speculative buying could occur regardless of whether or not the City was planning to rezone areas surrounding future stations immediately. One reason to implement zoning change sooner rather than later is to provide long-term predictability regarding what type of uses would be allowed where, and ample time for homeowners to become informed about the potential for change and determine their own long-range plans. For those that choose to sell, understanding the long-term potential of the property may allow them to capture additional value.

Available Funding for Infrastructure Improvements

Funding for street, intersection, and other transportation improvements, as well as utility upgrades and local transit programs is constrained. While there would be a substantial need for improvements to serve the potential growth in the subarea, funding for these projects is not secured. The City and other utility and service providers would need to reprioritize investments and aggressively seek funding to support redevelopment in the subarea. Another reason to undergo subarea planning a decade before the trains start running is to

identify projects and potential funding sources as soon as possible.

The Potential for Phased Zoning

At this time, it is not known if the subarea would be zoned all at once or zoned in phases. The potential for phased zoning could help to address some of these areas of uncertainty by identifying a specific area where redevelopment would happen first in the subarea. This could help to focus public and private investment activity to support redevelopment and make the areas of potential changes in land use more predictable (identifying where changes would occur first as part of Phase 1). The City also could work to target incentives and capital investments within this smaller geographic area in the next two decades, rather than diluting investment over a broader area.

Some homeowners that live within boundaries of Alternative 4—Preferred Alternative, but outside of Phase I, have expressed the preference that if they are potentially going to live adjacent to major redevelopment, they would like to have the option to increase their development potential as well, rather than waiting for zoning to be unlocked decades from now. Some homeowners who live inside and outside the Planned Action boundary have expressed a preference for less intensive zoning and as such, would support a phased approach to implementation. Decision-makers are interested in opinions on phased zoning.

1.10 Significant Unavoidable Adverse Impacts

This section addresses the potential for significant unavoidable adverse impacts, summarizing the results of the environmental analysis. While there are several areas of controversy and uncertainty and issues to be resolved over time, there is a long range horizon to proactively plan for and support build-out of the plan for redevelopment.

As long as investments are prioritized and infrastructure (transportation and utilities) improvements and public services (schools, parks and recreation, police, fire and emergency, City services and other human services) are increased over time to keep pace with growth and to mitigate the impacts identified in this FEIS, no significant unavoidable adverse impacts would be anticipated with implementation.

Land Use Patterns, Plans and Policies

Alternative 4—Preferred Alternative, as well as Alternative 3—Previous Most Growth or Alternative 2—Some Growth, all would result in greater intensity of land uses, housing and employment in the subarea than Alternative 1—No Action. While implementation of Alternative 4—Preferred Alternative (as well as Alternatives 3 or 2) would require updating the City's Comprehensive Plan and revising Development Code regulations and standards, the proposed changes to land use patterns do conform to and support the City's Comprehensive Plan policies 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 regulatory provisions adopted to support the subarea plan. Required Comprehensive Plan amendments include updating the land use map, which would be adopted concurrently with the 185th Street Station Subarea Plan and Planned Action Ordinance and other policy amendments, which would be adopted as part of the 2015 docket cycle. 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

To a greater degree implementation of Alternative 4—Preferred Alternative would result in a variety of housing types, as well as an increased quantity of housing choices to fit various income levels and household size needs in the subarea than the other action alternatives (3 or 2). 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.

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 Alternative 4 (or Alternative 3 or 2). Alternative 1 would not be as beneficial in meeting community and regional objectives related to expanding

housing options, including affordable housing. Under existing zoning, there could be a concern that existing single family homes would be demolished over time and replaced with larger homes, which is inconsistent with adopted policies.

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 alternatives (Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, Alternative 2—Some Growth, or Alternative 1—No Action) as a result of growth in traffic throughout the city and in the subarea.

Traffic would increase regardless of redevelopment activities due to development of the light rail station and park and ride parking structure. The rate of growth and change in the subarea would occur very gradually, over many decades. Development of the Preferred Alternative would occur incrementally over time, 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 for 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 in the region.

Public Services

Additional public services such as police, fire, emergency services, schools, parks and recreation, solid waste, and other services would be required to serve population growth under Alternative 4—Preferred Alternative, as well as Alternative 3—Previous Most Growth, or Alternative 2—Some Growth. The demand for increased services and facilities would occur gradually, over many decades. Increases in housing and employment would generate additional revenue and funding for services. Under Alternative 1—No Action, there would be an increase in demand for public services at a much lower level than under the action alternatives.

Development fees, sales tax revenues, property taxes generated from new households, customer service charges to new customers, and other project funding would offset the costs of providing additional public services, keeping pace with demand under Alternative 4—Preferred Alternative (as well as under Alternative 3 or 2). As such, no significant unavoidable adverse impacts are anticipated.

Utilities

The growth in residential and employment population would increase the demand for utilities (water, wastewater, surface water management, communications, and energy services) under any of the alternatives. Alternative 4 (as well as Alternative 3 or

2) would create a substantially greater demand for utility services over time than Alternative 1. Because growth would occur gradually over many decades, customer fees, service charges, and other funding would offset the costs of providing additional utility services, allowing service providers to fiscally manage the increased demand. No significant unavoidable adverse impacts would be anticipated. However, coordination between the City, utility providers, developers, and other entities such as Sound Transit who would construct capital projects would be critically important to minimize disruption.

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Chapter 2

Description of the Alternatives

FINAL ENVIRONMENTAL IMPACT STATEMENT



Chapter 2—Description of the Alternatives

2.1 Introduction

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 intends to adopt the 185th Street Station Subarea Plan and the supporting Planned Action Ordinance. The City also will amend its Comprehensive Plan, zoning, and development regulations to support implementation of the Planned Action. In the coming years, the City also will need to revise its Capital Improvement Plan, Transportation Master Plan, and other plans to further support implementation. 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, the Comprehensive Plan map and related provisions and the Shoreline Municipal Code, including zoning and development regulations, would need to be amended to support the Planned Action.

Because this FEIS involves amendments to the City's Comprehensive Plan, zoning, and regulations, this chapter provides planning background information. Section 2.2 outlines Planned Action procedures. Section 2.3 introduces the alternatives analyzed in this FEIS. Section 2.4 describes the environmental review process, and Section 2.5 provides planning and policy background information.

Refer to Chapter 1 for a description of the subarea context including the land use and mobility study area boundaries which together constitute the subarea boundary. Chapter 1 also presents objectives for the 185th Street Station Subarea to demonstrate the purpose and need for the Planned Action.

2.2 Planned Action Provisions of the State Environmental Policy Act

As part of the subarea planning process, and consistent with 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 designates a geographic area and growth thresholds that would apply to future redevelopment. The Planned Action process under SEPA is intended to emphasize quality environmental review of early planning efforts and provide the opportunity for early public input to shape decisions. Because of the extent of environmental analysis in this FEIS (and the previous DEIS), future redevelopment projects would not be required to conduct additional environmental analysis, as long as they are consistent with the Planned Action Ordinance growth thresholds.

The basic steps in implementing a Planned Action and subsequent projects within the Planned Action area are as follows.

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).

This FEIS addresses step 1 identified above by analyzing the potential environmental impacts related to the alternatives and prescribing mitigation to address potential impacts. The analysis in the FEIS addresses various alternatives related to land use and zoning and the extent of growth and development that would result from implementation over the next twenty years and with full build-out.

The intent with Planned Actions 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, would not be necessary as long as 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. If proponents choose to go through the development agreement process for density/height bonuses, their projects would be subject to a public process.

Planned Action Ordinance

The Planned Action Ordinance would encourage redevelopment and revitalization of the station subarea by streamlining the

project review process. This FEIS helps the City identify potential impacts of development and specific mitigation measures that projects in the subarea would need to provide. A Planned Action project must be consistent with the land use and zoning intensities studied in the DEIS and FEIS, or a supplemental environmental impact statement may be required of the project.

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

- Designation as a Planned Action by ordinance;
- Significant environmental impacts addressed in an EIS;
- 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;
- Located within an urban growth area;
- Not an essential public facility; and
- Consistent with an adopted comprehensive plan.

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

- Description of the components of the Planned Action;
- 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 intends to designate the 185th Street Station Subarea as a Planned Action by ordinance, pursuant to SEPA and implementing rules. The ordinance would identify mitigation, as described in this 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 Introduction to the FEIS Alternatives

2.3.1 Overview of the FEIS Alternatives

This FEIS analyzes four alternatives:

- Alternative 4—Preferred Alternative (Action Alternative)
- Alternative 3—Previous Most Growth (Action Alternative)
- Alternative 2—Some Growth (Action Alternative)
- Alternative 1—No Action (No Action Alternative)

Under all four alternatives, it is assumed that the planned 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. However, the light rail station and park-and-ride structure are not the subject of analysis in this FEIS (or the previous DEIS), as these actions are being analyzed by Sound Transit through a separate environmental process. Sound Transit's DEIS for the Lynnwood Link system was published in July

2013, and the Lynnwood Link FEIS is scheduled to be completed in 2015.

Because Alternative 3 was identified as the “Most Growth” alternative in the DEIS, but Alternative 4—Preferred Alternative now proposes a higher level of change and growth, Alternative 3 is now called “Previous Most Growth.” Alternatives 4, 3, and 2 are known as “action alternatives” and Alternative 1 is the “no action” alternative.

If implemented, any of the three action alternatives would result in changes to the Comprehensive Plan, zoning, and development regulations. Alternative 1—No Action would retain existing Comprehensive Plan and zoning designations, but is inconsistent with and does not support existing adopted policies at the local, regional, state, and federal levels. For example, Alternative 1—No Action does not align with the City's adopted Comprehensive Plan and other adopted plans that call for more intensive use around future light rail stations. This is more fully described in Section 3.1 of this FEIS.

Development of Action Alternatives Shaped by Community Design Workshops

Public input received at community design workshops helped guide the development of alternatives analyzed in the DEIS and FEIS. As a result of multiple workshop sessions with the public and stakeholder groups, proposed redevelopment in the action alternatives was focused along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor. All three action alternatives are framed around this corridor, but each propose varying levels of long term growth and change in the subarea, with Alternative 4

proposing the greatest level of change and intensity of redevelopment at full build-out. For more information about the public and stakeholder involvement process, refer to Chapter 1 of the FEIS.

New Alternative Analyzed—Alternative 4—Preferred Alternative

The FEIS analyzes a new alternative, Alternative 4—Preferred Alternative, which was created by the Planning Commission and City Council based on input received on the alternatives analyzed in the DEIS and additional considerations, including Planning Commission recommendations and subsequent City Council decision to increase the capacity and flexibility for growth in the subarea. The FEIS analyzes various impacts related to implementing Alternative 4, and retains the impact analysis completed for other alternatives for comparative reference.

Additional information about the creation of Alternative 4—Preferred Alternative is available in the City Council packets and meeting minutes for August 11, 2014 and August 25, 2014, available at:

<http://www.cityofshoreline.com/government/shoreline-city-council/past-meeting-documents>.

Discussions around increasing development capacity under Alternative 4 focused on the opportunity to maximize flexibility for redevelopment in the subarea. This alternative also would provide the most capacity to meet Shoreline's overall housing growth targets over the long term and in the coming decades. Alternative 4 would facilitate a greater level of redevelopment, consistent with local and regional plans and policies for high-capacity transit station subareas, with a diversity of housing

choices to fit varying income levels and household sizes. Under Alternative 4, changes to land use patterns would occur more broadly than under Alternative 3 or Alternative 2. Along with the broader extent of redevelopment under Alternative 4, a broader extent of improvements would be expected to occur over time in the subarea than under the other action alternatives.

Estimated Pace of 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. From July 1, 2012 to July 1, 2013, the Seattle-Tacoma-Bellevue metropolitan area ranked tenth in numerical population growth of metropolitan areas of the US, adding 57,514 people. According to Puget Sound Regional Council's 2040 Transportation Plan, our region will add 1.4 million people and 1.1 million jobs by 2040.

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.

In a review of other transit-oriented districts around light rail and high-capacity transit in the US, growth rates have varied greatly. Average annual growth rates of around 2 percent are often achieved, but are influenced by a variety of factors.

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 also are forecasted to continue to grow over the next couple of decades.

The growth potential for the 185th Street Station Subarea is high; however, it is moderated by potential challenges related to redevelopment, such as the need to aggregate parcels to create sites large enough for mixed use and multifamily housing, as discussed in Section 3.1 of this FEIS. Uncertainty about the market and property owners' interests in redeveloping or selling their properties also moderates the forecast for growth.

With all of these considerations, the anticipated average annual growth forecasted for the subarea is around 1.5 percent to 2.5 percent. This is the assumed growth rate for purposes of subarea planning and environmental analysis. However, growth would not be expected to occur at an even pace annually and presumably may be higher than the 1.5 to 2.5 percent average some years and lower other years.

The Potential for Phased Zoning with Alternative 4—Preferred Alternative

Over the next twenty years and beyond, it would be important that the station subarea redevelop as a cohesive, connected community that is supportive of transit, but also that provides residents and potential developers with some predictability about

when market forces are likely to support redevelopment of different areas. As such, the FEIS addresses the potential for phased zoning, identifying an area within the proposed zoning under Alternative 4 that could be rezoned immediately with the adoption of the subarea plan.

Discussions in the September 29, 2014 joint meeting examined potential benefits of having a more predictable pattern for growth to guide planning and implementation over the next few decades. As such, the City Council decided to study the potential of phasing zoning over time. On October 2, 2014, the Planning Commission refined boundaries of a potential Phase 1 zoning area. For more information about potential Phase 1 zoning and a map of the boundary for Phase 1 under consideration, refer to Section 3.1 of this FEIS, and see Figure 3.1-5 for a map of the Phase 1 zoning area.

If adopted, Alternative 4—Preferred Alternative would serve as a long term master plan for the subarea and provide the most capacity to achieve the desired vision for the station subarea. The City of Shoreline is considering adopting this proposed zoning in phases. The Phase 1 zoning area, if adopted along with the build-out zoning plan, would serve as a tool for focusing growth around the proposed light rail station and along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor.

The proposed Phase 1 zoning area balances concerns related to providing an adequate level of housing choices and enabling flexibility in future redevelopment with concerns about rezoning too broadly in the subarea in initial years, which might result in over-valuing property, speculative buying, uncertainty about the future resulting in potential decisions to defer maintenance, and

other effects. By focusing initial development closer to the station and 185th Street corridor through Phase 1 zoning, capital improvements needed to support initial growth could be prioritized for implementation.

Rezoning in a phased manner would provide a better opportunity to monitor the development market and redevelopment results, and to determine where regulations and incentives are creating the kind of community envisioned through the subarea planning process. The City would monitor redevelopment activity and determine the need for amendments to regulations and/or additional mitigation actions that might be needed to accommodate the next phase of zoning.

The rezoning of the remaining portion of subarea shown under Alternative 4—Preferred Alternative would be “unlocked” at a future date, such as ten years after the light rail system begins operating in 2023 (so 2033). This approach requires that redevelopment under the new zoning categories within the next twenty years be located within the proposed Phase 1 boundary.

Decision-makers are interested in hearing from residents regarding their preference about whether or not to phase adoption of zoning.

The First Twenty Years of Implementation Compared to Build-Out

The first twenty years of implementation among any of the action alternatives would create a similar level of change in the subarea, because all alternatives would be expected to grow and change at the same pace (1.5 percent to 2.5 percent). Each of the three action alternatives would reach build-out of proposed zoning at

different timeframes since varying levels of zoning change would occur under each (with the least amount of change under Alternative 2—Some Growth and the most amount of change under Alternative 4—Preferred Alternative).

Because the expected pace of growth would be the same for all action alternatives in the next twenty years, potential impacts and associated mitigation measures related to implementation would be similar as well. The similarity in anticipated impacts and recommended mitigation is presented in the summary charts in Chapter 1 and described in detail in Chapter 3 of this FEIS.

Long term impacts under each alternative would vary because of the extent of rezoning proposed. At full build-out Alternative 4—Preferred Alternative would require the most utility and transportation improvements and upgrades, as well as the highest level of public services to support the proposed growth (higher and covering a greater geographic extent than under the other action alternatives, Alternative 3—Previous Most Growth and Alternative 2—Some Growth).

Build-Out Timeframes

Anticipated build-out timeframes have been estimated for the action alternatives and are shown in **Table 2-1**.

Table 2-1
Estimated Build-Out Timeframes for Action Alternatives

Alternative 4— Preferred Alternative	Alternative 3— Previous Most Growth	Alternative 2— Some Growth
80 to 125 years by 2095 to 2140	60 to 100 years by 2075 to 2115	30 to 50 years by 2045 to 2065

Planning Horizon Year 2035 and Capital Improvements to Support the First Twenty Years of Implementation

While the proposed zoning scenarios under the action alternatives represent a long term vision for the subarea, the subarea plan and related capital improvement recommendations focus on the next twenty years of implementation, consistent with Washington State Growth Management Act (GMA) provisions. As such, the planning horizon year referenced consistently throughout the DEIS and FEIS is **2035**. Since the potential impacts under any of the alternatives over the first twenty years would be similar, capital improvement recommendations are generally consistent across all alternatives for the twenty-year planning horizon. The 185th Street Station Subarea Plan includes a list of specific capital improvement projects needed to support the first twenty years of implementation.

Current and Forecasted Population, Household, and Employment Levels

Table 2-2 shows current estimated population, household, and employment levels within the subarea. **Table 2-3** shows estimated twenty-year and build-out population, household, and employment projections for the alternatives. **Table 2-4** shows the projected net increases in population, household, and employment levels over current levels.

Market Trends and Demand for Housing and Mixed Use

The Market Assessment prepared by BAE Urban Economics for the 185th Street Station Subarea identified potential transit-oriented development opportunities for the next twenty years. The assessment identified a potential demand for up to 700 residential units in the subarea through 2035, representing approximately 15 percent of new residential growth projected by the Puget Sound Regional Council for all of Shoreline. Additional demand for housing could occur during the next twenty years depending on changes in the market, opportunities provided elsewhere, property owners' willingness to redevelop or sell their properties for redevelopment, what happens at the Shoreline Center site, and other factors. Certainly, the demand for housing will continue beyond twenty years, and may grow higher depending on these factors.

The Urban Land Institute (ULI), a national professional organization for developers, real estate investors, and land use professionals researches and tracks trends in redevelopment across the nation. In a 2014 forecast of "development prospects," ULI ranked infill housing and urban mixed use redevelopment as the two highest prospects. The retiring Baby Boom generation and the emerging generation of home buyers and renters (also known as the Millennials or Generation Y) are creating a higher demand for urban infill housing and mixed use. Based on recent studies by ULI and others, both of these types of consumers are seeking active neighborhoods and in many cases are looking for more compact, connected urban lifestyles. While urban central cities are projected to do well in the coming years based on this demand, places that mix the best of suburban and compact,

mixed use qualities may be most desirable. In a recent national survey “America in 2013: Key Findings on Housing, Community, Transportation, and the Generations” ULI found that among all adults polled (including Baby Boomers and Millennials/Gen Y-ers), the quality of public schools, parks and recreation opportunities, walkability, and short distance to work or school all ranked as important or very important. Shoreline’s reputation as a livable community, with good schools, parks, trails, and other amenities, will continue to attract residents in the coming decades.

For more information on market analysis and trends, refer to the report prepared by BAE Urban Economics, available at: <http://www.cityofshoreline.com/Home/ShowDocument?id=15704> as well as the analysis prepared by Leland Consulting Group for the 145th Street Station Subarea, available at: <http://www.cityofshoreline.com/home/showdocument?id=17855>.

Anticipated Growth and Change under Alternative 1—No Action

The environmental analysis in the DEIS and FEIS assumes population growth for Alternative 1—No Action consistent with the City’s Transportation Master Plan dispersed growth scenario through 2030, adding .05 percent growth through the planning horizon year of 2035. By 2035, the estimated population for the subarea under Alternative 1—No Action would be 8,734 people, compared to the current population of 7,944, adding 790 people over the next twenty years.

As analyzed in Section 3.1 of this FEIS, ***“No Action” does not translate to “No Change” in the subarea.*** With the implementation of light rail, there would be greater demand for

land uses in proximity to the station, particularly for housing. The current zoning for much of the subarea is R-6 (with the exception of the North City district on the east side of the subarea, which has a mix of commercial and multifamily uses, and the Town Center area near Aurora Avenue on the west side of the subarea, which has a mix of commercial and employment uses). The R-6 zoning allows six units per acre. The average number of units per acre currently in the subarea is 2.7. As such, a substantial number of new housing units (more than double the current number) could be constructed over time in the subarea under the current zoning. Attached single family homes (such as duplexes, triplexes, and townhouses) and accessory dwelling units (attached or detached, maximum one per lot) are allowed in the R-6 zone if proposed redevelopment meets certain criteria (refer to Shoreline Municipal Code 20.40.510). The current maximum height for buildings in the R-6 zone is 35 feet. The R-6 designation comprises the vast majority of the subarea under current zoning.

Much of the housing stock in the subarea is reaching an age of 50 to 60 years or more, and some residents will likely make substantial renovations to their homes or demolish existing homes to build new ones in the coming years. Based on this trend and the anticipated demand for more housing that will occur with light rail, as homesites are redeveloped in the subarea in the future (under Alternative 1—No Action), the community could expect to see either larger and taller single family homes or combinations of various types of attached multiple-unit single family buildings and accessory dwelling units. Any of the residential buildings, including accessory dwelling units, could be constructed to a maximum height of 35 feet (approximately 3 to 3.5 stories). For comparative purposes, throughout north Seattle, there has been significant construction of this type over the last

twenty years, which has changed the character of single family neighborhoods. This type of redevelopment also tends to significantly raise property values.

It is also important to note that redevelopment under Alternative 1—No Action would not be consistent with the adopted vision for the light rail station area as a vibrant, equitable transit-oriented district. Single family redevelopment under the No Action Alternative would provide fewer opportunities for new housing and new redevelopment improvements to streets and public spaces than proposed under Alternative 4, 3 or 2. Increased housing choice and affordability will be needed to serve the growing demand in the community over the long term. Under Alternative 1, there would be substantially less types of housing to fit diverse income levels, as well as less mixed use/neighborhood commercial and related employment opportunities. Population, housing, and employment projections are depicted on the following pages.

2.3.2 Comparison of Land Uses under the Alternatives

Land use, zoning, urban form, and comprehensive plan comparisons of the alternatives are briefly summarized below. For more information, refer to Section 3.1 of this FEIS.

Land Use, Zoning, and Urban Form

Land use concepts under the action alternatives propose framing a mix of higher intensity land uses between Shoreline Town Center (along Aurora Avenue N) and North City along the key

connecting corridor of N-NE 185th Street/10th Avenue NE/NE 180th Street.

Under the action alternatives (Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, and Alternative 2—Some 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. These proposed changes would also broaden the types of housing choices available to fit a variety of income levels, including affordable housing. These changes are most substantial under Alternatives 4 and 3 than under Alternative 2. Alternative 1—No Action would not result in changes to the existing land uses in the subarea.

Alternative 4 would provide the most housing opportunities. Alternative 3 would provide the most employment/commercial opportunities (with a greater intensity of commercial/office uses assumed for the Shoreline Center site under Alternative 3 than Alternative 4).

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 or the range of housing choices and affordability levels desired for the subarea.

Table 2-2 Current (2014) Population, Households, and Employment Estimates for the Subarea

Estimated Totals for Subarea Based on Available GIS Data, 2014 Land use concepts under the action alternatives propose framing a mix of higher intensity land uses between Shoreline Town Center (along Aurora Avenue N) and North City along the key connecting corridor of N-NE 185 th Street/10 th Avenue NE/NE 180 th Street.	
Population	7,944
Households	3,310
Employees	1,448

Note: the current estimated population of the City of Shoreline is 54,790.

Table 2-3 Estimated Twenty-Year and Build-Out Population, Households, and Employment Projections

	Alternative 4— Preferred Alternative	Phase 1 Zoning Area of Alternative 4	Alternative 3— Previous Most Growth	Alternative 2— Some Growth	Alternative 1— No Action
2035 Population*	10,860 to 13,343	10,860 to 13,343	10,860 to 13,343	10,860 to 13,343	8,734
2035 Households*	4,450 to 5,500	4,450 to 5,500	4,450 to 5,500	4,450 to 5,500	3,639
2035 Employees*	1,950 to 2,370	1,950 to 2,370	1,950 to 2,370	1,950 to 2,370	1,736
Build-Out Population	56,529	41,719	37,315	17,510	**
Build-Out Households	23,554	17,383	15,548	7,296	**
Build-Out Employees	15,340	10,227	27,050	9,750	**
Build-Out Years	80 to 125 years by 2095 to 2140		60 to 100 years by 2075 to 2115	30 to 50 years by 2045 to 2065	**

* Projections assume an average annual growth rate of 1.5 percent to 2.5 percent for the action alternatives after rezoning is adopted.

** For Alternative 1—No Action, only projections through the twenty-year horizon of 2035 were analyzed. Build-Out was not analyzed because the timeframe for this is unknown and difficult to approximate.

Table 2-4 Projected Net Increases in Population, Housing, and Employment over Current (2014) Levels

	Alternative 4— Preferred Alternative	Phase 1 Zoning Area of Alternative 4	Alternative 3— Previous Most Growth	Alternative 2— Some Growth	Alternative 1— No Action
2035 Population	+2,916 to +5,399	+2,916 to +5,399	+2,916 to +5,399	+2,916 to +5,399	+790
2035 Households	+1,140 to +2,190	+1,140 to +2,190	+1,140 to +2,190	+1,140 to +2,190	+328
2035 Employees	+502 to +928	+502 to +928	+502 to +928	+502 to +928	+288
Build-Out Population	+48,585	+33,775	+29,371	+9,566	
Build-Out Households	+20,244	+14,073	+12,238	+3,986	
Build-Out Employees	+13,892	+8,779	+26,602	+8,302	

The increase in the number of households projected for the next twenty years would be 1,140 at 1.5 percent growth and 2,190 at 2.5 percent growth under all action alternatives. Although the market assessment projected a demand for 700 households through 2035, that was a conservative estimate assuming the subarea would absorb approximately 15 percent of the forecasted housing growth for all of Shoreline by 2035. If the subarea supported 25 percent of the city's forecasted housing growth, the projection would be 1,164 additional units. There is also the potential that housing growth could occur more rapidly than projected given Seattle population growth in recent years. Zoning that provides more capacity for growth than projected provides flexibility to respond to market characteristics and homeowner preferences in the subarea.

Under Alternative 4, more of the zoning category Mixed Use Residential at the 85-foot height level (MUR-85') is assumed than under the other action alternatives. This new zoning category would allow various types of mixed use and transit-oriented development with housing over active uses at the ground floor level. The MUR-85' zone also would be applied to portions of the subarea under Alternative 3—Previous Most Growth. Zoning categories of MUR-35' (35-foot building heights) and MUR-45' (45-foot building heights) also are applied under all three action alternatives. Refer to Chapter 3.1.2 for a description of the Mixed

Use Residential designations and Figures 3.1-4 through 3.1-8 for maps of alternative zoning scenarios applying these designations.

The MUR zoning encourages mixed use buildings that have active ground floors with retail and other uses to promote pedestrian traffic and sustain street level interest. Where the MUR 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. The uses in these buildings above the ground floor level would be predominantly residential, but in some locations also could be office/employment. MUR zoning optimizes Transit-Oriented Development (TOD) potential and is consistent with building code requirements and common construction approaches in TOD throughout the region and the US.

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.

To support creating a more vibrant, pedestrian-friendly neighborhood with local services and retail opportunities as the subarea transitions over time, the City is also evaluating how updates in regulations can support more conversion of single family homes to professional office uses and neighborhood supporting businesses such as small shops and cafes, hair salons and barber shops, art studios, and other uses.

Under Alternatives 4 and 3, the proposed MUR-85' zoning of the Shoreline Center site and other surrounding areas locates the most intensive zoning nearest to the station. Under Alternative 4, it is assumed that development agreements may be authorized over about 25 percent of the MUR-85'-zoned area, which could result in building heights greater than 85 feet (up to a maximum of 140 feet). Whereas under Alternative 3, it was previously assumed in the DEIS that development agreements that would

allow increases in building height to maximum of 140 feet would only be applied at the Shoreline Center site. Based on public input, it was determined that this potential should be allowed more broadly in the subarea, to all areas zoned MUR-85'.

A new zoning designation was previously introduced in the DEIS 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 previous MUP designation is replaced by the MUR-85' designation in this FEIS and the new proposed provisions in the Development Code for development agreements. (Refer to Section 3.1 of the FEIS for more detailed descriptions of the proposed MUR zoning categories.)

Through a development agreement under Alternative 4 or under Alternative 3 in the MUR-85' zone, the Shoreline Center site (and other sites under Alternative 4) could be developed with buildings to a height of 140 feet. However, the FEIS assumes that this would happen to a lesser extent on the Shoreline Center site under Alternative 4 than under Alternative 3. Alternative 4 assumes that the same amount of land area may have higher buildings, but that this could occur in any of the MUR-85' zoned areas, not just at the Shoreline Center site. 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.

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 five levels above, a common approach to TOD in station areas.

In addition to the zones described above, other portions of the subarea would be upzoned under the three action alternatives. In areas that are currently zoned R-6 (single family residential, six units per acre), MUR-35' (based on R-18 and R-24 zoning) and MUR-45' (based on R-48 zoning) would be applied to various portions of the subarea. This would occur most broadly under Alternative 4. TC (Town Center) zoning would remain near the Aurora Avenue N corridor, consistent with the Town Center Subarea Plan.

There are several places of the subarea where the existing zoning (primarily R-6, with some R-8, R-12, R-18 and NB—Neighborhood Business) would remain in place under the action alternatives. Under Alternative 2, more areas would remain in existing zoning than under Alternatives 4 or 3. The R-48, R-24, R-18, NB, CB, and TC zones are existing designations in the Development Code. In summary, the maximum building heights under existing and proposed zones in the subarea would be:

- MUR-85' 85 feet*
- MUR-45' 45 feet
- MUR-35' 35 feet
- CB 60 feet
- TC 35 feet to 70 feet

*With development agreements MUR-85'-zoned areas can apply for additional density and height up to 140 feet with provision of community amenities such as affordable housing, parks/open space, green building, structured

parking, and other elements. The FEIS assumes this would be approximately 25 percent of the MUR-85' zoning in the subarea.

In areas where existing zoning is retained:

- R-6 35 feet
- R-8 35 feet
- R-12 35 feet
- R-18 40 feet
- R-12 40 feet
- NB 50 feet
- CB 60 feet
- TC 35 feet to 70 feet

Refer to more description of existing zoning designations in the subarea later in this chapter of the FEIS.

2.3.3 Growth Forecasting and Planning Using Traffic Analysis Zones

Growth forecasts and targets for Shoreline and the subarea are discussed in Chapter 3, Section 3.2 Population, Housing, and Employment. While the subarea plan is focused on the study areas shown in **Figure 1-1** in Chapter 1 of the FEIS, 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. TAZ boundaries in

proximity to the subarea are depicted in **Figure 2-1** in this chapter of the FEIS.

It is anticipated that future growth under each alternative would likely occur first on larger sites in the subarea that could be 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.

In order to align the Planned Action with a twenty-year planning horizon (to the year 2035) common for comprehensive planning and subarea planning, twenty-year growth targets have been set for the Preferred Alternative, and a list of capital improvement projects have been identified to support that level of growth in the subarea. ***If growth trends indicate that the twenty-year growth target will be exceeded and/or capital improvement projects do not keep pace with expected growth, the City would revisit the subarea plan through its typical long range planning efforts (comprehensive planning). This process may require development of a supplemental environmental impact statement to support projected growth changes in the subarea or other modifications to ensure growth is managed in accordance with the GMA.***

2.3.4 Potential Future Alternatives

The City Council considered public comments on the DEIS as well as Planning Commission's recommendations and identified Alternative 4—Preferred Alternative for analysis in this FEIS. As

stated above, the City intends to monitor growth and change in the subarea in the coming years, and at some point 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. If the City decided to pursue a new alternative in the future, this may or may not require supplemental environmental analysis (Supplemental EIS) to support its adoption.

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.

Supplemental environmental analysis could be required in the future if proposed redevelopment projects are inconsistent with the thresholds and analysis in the DEIS and FEIS and Planned Action Ordinance. Supplemental analysis also may be required if the City decides to amend zoning in the future in a manner substantially different from that analyzed in the DEIS and FEIS documents.

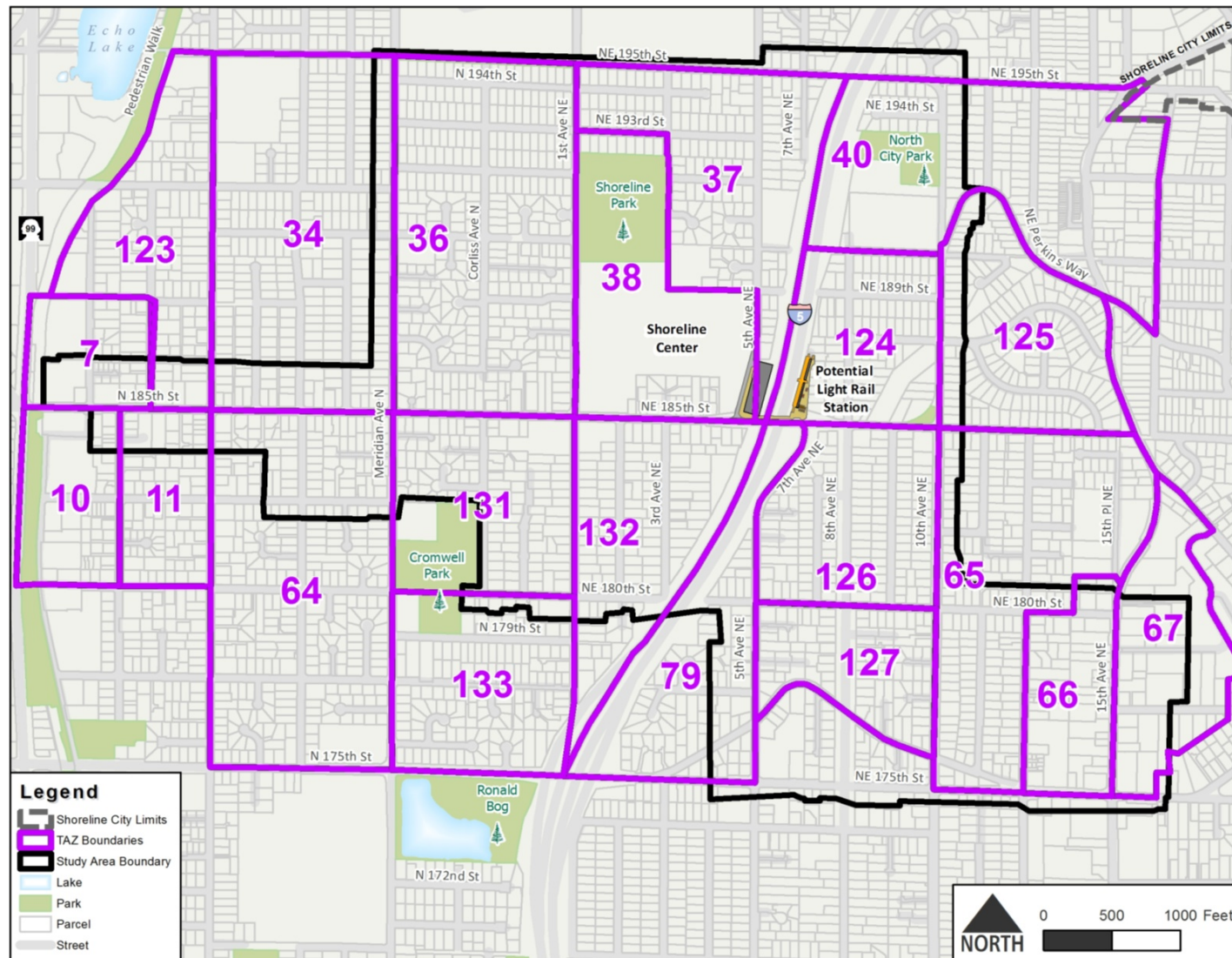


Figure 2.1 Traffic Analysis Zones in the Vicinity of the Subarea (Purple Boundary Lines) and Land Use Study Area (Black)

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 FEIS.

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 beyond, 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 FEIS:

- 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 (and also are analyzed in this FEIS). 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).

2.5 Planning and Policy 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.

2.5.1 Federal Partnership for Sustainable Communities

In 2009, the United States Department of Housing and Urban Development (HUD), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA) formed an interagency partnership to coordinate investments and align policies to support communities that want to give Americans more housing choices, make transportation systems more efficient and reliable, reinforce existing investments, and support vibrant and healthy neighborhoods that attract businesses. Each agency is working to incorporate the principles into its funding programs, policies, and future legislative proposals, and consequently, each agency now has adopted policies to support sustainable community development.

This Partnership for Sustainable Communities marked a fundamental shift in the way the federal government structures its transportation, housing, and environmental spending, policies, and programs. The three agencies agreed to collaborate to help communities become economically strong and environmentally sustainable. The Partnership recognizes that rebuilding national prosperity today and for the long run starts with individual communities where—now and generations from now—all Americans can find good jobs, good homes, and a good life.

Coordinating federal investments in infrastructure, facilities, and services meets multiple economic, environmental, and

Partnership for Sustainable Communities Guiding Livability Principles

- ❖ **Provide more transportation choices.** Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
- ❖ **Promote equitable, affordable housing.** Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
- ❖ **Enhance economic competitiveness.** Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
- ❖ **Support existing communities.** Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
- ❖ **Coordinate and leverage federal policies and investment.** Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy
- ❖ **Value communities and neighborhoods.** Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

community objectives with each dollar spent. For example, investing in public transit can lower household transportation costs, reduce greenhouse gas emissions and other air pollution, decrease traffic congestion, encourage healthy walking and bicycling, and spur development of new homes and amenities around transit stations. The Partnership is guided by six Livability Principles shown in the box on the previous page.

2.5.2 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 multimodal 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.

2.5.3 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.

2.5.4 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 FEIS. 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 reusable 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.

2.5.5 City of Shoreline Vision 2029

In fall 2008, the City of Shoreline began working with the community to create a vision for the next twenty 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, 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.

2.5.6 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

Existing Comprehensive Plan Land Use Designations

The City of Shoreline Comprehensive Plan applies land use designations to all parcels within the city limits. Existing land use designations shown on the Comprehensive Plan map include:

- 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*

** Boundaries were included as map features, but these were not formal land use designations defined by policy in the 2012 Comprehensive Plan*

With adoption of the 185th Street Station Subarea Plan, the Comprehensive Plan land use designations will be amended to reflect the proposed zoning of the plan. Specifically, the Light Rail Station Areas designations will be revised. This is described in more detail in Section 3.1 of this FEIS.

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 multifamily residential choices (R-18 or greater) that support light rail transit service, non-

residential uses, non-motorized transportation improvements, and traffic and parking mitigation.	LU31: Create a strategy in partnership with the adjoining neighborhoods for phasing redevelopment of current land uses to those suited for <i>Transit-Oriented Communities (TOCs)</i> , taking into account when the city's development needs and market demands are ready for change.
LU26: Evaluate property within a ¼ mile radius of a light rail station for multifamily 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.	LU32: Allow and encourage uses in station areas that will foster the creation of communities that are socially, environmentally, and economically sustainable.
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 multifamily, mixed-use, and non-residential uses.	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 multimodal transportation facilities.
LU28: Implement a robust community involvement process that develops tools and plans to create vibrant, livable, and sustainable light rail station areas.	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).
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.	LU35: Identify the market and potential for redevelopment of public properties located in station and study areas.
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.	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 multifamily 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.

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."

- 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.

Other Relevant Comprehensive Plan Goals and Policies

In addition to the specific Land Use policies pertaining to the light rail station area listed above, the following Comprehensive Plan goals and policies are relevant to the subarea.

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 multimodal approach.

grocery stores, farmers markets, and community food gardens in proximity to residential uses and transit facilities.

POLICIES

Goal LU V: Enhance the character, quality, and function of existing residential neighborhoods while accommodating anticipated growth.

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.

Goal LU VI: Encourage pedestrian-scale design in commercial and mixed use areas.

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.

Goal LU VII: Plan for commercial areas that serve the community, are attractive, and have long-term economic vitality.

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.

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

- 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 FEIS. The 185th Street Station Subarea Planned Action is directly relevant to these policies, and the policies would best be supported and reinforced through implementation of Alternative 4—Preferred Alternative. (Implementation of Alternative 2—Some Growth and Alternative 3—Previous Most Growth also would support these policies.)

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 the action Alternatives 2, 3, and 4, 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 FEIS.

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 multifamily 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.

HOUSING

GOALS

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

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.
- T2.** Place a higher priority on pedestrian, bicycle, and automobile safety than vehicle capacity improvements at intersections.
- 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.

- T4.** Enhance neighborhood safety and livability. Use engineering, enforcement, and educational tools to improve traffic safety on city roadways.
- T5.** Communicate with and involve residents and businesses in the development and implementation of transportation projects.
- 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.
- T7.** Implement the City’s Commute Trip Reduction Plan.
- 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.
- T9.** Develop a comprehensive, detailed street lighting and outdoor master lighting plan to guide ongoing public and private street lighting efforts.
- T10.** Use Low Impact Development techniques or other elements of complete or green streets, except when determined to be infeasible. Explore opportunities to expand the use of natural stormwater treatment in the right-of-way through partnerships with public and private property owners.

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- T11.** Site, design, and construct transportation projects and facilities to avoid or minimize negative environmental impacts to the extent feasible.
- 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.
- 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.
- T14.** Implement a strategy for regional coordination that includes the following activities:
- 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;
 - 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 multimodal 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 multimodal 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.

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| <p>ED2: Promote non-motorized connections between commercial businesses, services, and residential neighborhoods.</p> <p>ED3: Encourage and support home-based businesses in the city, provided that signage, parking, storage, and noise levels are compatible with neighborhoods.</p> <p>ED4: Use incentives and development flexibility to encourage quality development.</p> <p>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.</p> <p>ED6: Work to reinvigorate economically blighted areas in Shoreline by establishing Community Renewal Areas with associated renewal plans.</p> <p>ED7: Enhance existing neighborhood shopping and community nodes to support increased commercial activity, neighborhood identity, and walkability.</p> <p>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.</p> <p>ED9: Promote land use and urban design that allows for smart growth and dense nodes of transit-supportive</p> | <p>commercial activity to promote a self-sustaining local economy.</p> <p>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.</p> <p>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.</p> <p>ED12: Revitalize commercial business districts, and encourage high-density mixed-use in these areas.</p> <p>ED13: Support and retain small businesses, and create an environment where new businesses can flourish.</p> <p>ED14: Encourage a mix of businesses that complement each other, and provide variety to the community to create activity and economic momentum.</p> <p>ED15: Direct capital improvements to key areas to promote the city’s image, create a sense of place, and grow and attract businesses.</p> <p>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.</p> |
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- 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:
 - Town Center
 - Echo Lake
 - North City
 - Richmond Beach
 - Ridgecrest/Briarcrest
 - 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 run-off 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 (see page 2-65).

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 (see page 2-65).

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.

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.

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.

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.

2.5.7 Transportation Master Plan

The City of Shoreline Transportation Master Plan (TMP) was adopted in 2011, with amendments adopted in December 2012 and December 2013. Chapter 3 of the TMP, Sustainability and

Quality of Life, references goals and policies along with management and implementation strategies to guide planning, design, and development of streets and transportation facilities in the city. The TMP cites specific goals and policies of the Comprehensive Plan (listed above) and encourages best practices in street design such as integration of green infrastructure and low impact development. The TMP also encourages the provision of complete streets that meet everyone's needs with facilities for all modes of transportation. Specific goals and policies cited in the TMP related to quality of life include:

- Comprehensive Plan Goal FG 13: Encourage a variety of transportation options that provide better connectivity within Shoreline and throughout the region.
- Goal T I: Provide safe and friendly streets for Shoreline citizens.
- Goal T II: Work with transportation providers to develop a safe, efficient and effective multimodal transportation system to address overall mobility and accessibility. Maximize the people-carrying capacity of the surface transportation system.
- Policy T1: Make safety the first priority of citywide transportation planning and traffic management. Place a higher priority on pedestrian, bicycle and automobile safety over vehicle capacity improvements at intersections.
- Policy T2: Reduce the impact of the City's transportation system on the environment through the use of

technology, expanded transit use and nonmotorized transportation options.

- Policy T10: Transportation projects and facilities should be sited, designed and constructed to avoid or minimize negative environmental impacts to the extent feasible.

Implementation Strategies

- 10.1. Minimize curb cuts (driveways) on arterial streets by combining driveways through the development review process and in implementing capital projects.
- 10.2. Implement the Transportation Master Plan that integrates the City's Complete Streets program. Promote adequate capacity on the roadways and intersections to provide access to homes and businesses.
- 10.3. Coordinate transportation infrastructure design and placement to serve multiple public functions when possible, i.e. integrate stormwater management, parks development and transportation facility design.
- 10.4. Implement a coordinated signal system that is efficient and flexible depending on demand or time of day and responsive to all types of users, including transit riders, bicyclists and pedestrians.
- 10.5. Require evaluation of the transportation impacts resulting from significant land use developments. Each development that requires a Transportation Impact Analysis should have project specific scoping that

evaluates all transportation modes, including pedestrian, bicycle and transit. A more specific impact analysis that includes activities such as pedestrian activity near schools or high traffic volumes outside of standard peak period travel times is required to address the unique transportation needs of some land uses.

Additional discussion about the TMP is provided in Section 3.3 of this FEIS.

2.5.8 Parks, Recreation, and Open Space (PROS) Master Plan

The PROS Master Plan was adopted July 25, 2011 and includes specific goals and policies that support:

- The preservation, enhancement, maintenance and acquisition of facilities
- Diverse, affordable community-based recreational, cultural and arts programs
- Equitable distribution of resources
- Partnerships that maximize the public use of all community resources
- Community engagement in parks, recreation and cultural service activities and decisions

The PROS plan vision is stated as: *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.

Key goals and policies include the following.

GOAL 1 Preserve, enhance, maintain and acquire built and natural facilities to ensure quality opportunities exist.

Policy 1.1: Preserve, protect and enhance natural, cultural and historical resources, and encourage restoration, education and stewardship.

Policy 1.2: Provide a variety of indoor and outdoor gathering places for recreational and cultural activities.

Policy 1.3: Maintain current facilities and plan, develop and acquire assets as the need is identified.

Policy 1.4: Maintain environmentally sustainable facilities that reduce waste, protect ecosystems and address impacts of best practices.

Policy 1.5: Create efficiencies and reduce maintenance costs by using contracted services and volunteers where feasible.

Policy 1.6: Maintain safe, attractive facilities using efficient and environmentally sustainable practices.

Policy 1.7: Encourage a variety of transportation options to provide better connectivity to recreation and cultural facilities.

Policy 1.8: Improve accessibility and usability of existing facilities.

GOAL 2 Provide community-based recreational and cultural programs that are diverse and affordable.

Policy 2.1: Provide and enhance recreational and cultural programs to serve all ages, abilities, and interests.

Policy 2.2: Provide affordable programs and offer financial support for those who qualify.

Policy 2.3: Create programs to support and encourage an active and healthy lifestyle.

GOAL 3 Meet the parks, recreation and cultural service needs of the community by equitably distributing resources.

Policy 3.1: Determine the community's need by conducting need assessments.

Policy 3.2: Adjust program and facility offerings to align with demographic trends and need assessment findings.

Policy 3.3: Equitably distribute facilities and program offerings based on need.

GOAL 4 Establish and strengthen partnerships and other public agencies, non-governmental organizations, volunteers and City departments to maximize public use of all community resources.

Policy 4.1: Collaborate with and support partners to strengthen community-wide facilities and programs.

Policy 4.2: Seek partners in the planning, enhancement and maintenance of facilities and programs.

Policy 4.3: Develop mechanisms for public outreach, communication and coordination among partners.

GOAL 5 Engage the community in park, recreation and cultural services decisions and activities.

Policy 5.1: Encourage consistent and effective public involvement in the short and long-range park planning process.

Policy 5.2: Provide public relations and publicity efforts to inform citizens of community-wide opportunities.

Policy 5.3: Create volunteer opportunities to encourage citizen involvement and participation.

2.5.9 Surface Water Master Plan

Originally adopted in 2005 and updated in 2011, the City of Shoreline Surface Water Master Plan (SWMP) goals are:

- To serve as a management plan (i.e., business plan) to more efficiently manage the capital and operational (including maintenance and NPDES permit compliance) programs of the Surface Water Utility for the next five years, at which time the basin plans should be completed.

- To incorporate sustainability components into the recommended programs, projects, and regulations, as part of the commitment to create an environmentally sustainable community within the Shoreline Environmental Sustainability Strategy.
- To evaluate Utility rates and project surface water management fees for the next five years to ensure the continued financial viability of the Utility.

Additional information pertaining to the SWMP is provided Section 3.5 of this FEIS.

2.5.10 Shoreline Climate Action Plan

The Shoreline Climate Action Plan was adopted in September 2013, building on the City's commitment to environmental sustainability. Environmental sustainability has been a core value in Shoreline since the City's incorporation in 1995, and Shoreline has become a regional and national leader in sustainability and climate protection, adopting bold policies and implementing numerous ambitious projects in recent years. Climate Action Plan goals include:

1. Communicate to the community what the City has already done and quantify the benefits of those actions.
2. Establish specific GHG emissions reduction targets and make recommendations for additional City actions to help achieve them.
3. Inform the community about what residents and businesses can do to address climate change.

Ultimately, the Shoreline Climate Action Plan strives to provide the important steps that City officials and staff, as well as Shoreline residents and businesses, can take to reduce greenhouse gas emissions and protect our abundant northwest environment, as part of the global effort to address climate change.

2.5.11 Shoreline Environmental Sustainability Strategy

A precursor to the Climate Action Plan, the Environmental Sustainability Strategy, adopted in 2008, includes the following mission statement:

The City of Shoreline will exemplify and encourage sustainable practices in our operations and in our community by:

- Being stewards of our community's natural resources and environmental assets;
- Promoting development of a green infrastructure for the Shoreline community;
- Measurably reducing waste, energy and resource consumption, carbon emissions, and the use of toxics in City operations; and
- Providing tools and leadership to empower our community to work towards sustainable goals in their businesses and households.

The strategy conveys ten guiding principles:

1. Sustainability will be a key factor in policy development.
2. The City will lead by example and learn from others.

3. Environmental quality, economic vitality, human health, and social benefit are interrelated systems.
4. Community education, participation, and responsibility are key elements.
5. Commitment to continuous improvement—the City will apply adaptive management to its efforts and clearly communicate findings.
6. Manage expected growth in a sustainable way.
7. Address impacts of past practices.
8. Proactively manage and protect ecosystems.
9. Improve and expand waste reduction and resource conservation programs.
10. Energy solutions are key to reducing our carbon footprint.

- 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
- Collaboration—broad-based partnerships that benefit all participants

Place Making...

“turns a City from a place you can’t wait to get through into a place you never want to leave.” Fred Kent

2.5.12 Economic Development Strategic Plan

The Economic Development Strategic Plan guides economic development strategy for the period of 2012 through 2017. Through a collaborative process, the Economic Development Strategic Plan concluded that the goal of economic development in Shoreline is captured by the concept of Place Making. Through Place Making, projects can be accomplished that realize the following six guidelines for sustainable economic growth:

- Multiple areas—improvements and events throughout the City that attract investment
- Revenue—growing revenue sources that support City programs

The plan recognizes the light rail station areas as two imminent and crucial opportunities.

2.5.13 Town Center Subarea Plan

The Town Center Subarea Plan was adopted July 25, 2011. 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 multimodal 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.

2.5.14 North City Subarea Plan

The North City Subarea Plan was adopted in July 2001. 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.”

2.5.15 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 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.

Title 20—Development Code—Existing Provisions

The Development Code includes requirements, standards, and guidelines for zoning and development, including private and public facilities. 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.

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. Development Code sections include:

- 20.10 General Provisions
- 20.20 Definitions
- 20.30 Procedures and Administration
- 20.40 Zoning and Use Provisions
- 20.50 General Development Standards
- 20.60 Adequacy of Public Facilities
- 20.70 Engineering and Utilities Development Standards
- 20.80 Critical Areas
- 20.93 Aldercrest—Planned Area—not applicable to the subarea
- 20.100 Special Districts—not applicable to the subarea

Division II. Shoreline Master Plan (20.200, 20.210, 20.220, and 20.230 provisions) –not applicable to the subarea

Existing Zoning Designations in the Subarea

- Parks
- Utilities
- 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 (multifamily, townhouses, apartments)
- R-24, Residential, 24 dwelling units per acre (multifamily, townhouses, apartments)
- R-48, Residential, 48 dwelling units per acre (multifamily, 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)
- NB—Neighborhood Business
- Campus

Amendments to City of Shoreline development regulations are being prepared to support implementation of the subarea plan. The regulations specify requirements for the new zoning categories and include new provisions not currently covered in the existing Municipal and Development Codes. The new regulations will be adopted as part of the subarea plan and Planned Action, and integrated into City codes as needed to support implementation. These include provisions for building height, bulk, character/form, setbacks, transitions between land uses, surface coverages, parking ratios, and other requirements.

Development Code revisions include new and unique regulations to implement the City's vision for the subarea.

For information pertaining to the relationship of the FEIS alternatives to the Development Code, including Code revisions to support the proposed Planned Action, refer to Chapter 3, Section 3.1 Land Use Patterns, Plans and Policies.

Chapter 3

Affected Environment, Analysis of Potential Impacts, and Mitigation Measures FINAL 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 three action alternatives, including Alternative 4, the Preferred Alternative, is also addressed.

3.1.1 Affected Environment

The analysis of the affected area was completed based on field work in the subarea, as well as review of existing data and information, such as the City of Shoreline Comprehensive Plan and other 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 and their relationship to potential action under the subarea plan also have been reviewed.

Station Subarea Context

For development of the 185th Street Station Subarea Plan and environmental analysis purposes, the City of Shoreline Planning Commission determined study area boundaries with consideration of factors such as topography, 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 the subarea is defined by these combined study area boundaries—one that delineates the study area for land use and another that delineates the study area for mobility (multimodal transportation). These boundaries were adopted by City Council as Ordinance 671 on September 23, 2013. **Figure 3.1-1** illustrates two study areas that together comprise the subarea.

The subarea includes portions of the Echo Lake, Meridian Park, and North City neighborhoods and borders the Ridgecrest neighborhood of Shoreline. Bordering areas include the City of Lake Forest Park to the northeast, which is predominantly single family use (similar to Shoreline), and other incorporated areas of Shoreline to the north, west, and south.

N-NE 185th Street is the most prominent corridor in the subarea, extending from Aurora Avenue (SR 99) at the west boundary of the subarea to 10th Avenue NE at the east boundary of the subarea. The subarea extends approximately one-half mile to the north and south of the 185th corridor. Through a design workshop process, community input shaped the idea of N-NE 185th Street/10th Avenue NE/NE 180th Street as the central connecting

corridor in the subarea between the Town Center District and the North City District.

Traffic Analysis Zones Used for Planning and Analysis

For purposes of population, housing, and employment projections and transportation planning, traffic analysis zone (TAZ) boundaries in proximity to the subarea also have been referenced in this analysis. 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 and Section 3.3 Multimodal Transportation for additional information and a map of the TAZ boundaries.

Proposed Sound Transit Light Rail Station Facilities

Through a separate environmental process, Sound Transit identified the potential light rail station location. The preferred option for the station location is north of NE 185th Street on the east side of and immediately adjacent to the Interstate 5 (I-5) corridor. 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 NE 185th Street.

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 conceptual plan identified by Shoreline City Council.

A second light rail station in Shoreline is proposed, with the possible location identified by Sound Transit as just north of NE 145th Street, immediately adjacent to the east side of I-5. The primary connecting routes between the 185th and 145th light rail station subareas include the north-south corridors of 5th Avenue NE, 8th Avenue NE, 10th Avenue NE, and 15th Avenue NE.

Past and Present Land Use Patterns in the Subarea

Past and present land use patterns in the subarea are described below and on the following pages.

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, increasing 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 was transported 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. Ronald Station along the trolley line was located near present-day Park at Town Center.

During the early twentieth century, Shoreline attracted large developments drawn by its rural yet accessible location, including the Highlands and Seattle Golf Club (circa 1908). The Firland Tuberculosis Sanitarium (circa 1911), which is now Crista Ministries, also developed during that era. Commercial centers formed around Interurban stops at Ronald (175th Street and Aurora Avenue N) and Richmond Highlands (185th Street and Aurora Avenue N). Car travel facilitated settlement, which increased considerably by the mid-1920s. Although large tracts of land were 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. Others say the name recognized the highway as a route north, toward the Aurora Borealis. Regardless of how the highway got its 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 use of 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, 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 development. Many Shoreline families managed to live off land they had purchased in better times. During World War II, building materials were rationed and 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.

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 that 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 54,790 residents (2013 population), Shoreline is Washington's 15th largest city.

City of Shoreline Historic Preservation Program

The Shoreline community has an interesting historical background, as summarized above. 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 ensure 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, including 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 either Alternatives 2, 3, or 4, 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 if alterations or demolition are proposed, but such changes are allowed to inventoried properties.

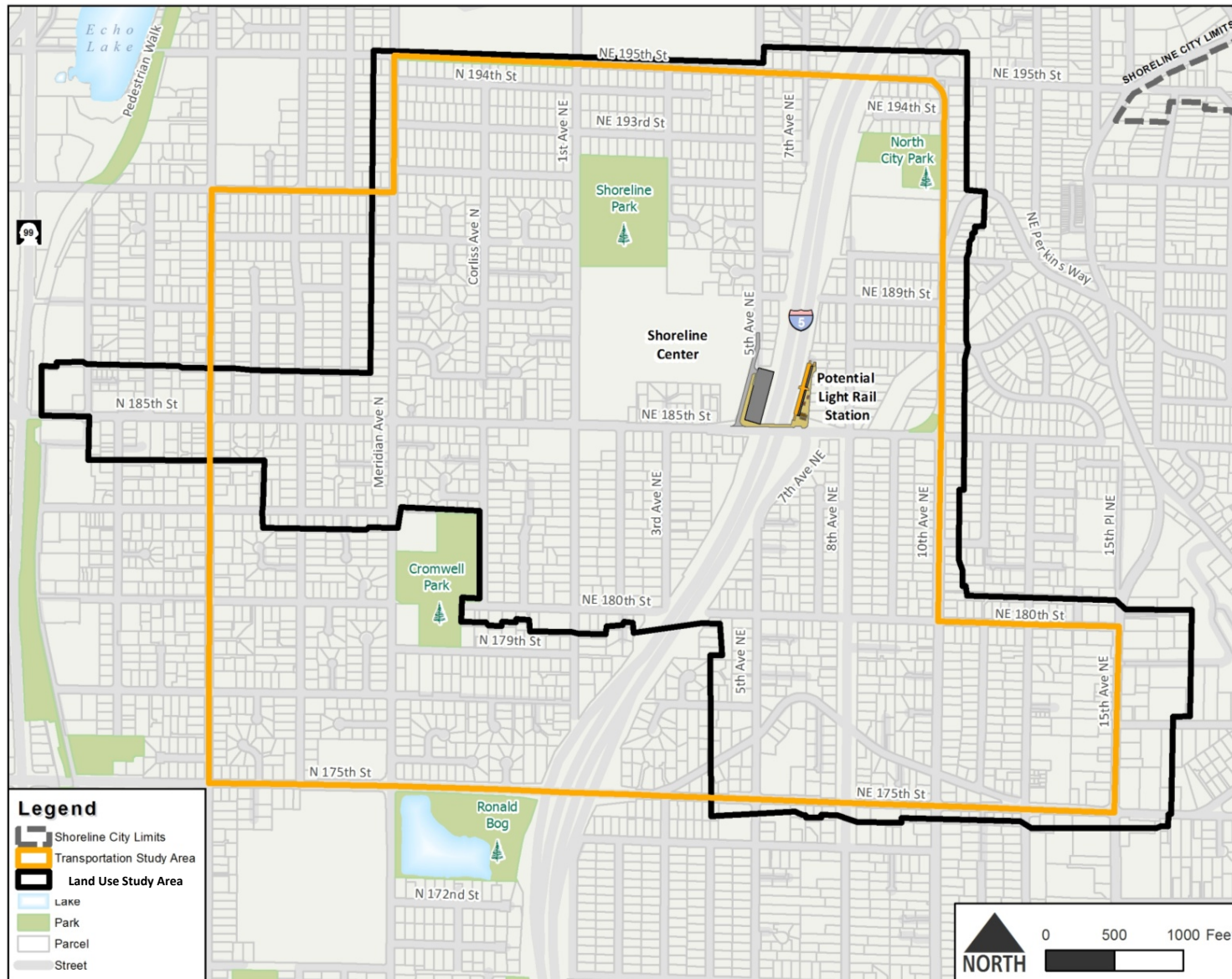
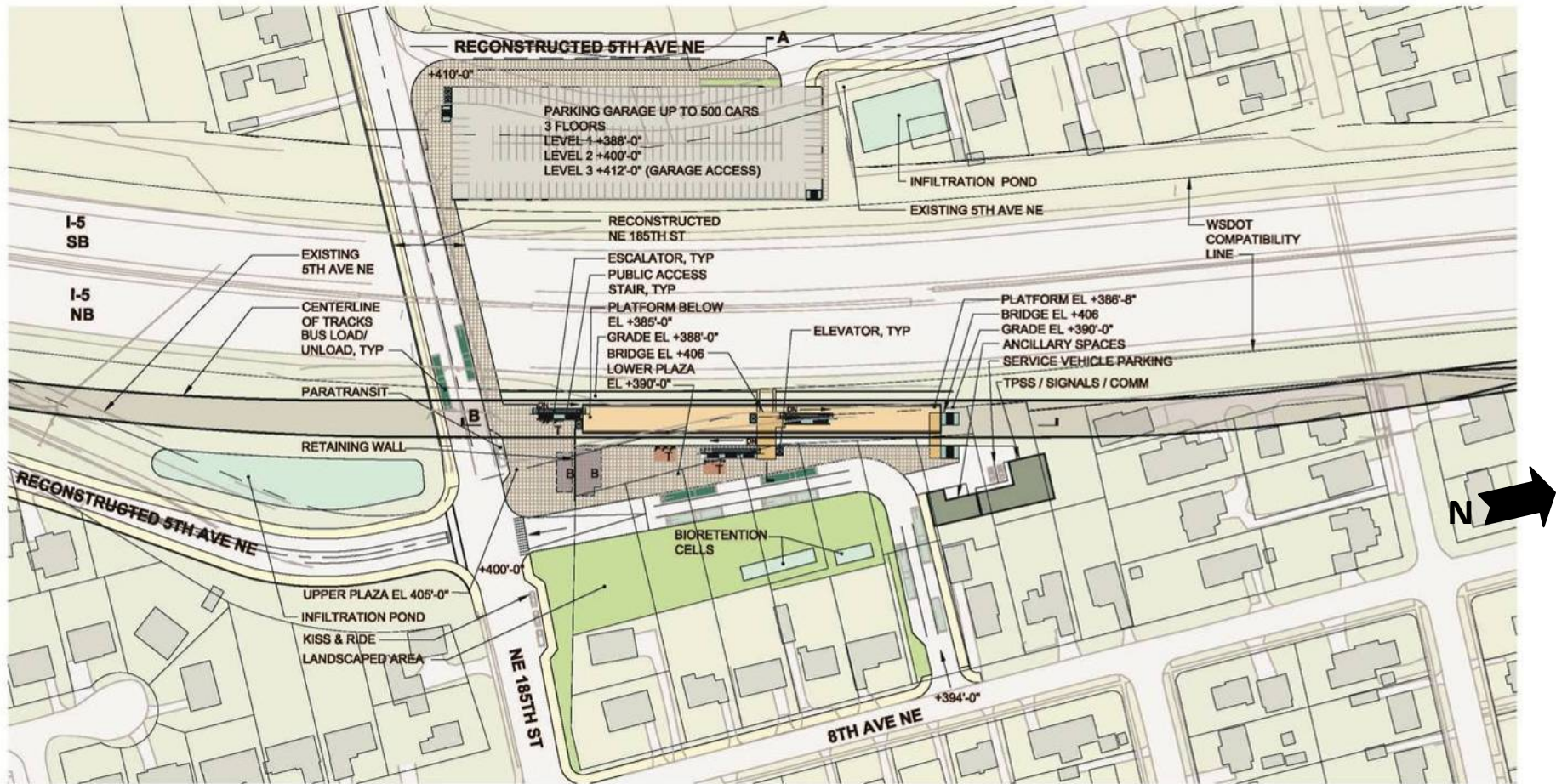


Figure 3.1-1 Land Use (Black) and Mobility (Gold) Study Area Boundaries, which Together Comprise the Subarea

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)

More information about Shoreline's Historic Preservation Program as well as community 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/>.

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 neighborhoods in the subarea 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. Surface water management standards also were less intensive than they are today and as such, there are frequently drainage issues in the subarea. Stormwater facilities are generally below the standard now required by the Department of Ecology, and there are very few low impact development facilities such as rain gardens.

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 subarea in recent years, budget constraints have limited the level of street and utility improvements completed to date. In the coming years, the City intends to leverage the regional investment made to implement light rail and prioritize improvements in the station subarea to serve proposed growth.

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 multifamily 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.

Current 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 subarea.

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 events, 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 proximity to the subarea follow.

Meridian Park Neighborhood—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 N.

Echo Lake Neighborhood—The Echo Lake Neighborhood extends from the Shoreline city limits and King 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 I-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.

[illegible]

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.

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 multifamily 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 multifamily housing options, along with schools, parks, and other community destinations, including the Shoreline Center.

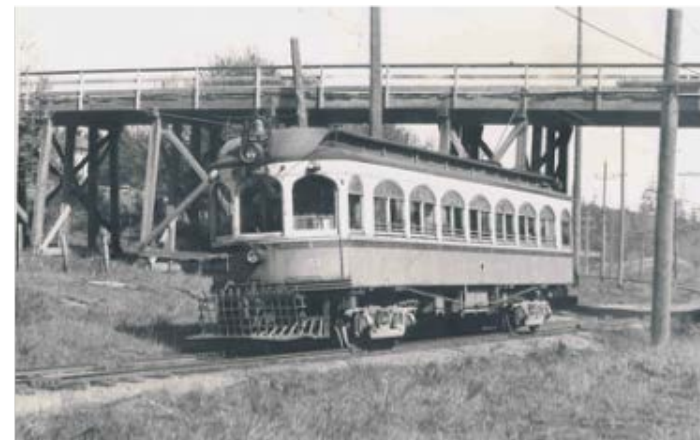
North City Neighborhood—The North City Neighborhood is located east of Interstate 5 and extends to NE 195th Street to the north, NE 160th Street to the south, and the City of Lake Forest Park to the east. 15th Avenue NE is the central spine of the neighborhood and the North City business district (discussed 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 forested, hilly topography to provide access to homes. An interesting story of this area, based on knowledge of long-time residents, relates to the dirt motorcycle paths that people rode on for recreation in the mid-1900s. This area came to be called "motorcycle hill." Later in 1954, the Firview Terrace subdivision was developed, and recreational motorcycling in the forested hillside area was no longer an option.

With commercial, mixed use, office, and multifamily 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 .

Historic Photos of Shoreline



The historic image above, circa 1910, shows the old Interurban Streetcar line looking northwest. 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)

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

Existing Conditions in the 185th Street Station Subarea

Cromwell Park



Looking East on 180th Street toward North City



Shoreline Center at the southeast corner



Aurora Avenue North green street improvements



North City Park



Shoreline Pool operated by the City of Shoreline

Looking North on 8th Avenue NE from NE 180th StreetPowerline corridor looking north from NE 185th Street

North City, 15th Avenue NE

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 Neighborhood—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. As such, this neighborhood borders the subarea. While no zoning changes are proposed under the 185th Street Station Subarea Plan to the Ridgecrest neighborhood, the subarea planning process for the 145th Street Station is currently underway and potential zoning alternatives in the neighborhood are being evaluated in a separate environmental analysis.

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 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 neighborhoods 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, Key Sites, and Redevelopment Opportunities

Town Center District

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 community 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

...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 (summarized in Chapter 2 of this FEIS), 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.

North City District

The North City Subarea is a business district that includes primarily commercial uses as well as some mixed use, multifamily 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.

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



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



Vision illustrations of North City from the North City Subarea Plan

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 North City Subarea Plan called for recognizing the heart of North City as being located along 15th Avenue NE, between NE 175th and 177th Streets with 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.

With recent development and parking concerns, there have been lessons learned about potential conflicts that can arise between large multifamily development and adjacent single family homes. This has helped to inform the station subarea planning process.

Shoreline Center

The Shoreline 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 N 185th 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 Shoreline 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.



Luncheon event at the Shoreline Conference Center

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. However, it should be noted that any decisions about redevelopment of the site are entirely up to the School District.

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. The 185th Street Station Subarea Plan recognizes its use as an important existing and future educational site. Any decisions about future use of this site would be entirely up to the School District.

Seattle City Light Transmission Line Rights-of-Way

Seattle City Light (SCL) 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, contingent upon approval by SCL.

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 the Preferred Alternative, Alternative 4 would support this redevelopment (as would the zoning under Alternative 3—Previous Most Growth and Alternative 2—Some Growth). These properties could either be redeveloped directly by the owners or sold to interested developers in the future at the owners' discretion.

Home-based Businesses and Interest in Converting from Single Family Use

There are a few small neighborhood businesses in the subarea, and an interest in more flexibility to convert single family homes to office and small business use. As with other urbanizing areas,

there will be a growing need for more neighborhood services and businesses in the subarea, under any of the action alternatives studied in the FEIS. There is also an increasing trend in teleworking, with more people interested in having home-based businesses and offices. This growing need can be addressed through adjustments to zoning regulations to provide more flexibility to operate a wider variety of business and office uses from homes, and to convert single family homes to business and office uses. Refer to discussion later in this section about proposed zoning and development provisions that would accomplish this under the action alternatives.

Redevelopment Potential Based on Market Analysis and Recent Trends

Redevelopment opportunities in the subarea 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. Redevelopment opportunities 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 twenty years. Approximately 700 units would represent 15 percent of the new residential growth that PSRC projects for all of Shoreline through 2035, but there may be additional demand beyond this, and certainly there would be additional longer-term demand in the subarea. 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.

While the market assessment prepared by BAE Urban Economics for the 185th Street Station Subarea identified a potential demand for up to 700 residential units through 2035, additional demand for housing could occur during the next twenty years depending on changes in the market, opportunities provided elsewhere, property owners' willingness to redevelop or sell their properties for redevelopment, what happens at the Shoreline Center site, and other factors. Certainly, the demand for housing would continue beyond twenty years, and may grow higher depending on these factors.

- Due to the complexities of assembling properties to create large enough sites for redevelopment into housing and mixed use redevelopment, the process would be incremental and gradual. For this reason, some of the larger sites, such as church properties, the Shoreline Center site, etc. could be better suited to moving ahead in the redevelopment process if their owners are interested and willing to redevelop or sell to developers.
- A variety of residential types could be supported around the station subarea, including a mix of for-sale condominiums, for rent apartments, townhouse and row house units, various other types of multifamily 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 in the 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.

The Urban Land Institute (ULI), a national professional organization for developers, real estate investors and land use professionals researches and tracks trends in redevelopment across the nation. In a 2014 forecast of "development prospects," ULI ranked infill housing and urban mixed use redevelopment as the two highest prospects. Retiring baby boom generation and the emerging generation of home buyers and renters (also known as the Millennials or Generation Y) are creating a higher demand for urban infill housing and mixed use.

Based on recent studies by ULI and others, both of these types of consumers are seeking active neighborhoods and in many cases are looking for more compact, connected urban lifestyles. While urban central cities are projected to do well in the coming years based on this demand, places that mix the best of suburban and compact, mixed use qualities may be most desirable. In a recent national survey "America in 2013: Key Findings on Housing, Community, Transportation, and the Generations" ULI found that among all adults polled (including Baby Boomers and Millennials/Gen Y-ers), the quality of public schools, parks and

recreation opportunities, walkability, and short distance to work or school all ranked as important or very important.

Shoreline's reputation as a livable community, with good schools, parks, trails, and other amenities, will continue to attract residents in the coming decades. However, the potential timing and pace of redevelopment is difficult to predict given the influences of market forces, property owner interests, the need to assemble large enough parcels for redevelopment, and many other factors described earlier.

For more information on market analysis and trends refer to the report prepared by BAE Urban Economics, available at: <http://www.cityofshoreline.com/Home/ShowDocument?id=15704> as well as the analysis prepared by Leland Consulting Group for the 145th Street Station Subarea, available at: <http://www.cityofshoreline.com/home/showdocument?id=17855>.

A final point to note regarding market analysis: The Lynnwood Link Extension Station Area Transit-Oriented Development Potential report completed by Sound Transit in 2013 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.

Relationship of the City of Shoreline Comprehensive Plan and Code Provisions to the Subarea Plan

The 185th Street Station Subarea Plan would become an adopted element of the City of Shoreline Comprehensive Plan. Additionally, the City of Shoreline Comprehensive Plan contains extensive goals and policies that are relevant to the subarea and planned action, including specific framework policies for the light rail station areas and Land Use Element policies that guide station subarea planning. Relevant goals and policies of the Comprehensive Plan, as well as the plan's land use designations, and other applicable provisions are summarized in Chapter 2 of this FEIS. Comprehensive Plan amendments would be required to support adoption of the subarea plan, as described later in this section under 3.1.2 Analysis of Potential Impacts.

The City of Shoreline's Development Code, a section of the Shoreline Municipal Code includes requirements, standards, and guidelines for zoning and development, including private and public facilities. Specific revisions and updates to the Development Code would be required with adoption of the subarea plan. 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 create new zoning designations and provisions to address building setbacks, architectural step-backs of buildings, building heights, design standards, allowable uses, housing types, transition standards between land uses, parking

requirements, and affordable housing provisions. These are described in more detail in Section 3.1.3 Mitigation Measures.

3.1.2 Analysis of Potential Impacts

This section of the FEIS analyzed potential impacts related to land use of the four alternatives: Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action. Proposed zoning under the three action alternatives is shown in **Figures 3.1-4, 3.1-6, and 3.1-7** later in this section. Alternative 1—No Action retains existing zoning and is shown in **Figure 3.1-8**.

Given Shoreline City Council’s designation of Alternative 4 as the Preferred Alternative, analysis in this section of the FEIS focuses on the potential impacts of adoption and implementation of Alternative 4 (or potential phasing thereof), while also briefly summarizing the potential impacts of other alternatives for comparative purposes. Refer to the DEIS for additional discussion and information regarding Alternatives 3, 2, or 1.

For more information about how Alternative 4 was developed and selected for environmental analysis, refer to Chapter 2 of this FEIS. For more information about forecasted growth and growth targets for population, households, and employment, refer to Chapter 2 and Section 3.2 of this FEIS.

Necessary Plan and Code Amendments

Adoption of any of the action alternatives, including Alternative 4—Preferred Alternative, would require updates to the Shoreline Comprehensive Plan and Shoreline Municipal Code (including the Development Code and zoning provisions). This is an expected

outcome of the subarea planning process, and the City is prepared to make these amendments.

Comprehensive Plan amendments effective upon adoption of the subarea plan would revise the Land Use Map to correspond with zoning designations. Goals and policies of the Land Use Element, including those pertaining specifically to Mixed Use and Commercial Land Use and Light Rail Station Subareas would be revised to more closely align with the subarea plan and its proposed policies as part of the 2015 docket cycle. Because Comprehensive Plan policies listed in Chapter 2 are applicable to the subarea, the subarea plan includes a nominal number of proposed policies, which would provide direction regarding implementation or further study.

Shoreline Development Code provisions would need to be amended specifically related to zoning designations and other regulations. Proposed zoning is described later in this section. All three action alternatives would require amendments to the zoning and Development Code provisions. City zoning maps would need to be amended, and zoning descriptions and requirements related to the new zoning categories would need to be integrated into the City’s Code.

The City intends to amend its existing zoning provisions and development standards to better support the adopted subarea plan. This would include providing more flexibility for home-based businesses (with a longer list of types of business and office use allowed) as well as for converting single family homes to exclusive business or office use.

The City is considering potential amendments to the Development Code to allow for development agreements within

the MUR-85' zone. With a development agreement, bonus density/height could be granted by the City with the provision of specific amenities in the project (such as parks and open space preservation, low impact development, affordable housing, and other provisions). Other development standard amendments address requirements such as height, setbacks, step backs in buildings, architectural treatments, and a variety of other provisions applicable to the MUR-85', MUR-45', and MUR-35' zoning.

Recommended Development Code amendments are described under 3.1.3 Mitigation Measures, and will constitute Exhibit C of the Planned Action Ordinance, which is the mechanism by which they will be adopted, potentially at the February 23 Council meeting.

Alternative 1—No Action would not amend existing zoning or development standards.

Proposed Zoning Categories and Descriptions

Three new zoning categories are being introduced for the subarea. These would be applicable under any new zoning adopted for the subarea.

- MUR-85': Mixed use residential with 85-foot building height
- MUR-45': Mixed use residential with 45-foot maximum building height; based on R-48 zoning
- MUR-35': Mixed use residential with 35-foot maximum building height; based on R-18 zoning

These new zoning designations were developed to support neighborhood-serving businesses and additional housing styles. They represent a change from the current system of defining zoning by density maximums to using height limits instead. The City is updating Code provisions to add these zones and define allowed uses; dimensional, design, and transition standards; mandatory requirements; and incentives for desired amenities. Existing single-family homes are protected under all new zoning designations. Refer to the figures at the end of this section for illustrations of potential housing styles that could be built within these zoning categories.

MUR-85'

Mixed-Use Residential—85-foot height: This zone would allow building heights of 85 feet (generally 7 stories tall). Building types would typically be mixed use with residential and/or office uses above commercial or other active use at the ground floor level. This designation could be applied to areas within roughly a ¼ mile of the station, and allow the highest intensity uses. Generally, 7 stories is as tall a building as can be built using concrete and wood; above that steel must be used, which substantially raises construction costs. Extra height was included to allow for mechanical equipment, or potentially amenities like a gazebo on a green roof.

The Planning Commission discussed, and included in draft regulations, provisions for a developer agreement that could award additional height/density for projects that provide a mix of required and optional amenities. See additional discussion later in the section and draft development regulations for more information.

It is anticipated that it could take many years to implement redevelopment at the density allowed in the MUR-85' zoning. Redevelopment of this type (supporting building heights of seven stories or more with development agreements) would require aggregation of a large number of parcels. It is not currently known how many single family property owners are interested in aggregating their lots for redevelopment. Also, given current market forces, it may be some time before this building type is developed in the subarea.

MUR-45'

Mixed-Use Residential—45-foot height limit: Similar to the existing zoning category R-48 that allows 48 dwelling units per acre, this zone would allow multi-family building types. The height limit for MUR-45' would be 45 feet (differing from the height limit of R-48, which currently varies from 40 feet if adjacent to single family zones, 50 feet if adjacent to multi-family zones, and 60 feet with a Conditional Use Permit). The new MUR-45' zone would be limited to 45 feet regardless of adjacent zoning, which equates to a 4-story building. The MUR-45' zone would allow housing styles such as mixed use buildings with three levels of housing over an active ground floor/commercial level. Buildings such as row houses, townhomes, live/work lofts, professional offices, apartments, etc. also could be developed in MUR-45', and single family homes could be converted to commercial and professional office uses like in MUR-35'.

MUR-35'

Mixed-Use Residential—35-foot height limit: Similar to the existing zoning category R-18 that allows 18 dwelling units per

acre, this zone would allow multi-family and single family attached housing styles such as row houses and townhomes. The height limit for this zone is 35 feet, which is the same as single-family R-6 zones, and equates to a 3-story building. MUR-35' also would allow commercial and other active uses along streets identified as arterials. These types of buildings might include live/work lofts, professional offices, and three-story mixed use buildings (two levels of housing over one level of commercial). This also would allow conversion of existing homes to restaurants, yoga studios, optometrist offices, and other uses.

Change of MUP Zone in DEIS to MUR-85' in FEIS and Developer Agreements

The Master Use Permit (MUP) category introduced in the DEIS has now been replaced with the MUR-85' category, with the understanding that Development Agreements can be implemented anywhere within the MUR-85' zoned areas.

MUP was to be a new zoning designation that only applied to the previous Alternative 3 in the DEIS. This designation was proposed to 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 new MUR-85' category now provides this flexibility.

The built form assumed for the MUP zoning designation would allow up to a 140-foot maximum height limit and was designated for use on the Shoreline Center site only. With development of Alternative 4—Preferred Alternative, it was determined that the bonus for density and height could apply to any property zoned MUR-85', not just the School District sites, but anywhere with the

zoning designation of MUR-85' if the project provides certain amenities. Required provisions would include affordable housing, park space, green building, and structured parking. Optional amenities could include a number of other community amenities. In this negotiated agreement, additional height/density could be awarded, allowing heights to exceed 85 feet, but not more than 140 feet. For purposes of the analysis in this FEIS, it was assumed that 25 percent of the properties zoned MUR-85' would be developed to the 140-foot height at build-out, although this assumption is likely high given current market forces and property configurations in the subarea.

Potential Phase 1 Zoning Area of the Preferred Alternative

If Council were to adopt Alternative 4—Preferred Alternative entirely or in phases, it would serve as a long term master plan for the subarea, and provide the most capacity to achieve the desired vision for the station subarea. Comprehensive Plan Land Use policy LU31 provides direction to examine phasing redevelopment. In a joint meeting of the Shoreline Planning Commission and City Council on September 29, 2014, they discussed the benefits of having a more predictable pattern for growth to guide planning and implementation over the next few decades, and weighed them against potential disadvantages to phased zoning.

The City Council decided to study the potential of phasing zoning over time, and on October 2, 2014, the Planning Commission defined boundaries of a potential “Phase 1” zoning area. This approach would require that redevelopment under the new

proposed zoning categories within the next twenty years would be located within the proposed Phase 1 boundary.

The Phase 1 zoning area identified by the City is shown in **Figure 3.1-5** later in this section. This proposed Phase 1 zoning area would be in place for nearly twenty years (according to the draft code language being proposed- ten years after light rail is operational in 2023). The City Council could then revisit the proposed zoning of the subarea plan and “unlock” the remaining area of zoning at that time.

The proposed Phase 1 zoning boundary focuses the potential area of change more closely around the future light rail station and along the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor than the full extent of zoning proposed under Alternative 4.

Over the next twenty years and beyond, it will be important that the station subarea redevelop as a cohesive, connected community that is supportive of transit, but also that provides residents and potential developers with some predictability about when market forces are likely to support redevelopment of different areas. The Phase 1 zoning area would help to provide this. Rezoning in a phased manner also would allow the opportunity to monitor the development market and redevelopment results and determine where regulations and incentives are creating the kind the community envisioned through the subarea planning process, prior to allowing redevelopment of a larger area.

The proposed Phase 1 zoning area attempts to balance to the provision of an adequate level of housing choice and enabling flexibility in future redevelopment with concerns about rezoning too broadly in the subarea in initial years, which could result in unintended effects such as spotty development patterns, delayed maintenance, and over-valuing of property. Implementing the Phase 1 zoning area would help to focus initial development closer to the station and define an area for concentrating improvements within the next twenty years to support initial growth. This could also potentially be accomplished by targeting incentives to smaller geographic areas along the 185th Street corridor.

Decision-makers are interested in hearing from residents regarding their preference on whether or not to phase adoption of zoning.

Retention of Existing Zoning Designations

The action alternatives would retain varying portions of the subarea in existing zoning designations. Existing zoning categories in the subarea were listed in Chapter 2. For more information about these zoning designations, refer to the DEIS and the Shoreline Municipal Code:

<http://www.codepublishing.com/wa/shoreline/>

Consistency with Plans and Policies

The Washington State GMA requires participating jurisdictions to conduct capital facilities planning for six and twenty year planning horizons. This FEIS and the 185th Street Station Subarea Plan summarize capital facilities improvements that would be needed to support implementation of rezoning (redevelopment) in the station subarea over the next twenty years. The subarea plan and

planned action will set a growth target that provides a framework for anticipated population, household, and employment growth between 1.5 percent and 2.5 percent annually. By identifying an area for initial focus, capital improvements can be better defined to serve that area.

If growth were to exceed the overall average of 1.5 percent to 2.5 percent and occur more quickly, achieving the twenty year growth target more quickly, the City would update capital facilities improvements planning to support additional growth beyond the twenty year target. The City updates its capital facilities plans on a regular basis anyway, and will continue to closely monitor improvement needs in the subarea as growth and change occur over the next twenty years to ensure that sufficient infrastructure (transportation, utilities, etc.) is in place to support redevelopment as it occurs.

Alternative 4—Preferred Alternative best supports the City's and region's adopted plans and policies for more intensive and vibrant urban development around high-capacity transit stations. Redevelopment implemented under Alternative 4 would support many of the City's adopted policies under various elements of the Comprehensive Plan, as well as adopted policies and provisions of the Town Center and North City Subarea Plans. The Preferred Alternative also would support a variety of local, regional, state and federal policies related to smart growth, livability, and climate action. Refer to Chapter 2 for a list of policies at the local, regional, state, and federal levels that are relevant to and supported by the subarea plan.

Alternative 3—Previous Most Growth and Alternative 2—Some Growth also are consistent with adopted plans and

policies, but to a lesser extent than Alternative 4. Alternative 4 would result in the highest level of housing choices including affordable housing and the most opportunities for creating an equitable transit-oriented community, consistent with adopted plans and policies. While Alternative 3—Previous Most Growth proposes more employment than Alternative 4, it would result in fewer housing opportunities.

Alternative 1—No Action is not consistent with or supportive of the City's adopted Comprehensive Plan or policies of other plans adopted by the City. Alternative 1 also it is not consistent with plans and policies adopted at the regional, state, and federal levels, it is not a viable option for meeting the purpose and need of the planned action.

Land Use Patterns and Compatibility between Land Uses

Under all alternatives, it is anticipated that the subarea would experience growth and change. Alternative 4—Preferred Alternative would result in the most change at full build-out of all the alternatives. That said, it is anticipated that the pace of change during the first twenty years after adoption would generally be the same with any of the action alternatives. It is estimated that the pace of growth and change would average around 1.5 percent to 2.5 percent annually.

The differences in the level of change expected among the alternatives, as well as implications on compatibility between land uses, are described below.

Alternative 4—Preferred Alternative would create change more broadly than under Alternatives 3 or 2. Change to the higher density of MUR-85' is proposed north of the Shoreline Center site and MUR-45' west and northwest of Shoreline Center in Alternative 4 but not in Alternative 3 or 2. This change in land use pattern also may be more prominent in the subarea given that the geographic area north and northwest of the Shoreline center is higher in elevation than other areas.

The pattern of proposed zoning would result in appropriate transitions between land uses. For example, MUR-45' is typically located between MUR-85' and MUR-35' zoning. MUR-35' zoning is typically located between MUR-45' and single family zoning such as R-6. Even with these provisions, as change occurs throughout the subarea, there could be incompatibilities between new redevelopment and existing homes. Even though the underlying zoning would allow more density, single family use may continue in the MUR-35', MUR-45' and MUR-85' zoned areas. The City's development standards provide setbacks, landscaping requirements, and other provisions to provide buffers between land uses that would help to address these issues.

Alternative 4 provides the most capacity for growth and change, and as such offers the most flexibility to respond to market forces and property owners' willingness to redevelop or sell. This may help to create more transit-oriented development sooner than under alternatives that propose rezoning over less land area.

The Phase 1 zoning area would focus the amount of change in the next twenty years within the proposed boundary. Zoning

transitions would not necessarily occur with the initial adoption of the Phase 1 zoning area; although these eventually would be activated with adoption of all of the zoning of Alternative 4—Preferred Alternative. This could result in some MUR-85' and MUR-45' zoned land being redeveloped directly adjacent to land remaining in R-6 zoning over the next twenty years. As mentioned above, this condition would be expected anyway as the subarea builds out. Setback and landscaping requirements in the City's development standards would help to address transitions between these uses.

Because the Phase 1 zoning area would activate less land area with new zoning in the next twenty years, there would be less capacity for growth and change, which may limit redevelopment opportunities based on market forces and property owners' interests.

Alternative 3—Previous Most Growth proposes less extent of change than Alternative 4, but more than Alternative 2. However, more office and commercial use would be expected under Alternative 3 than under Alternative 4 or 2 based on the proposed zoning. Alternative 3 includes the same transitions in zoning as described above under Alternative 4 and it would require the same development standards. The same incompatibilities would be expected as described under Alternative 4 as the subarea redevelops. Alternative 3 would have less capacity and flexibility to respond to market conditions and property owners' interests than Alternative 4 since less land area would be rezoned.

Alternative 2—Some Growth would result in the least amount of change at build-out. The same incompatibilities could occur as

redevelopment builds-out, but there would be less potential for this to occur since the overall level of change would be less. Alternative 2 would provide the least amount of capacity and flexibility for redevelopment opportunity given that it proposes rezoning of the least amount of land area.

Alternative 1—No Action retains existing zoning. However, ***“No Action” does not translate to “No Change” in the subarea.*** With the implementation of light rail, there would be greater demand for land uses in proximity to the station, particularly for housing. The current zoning for much of the subarea is R-6 (with the exception of the North City district on the east side of the subarea, which has a mix of commercial and multi-family uses and the Town Center area near Aurora Avenue on the west side of the subarea, which has a mix of commercial and employment uses). The R-6 zoning allows six units per acre. The average number of units per acre currently built in the subarea is 2.7. As such a substantial number of new housing units (more than double the current number) could be constructed over time in the subarea under the current zoning. Attached single family homes (such as duplexes, triplexes, and townhouses) and accessory dwelling units (attached or detached, maximum one per lot) are allowed in the R-6 zone if proposed redevelopment meets certain criteria (refer to Shoreline Municipal Code 20.40.510). The current maximum height for buildings in the R-6 zone is 35 feet.

Much of the housing stock in the subarea is reaching an age of 50 to 60 years or more, and some residents have made substantial renovations to their homes or have demolished existing homes to build new ones. This trend likely would continue under Alternative 1. With the anticipated demand for more housing that

will occur with light rail, as homesites are redeveloped in the subarea in the future (under Alternative 1—No Action), the community could expect to see either larger and taller single family homes or combinations of various types of attached multiple-unit single family buildings and accessory dwelling units.

Most homes in the subarea are currently one story or two stories in height (approximately 15 to 25 feet high). New residential buildings, including accessory dwelling units, could be constructed to a maximum height of 35 feet (approximately 3 to 3.5 stories). For comparative purposes, throughout north Seattle, there has been significant construction of this type over the last twenty years, which has changed the character of single family neighborhoods.

It is also important to note that redevelopment under Alternative 1—Not Action would not be consistent with the adopted vision for the light rail station area as a vibrant, equitable transit-oriented district. Single family redevelopment under the No Action Alternative would provide fewer opportunities for new affordable housing than proposed under Alternative 4, 3 or 2, as well as a significantly lower overall quantity of various types of housing to fit diverse income levels, and substantially less mixed use/neighborhood commercial at street level. Increased housing choice and affordability will be needed to serve the growing demand in the subarea over the long term.

Without zoning changes to require higher densities, single family home development would continue to be the focus in the subarea. Transit-oriented redevelopment opportunities, with a variety of housing choices and mixed use development, would

not occur. While there could be some new development in the North City and Town Center subareas, these are located outside of the typical half-mile walking distance of the light rail station.

Opportunities envisioned for the redevelopment of the Shoreline Center and other sites (such as church parcels) would not be realized under this alternative since the existing R-6 zoning would remain in place. Investments in infrastructure and street improvements in the subarea would be very limited compared to the action alternatives.

Potential Built Form and Neighborhood Character

Each of the action alternatives proposes a mix of zoning under the MUR-85', MUR-45', and MUR-35' categories, along with retaining other existing zoning categories in the subarea. Each alternative has been modeled to show the expected built form (housing and development) that could result from implementation. Illustrations later in this section present simulated 3-D Sketch Up models for each alternative. These models conceptually illustrate the potential building form that could occur with full build-out of each alternative using the SketchUp model technique. The colors shown in the model graphics represent the MUR zoning designations described previously. Photographic examples of the built form/housing types that could be constructed under the new MUR zoning categories.

Renderings also have been developed show possible redevelopment concepts for various locations in the subarea and are presented later in this section, along with layout concepts of

how potential redevelopment could be configured adjacent to existing and new streets in the subarea. 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.

Building Heights

Alternative 4—Preferred Alternative proposes the most MUR-85' zoning of the action alternatives. The MUR-85' zoning allows a base height of 85 feet. A bonus height/density of up to 140 feet may be allowed for projects that meet special requirements through development agreements. Projects implemented through development agreements would be subject to a public process.

If development projects were to incorporate characteristics such as green building, additional affordable housing, public open space, and other amenities, they would have the ability to add bonus height/density to their projects, which could involve increases in height above the 85-foot level in all areas zoned MUR-85'. Population and household unit calculations in this FEIS assume this would occur over approximately 25 percent of the area zoned MUR-85' and buildings would not exceed 140 feet.

If over time the City observes a trend that could lead to more than 25 percent of buildings in height over 85 feet (and greater density), the City would need to conduct a supplemental environmental impact analysis to evaluate the potential impacts and reassess project and program needs to support the additional density.

Alternative 3—Previous Most Growth, also assumes that building heights of up to 140 feet would be allowable at the Shoreline Center site, but no other locations in the subarea. Alternative 4—Preferred Alternative changes this assumption, and instead assumes that the 140-foot building height could be implemented in any location zoned MUR-85' for a project that meets special requirements through a development agreement.

Market analysis has indicated that there may be minimal demand for mid-rise buildings in the subarea in the foreseeable future. However, over time this demand could grow. Zoning would preserve a broader range of possibilities for the subarea over the long term.

The MUR-85' zoning allows buildings in the construction type "5 over 2" translating to five stories of wood frame construction over two levels of a concrete podium base. The ground floor of this type of construction typically includes active uses along the street with parking behind the active uses and below grade. The second level can be housing, office, or commercial use, or in some case it can be structured parking. This is a common type of construction in the region for mixed use development. MUR-45' also allows mixed use development, which may include an active ground floor level along the street with typically three stories of housing above.

Active uses at the street level help to ensure a vibrant, walkable environment and typically include neighborhood retail uses and services.

MUR-35' also could include active use at the street level, but more often may consist of various types of low-scale multifamily

housing such as row houses, townhomes, live/work lofts, and other types of attached housing. MUR-35' would allow buildings of three to three and a half levels depending on the design.

In considering the costs of various types of building construction, buildings that are between eight levels to twelve levels are more challenging to finance due the cost of steel construction, but when a building can reach thirteen to fourteen levels, as could be the case with the 140' maximum height, it becomes a more financially feasible type of construction.

As previously discussed, under Alternative 1, there could be a change in character over time of larger, more expansive single family homes, even if no changes to zoning were made. Many current homes are one story to two stories in height. Up to 35-foot-high homes are allowed, so taller homes could be constructed over time. Also as mentioned previously, up to 6 units per acre are allowed under the current R-6 zoning. Because the current density is typically 2.7 units per acre in the subarea, property owners may choose to add more units over time. Accessory dwelling units and/or conversion and reconstruction of homes into duplexes and triplexes would be permissible if certain requirements are met by Code.

To summarize expectations related to building heights, under the action alternatives (Alternative 4, 3, or 2) allowable building heights in most areas would increase by approximately 0 (MUR-35') to 50 feet (MUR-85') compared to the 35-foot height limit under existing zoning. For approximately 25 percent of the area zoned MUR-85', building heights could be taller with development agreements. Alternative 4 proposes the greatest

amount of MUR-85' zoning of the action alternatives. Also under Alternative 4, MUR-85' zoning is proposed in the area northwest of Shoreline Center, which is at a higher elevation and may be more prominent visually in the neighborhood.

Neighborhood Character

Alternative 4—Preferred Alternative would alter the neighborhood character more than the other alternatives at full build-out. Alternative 3—Previous Most Growth would result in less overall change than Alternative 4, but more than Alternative 2—Some Growth.

Over many decades, the subarea likely would transform from predominantly single family residential to a mix of housing types and neighborhood-serving retail and uses. Major redevelopment of the Shoreline Center site also could occur. While this would be a substantial change, the growth and related change would be expected to occur very gradually, similar to other urbanizing neighborhoods in the region such as Ballard, Green Lake, and Greenwood. 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. Mitigation measures including a variety of development standards and transitional zoning provisions are proposed to help buffer existing land uses from new redevelopment in the subarea.

With redevelopment, neighborhood character would change, but the subarea also would see positive enhancements, such as improved streets, intersections, and streetscapes, additional public spaces, parks, trails, and recreation facilities, and community benefits such as sidewalk cafes, public art, plazas, and

other amenities. Low impact development treatments such as rain gardens and stormwater planters would be envisioned as surface water management solutions. Regarding these positive changes to the neighborhood, Alternative 4 would result in the most amount of these over time than the other action alternatives due to the extent of redevelopment allowed.

Any of the action alternatives would be required to comply with the City's Historic Preservation Program, discussed earlier, as applicable.

Under Alternative 1—No Action, there would be minimal change to built form and neighborhood character. Streets, roadways, and public spaces 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.

Real Estate Speculation and Long-Term Predictability

Property owners have expressed concerns that real estate investors may be interested in purchasing single family homes and holding them as rentals until the time is right for redevelopment in the future. Many homeowners in both station subareas have already received letters offering fair market value, possibly because investors believe that properties will be less expensive before zoning changes or light rail service is operational. This type of speculative buying could occur regardless of whether or not the City was planning to rezone areas surrounding future stations immediately. One reason to implement zoning change sooner rather than later is to provide long-term predictability regarding what type of uses will be

allowed where, and ample time for homeowners to become informed about the potential for change and determine their own long-range plans. For those that choose to sell, understanding the long-term potential of the property may allow them to capture additional value.

3.1.3 Mitigation Measures

Proposed Mitigation Measures

The City intends to amend its Comprehensive Plan to reflect the proposed alternative adopted through the subarea plan, and the City will adopt revisions to the Shoreline Municipal Code, including amendments to zoning provisions and development standards to support implementation of the subarea plan. These would occur under any of the redevelopment alternatives.

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.

With the proposal to adopt the planned action, redevelopment would be able to proceed through streamlined environmental review as long as it is consistent with the planned action thresholds for growth for the next twenty years. The planned action threshold also provides a checkpoint for monitoring growth and change in the subarea. If more growth occurs than expected, the City would need to reevaluate the environmental

analysis in this FEIS and potentially implement additional mitigation measures.

As described earlier in this section of the FEIS and in Chapter 2, there are extensive policies already adopted by the City of Shoreline that would be supported by the subarea plan, regardless of which action alternative is implemented. Policies within the Shoreline Comprehensive Plan; Climate Action Plan, Environmental Sustainability Strategy, Economic Development Strategy, Transportation Master Plan; Parks, Recreation, and Open Space Plan; Town City Subarea Plan; North City Subarea Plan; and other adopted plans would be furthered and supported by redevelopment of the subarea.

Alternative 4—Preferred Alternative (and Alternative 3—Previous Most Growth or Alternative 2—Some Growth)

Retaining and enhancing neighborhood character is important to residents in the station subarea and required by City of Shoreline Comprehensive Plan policies and Shoreline Municipal Code provisions. It will be important that new higher density residential and mixed use land uses in the station subarea provide buffering and transition when located adjacent to single family uses. Some of the transitions would be accomplished through the proposed zoning frameworks as discussed previously. In addition, the City is preparing amendments to zoning provisions and development standards in the City's Code that would lead to improved neighborhood character and compatibility. Specific development regulations for the light rail station areas will be adopted. A brief summary of these anticipated provisions is provided below. For the full text of proposed amendments to the Code, refer to the

planned action ordinance that will be adopted with the subarea plan.

- **Development Agreements**—A new set of provisions is proposed allowing Development Agreements that would require specific elements from redevelopment projects in exchange for density/height increases. Elements such as affordable housing, green building standards, and structured parking would be required. Elements such as combined heat and power systems, provision of commercial uses, sidewalk cafes, provision of public open space, and other amenities would be encouraged.
- **Affordable Housing**—Expanded provisions are being proposed for the Code to encourage and incentivize affordable housing as part of redevelopment projects.
- **Mixed Use Residential and Live/Work**—Provisions related to mixed use residential development including additional requirements related to live/work units are proposed to encourage a vibrant transit-oriented community with a mix of housing and employment in proximity to the light rail station.
- **Green Building**—Provisions are being developed to encourage green building and low impact development.
- **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.

- ***Greater Flexibility in Use of and Conversion of Single Family Homes to Business and Office Use***—Code provisions would allow more flexibility for business and office use in existing single family homes and conversion of homes to exclusively business/office use.
- ***Light Rail Station and Park-and-Ride Design***—The light rail station project including the station and park-and-ride structure design would be subject to a specific agreement with the City that would establish design and implementation provisions for the light rail facilities.
- ***Community and Social 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, senior facilities, community meeting rooms, farmers markets, community gardens, interpretation and heritage projects that commemorate Shoreline’s history, public art, and other social 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 would provision of these elements with redevelopment

projects. Mitigation measures for parks, recreation, open space are addressed in Section 3.4 of the FEIS. Also, see Section 3.2 for additional discussion of mitigation measures related to Housing Choice and Affordability.

- ***Updated Development Standards***—A variety of amendments to development standards are proposed to reflect the new MUR zoning categories and to require and encourage specific elements such as:
 - Height limits (discussed previously in this section)
 - Front, rear, and side yard setbacks
 - Standards for transition areas, which include architectural step backs in the building design (“wedding cake” form), and landscaping requirements
 - Vehicular access oriented to side and rear rather than to the front along arterials
 - Traffic calming measures
 - Compatible architectural styles
 - Streetscape improvements and landscaping requirements
 - Open space and recreation facilities for residents
 - Parking quantity, access, and location standards
 - Reduced parking requirements in transit-oriented MUR zones
 - Shared parking, HOV, and EV parking encouraged
 - Vehicle circulation and access

- Good pedestrian access
- Bicycle parking facilities
- Lighting to enhance safety and security
- Building orientation to the street and transitions between buildings
- Design of public spaces
- Building façade articulation and compatible architectural form
- Covered access ways
- Preferences for architectural finishes and materials
- Preferences for fencing and walls
- Screening of utilities, mechanical equipment and service areas
- Land clearing, and site grading standards
- Tree conservation encouraged with residential redevelopment (but exempt from commercial and MUR-85' redevelopment)
- Signing requirements
- Integration of public art, planters, water features, and other public amenities

Other Recommended Mitigation Measures

- ***Exploring Partnerships***—In the near term, the City could explore potential public/private and public/public partnership opportunities in the subarea to help encourage and catalyze redevelopment. These could include partnering with the School District on redevelopment of the Shoreline Center site, including incorporation of a new multi-generational recreation/community facility. This also could include working with Sound Transit on the park-and-ride structure and potentially integrating other uses along its street frontage. Partnerships could include involvement in implementing affordable housing and community uses in the subarea.
- ***Proactive Capital Investments***—The City intends to proactively seek funding for transportation and infrastructure improvements in the subarea, which will help to support redevelopment and enhance neighborhood character.

3.1.4 Significant Unavoidable Adverse Impacts

Proposed redevelopment of the subarea under Alternative 4—Preferred Alternative would result in substantial changes in neighborhood character over time. Intensification of development and higher buildings would occur incrementally. While the intensity of redevelopment in this area would be substantially greater than existing conditions, the new redevelopment would be consistent with the Shoreline Comprehensive Plan, and other local, regional, state, and federal plans and policies. Additional housing and employment opportunities would be created, and it is anticipated that a variety of positive neighborhood benefits would result through redevelopment.

Implementation of the planned action will set a threshold for growth and development in the subarea for the next twenty years that aligns with an expected level of capital improvements and investments to support the growth. This will allow the City to monitor change and would trigger additional environmental review if change occurs at a more aggressive pace than anticipated.

Keeping in mind that change in the subarea would be expected to occur gradually, over many decades, it is not anticipated that there would be significant unavoidable adverse impacts that could not be addressed through the mitigation measures discussed above and the City's ongoing proactive monitoring of conditions in the subarea.



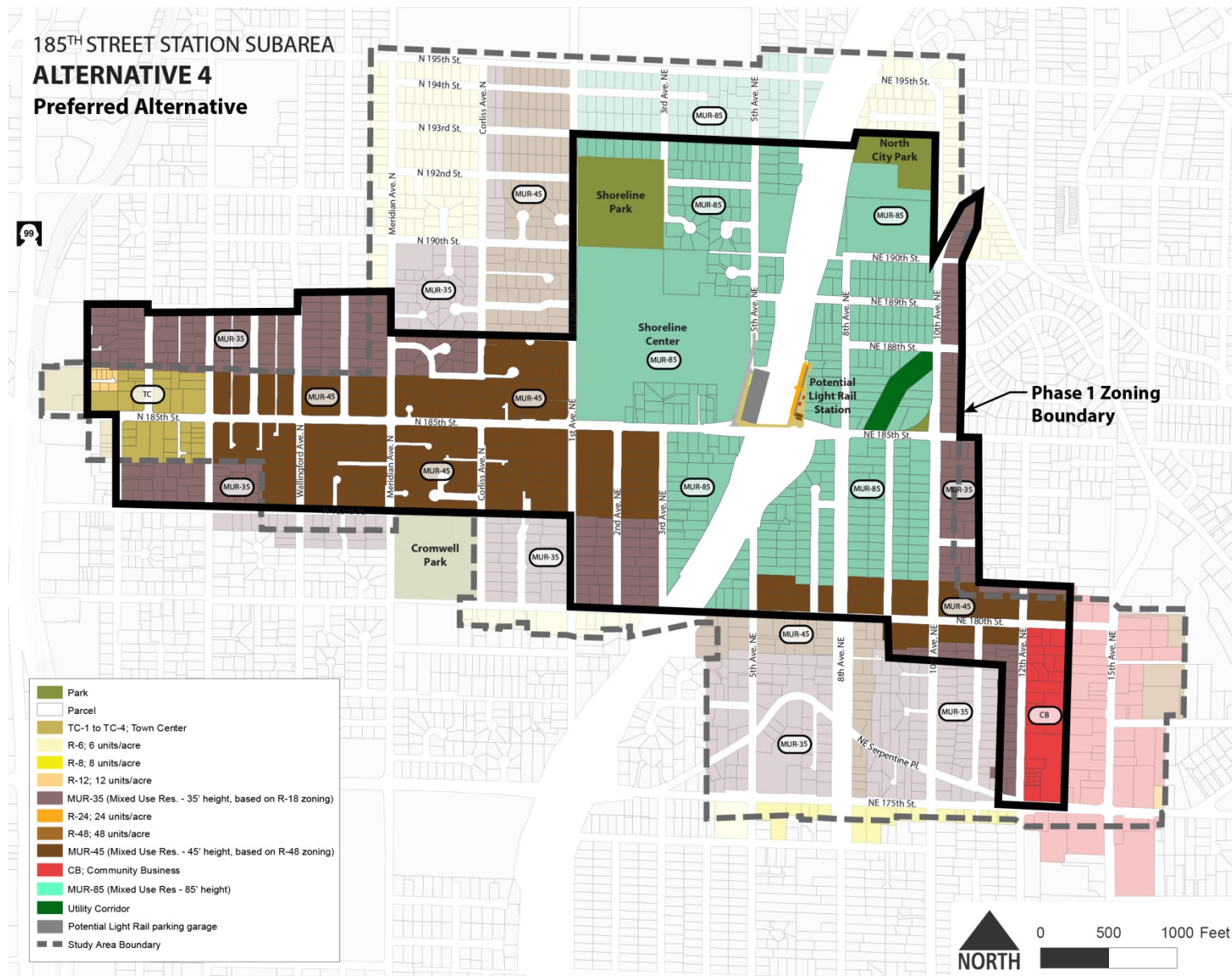


Figure 3.1-5 Alternative 4—Preferred Alternative, with Potential Phase 1 Zoning Boundary (If Phased Zoning is Adopted)

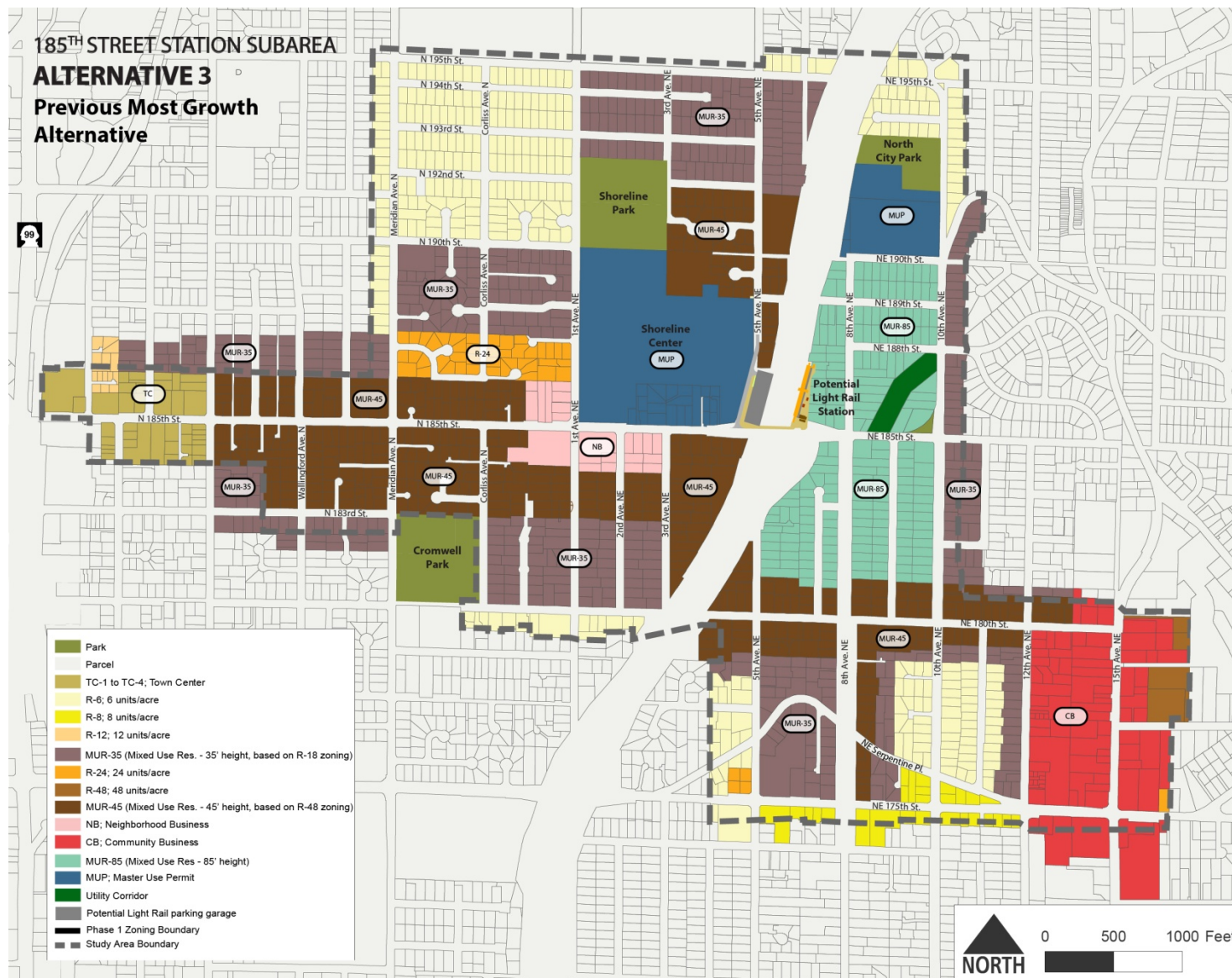


Figure 3.1-6 Alternative 3—Previous Most Growth Zoning Map

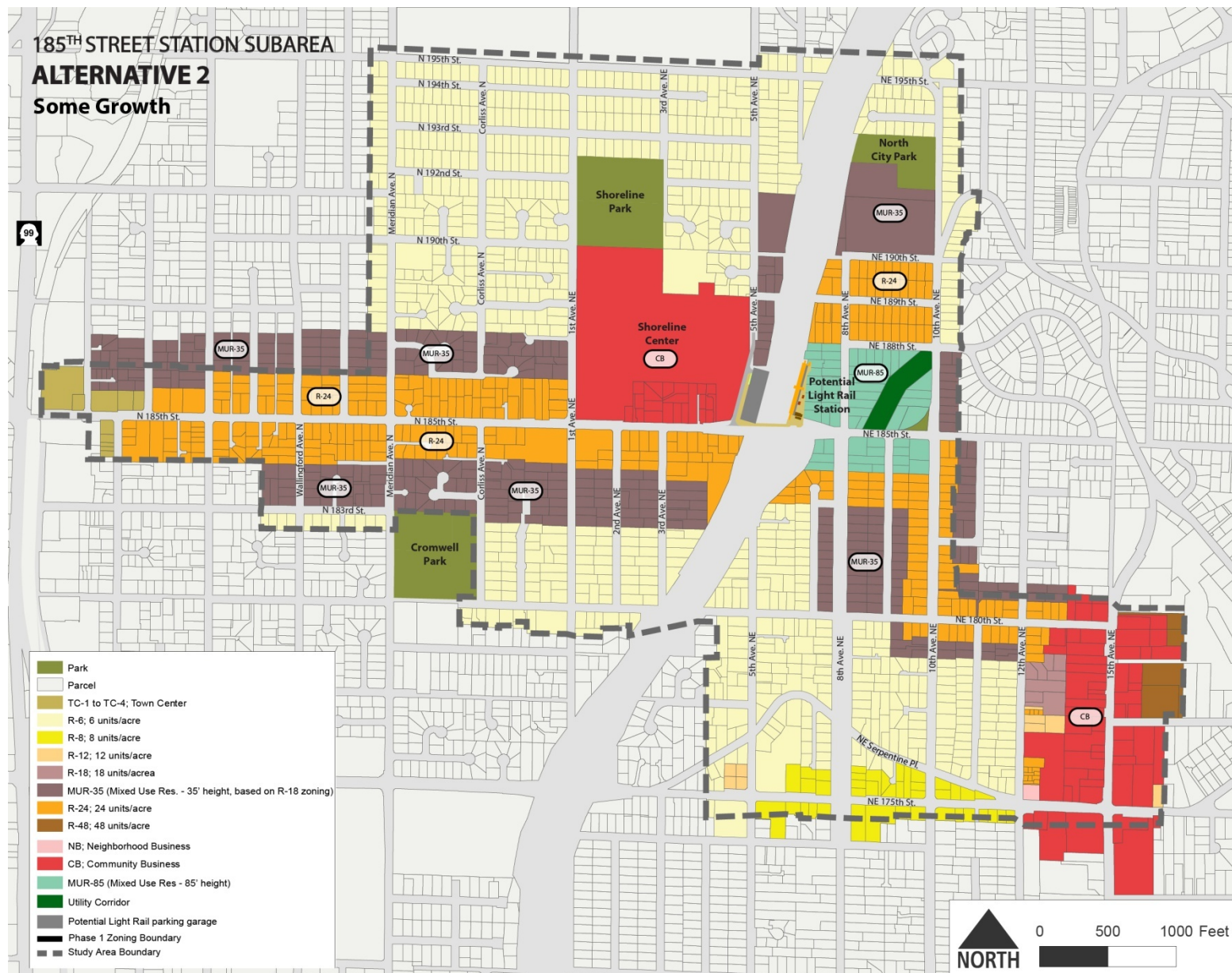


Figure 3.1-7 Alternative 2—Some Growth Zoning Map

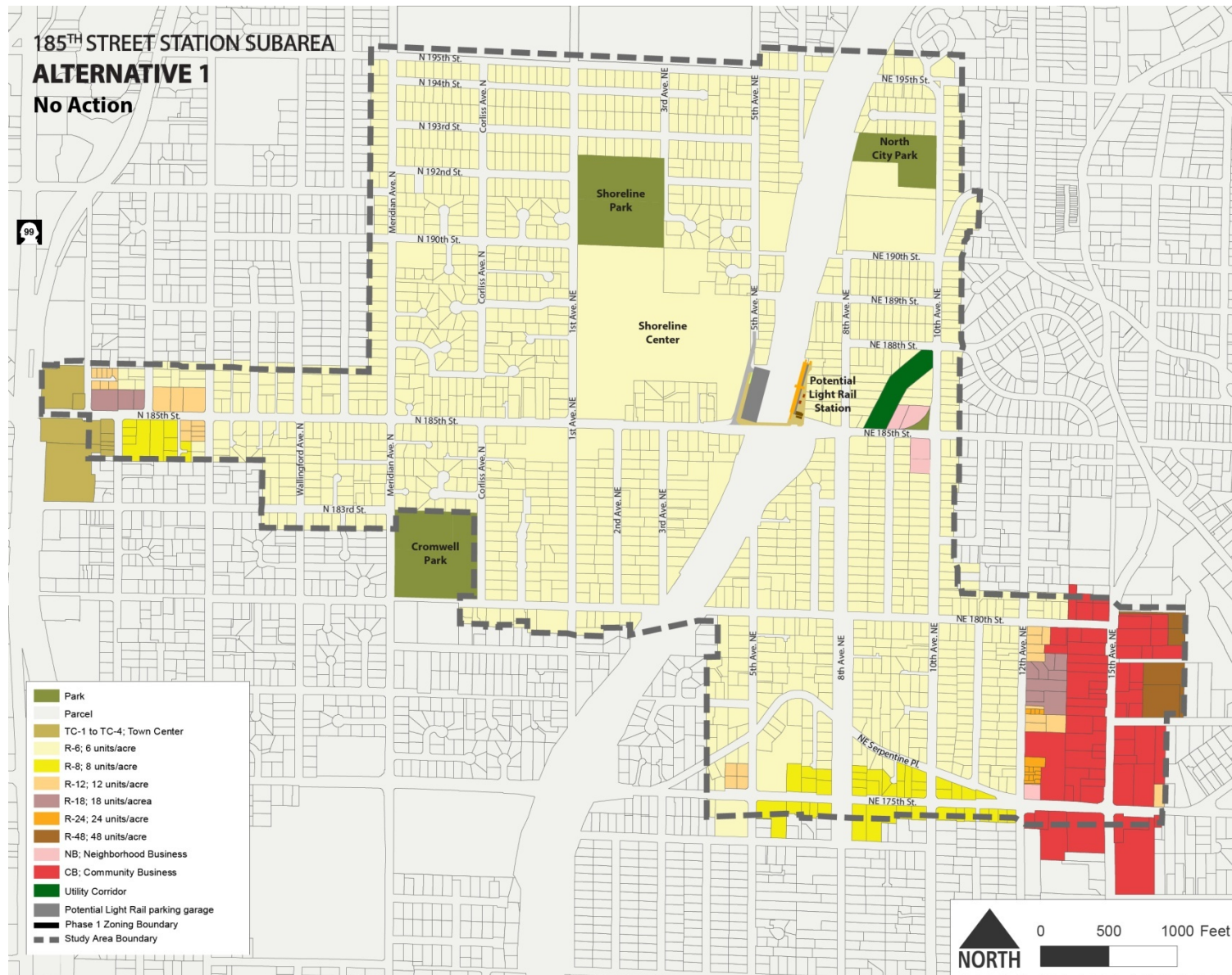


Figure 3.1-8 Alternative 1—No Action, Existing Zoning Map



Example Housing Styles-MUR-85' Zoning Designation

MUR 85

MIXED-USE RESIDENTIAL—85 FOOT HEIGHT LIMIT: This zone would allow building heights of 85 feet (generally 7 stories tall). Building types would typically be mixed use with residential and/or office uses above commercial or other active use at the ground floor level. It should be noted that this density is unlikely to be supported by current market forces, and as such, it may be some time before this building type would be developed in the subarea.



Example Housing Styles-MUR-45' Zoning Designation

MUR 45

MIXED-USE RESIDENTIAL—45 FOOT HEIGHT LIMIT: Similar to the existing zoning category R-48 that allows 48 dwelling units per acre, this zone would allow multi-family building types. The height limit for MUR-45 would be 45 feet (differing from the height limit of R-48, which currently varies from 40 feet if adjacent to single family zones, 50 feet if adjacent to multi-family zones, and 60 feet with a Conditional Use Permit). Because building heights have been identified through public involvement as a concern in the station subarea, the new MUR-45 zone would be limited to 45 feet regardless of adjacent zoning, which equates to a 4-story building. The MUR-45 zone would allow housing styles such as mixed use buildings with three levels of housing over an active ground floor/commercial level. Buildings such as row houses, townhomes, live/work lofts, professional offices, apartments, etc. also could be developed in MUR-45, and single family homes could be converted to commercial and professional office uses like in MUR-35.



Example Housing Styles-MUR-35' Zoning Designation

MUR 35

MIXED-USE RESIDENTIAL—35 FOOT HEIGHT LIMIT:

Similar to the existing zoning category R-18 that allows 18 dwelling units per acre, this zone would allow multi-family and single family attached housing styles such as row houses and townhomes. The height limit for this zone is 35 feet, which is the same as single-family R-6 zones, and equates to a 3-story building. MUR-35 also would allow commercial and other active uses along streets not identified as "local." These types of buildings might include live/work lofts, professional offices, and 3-story mixed use buildings (two levels of housing over one level of commercial). This also would allow conversion of existing homes to restaurants, yoga studios, optometrist offices, and other uses.



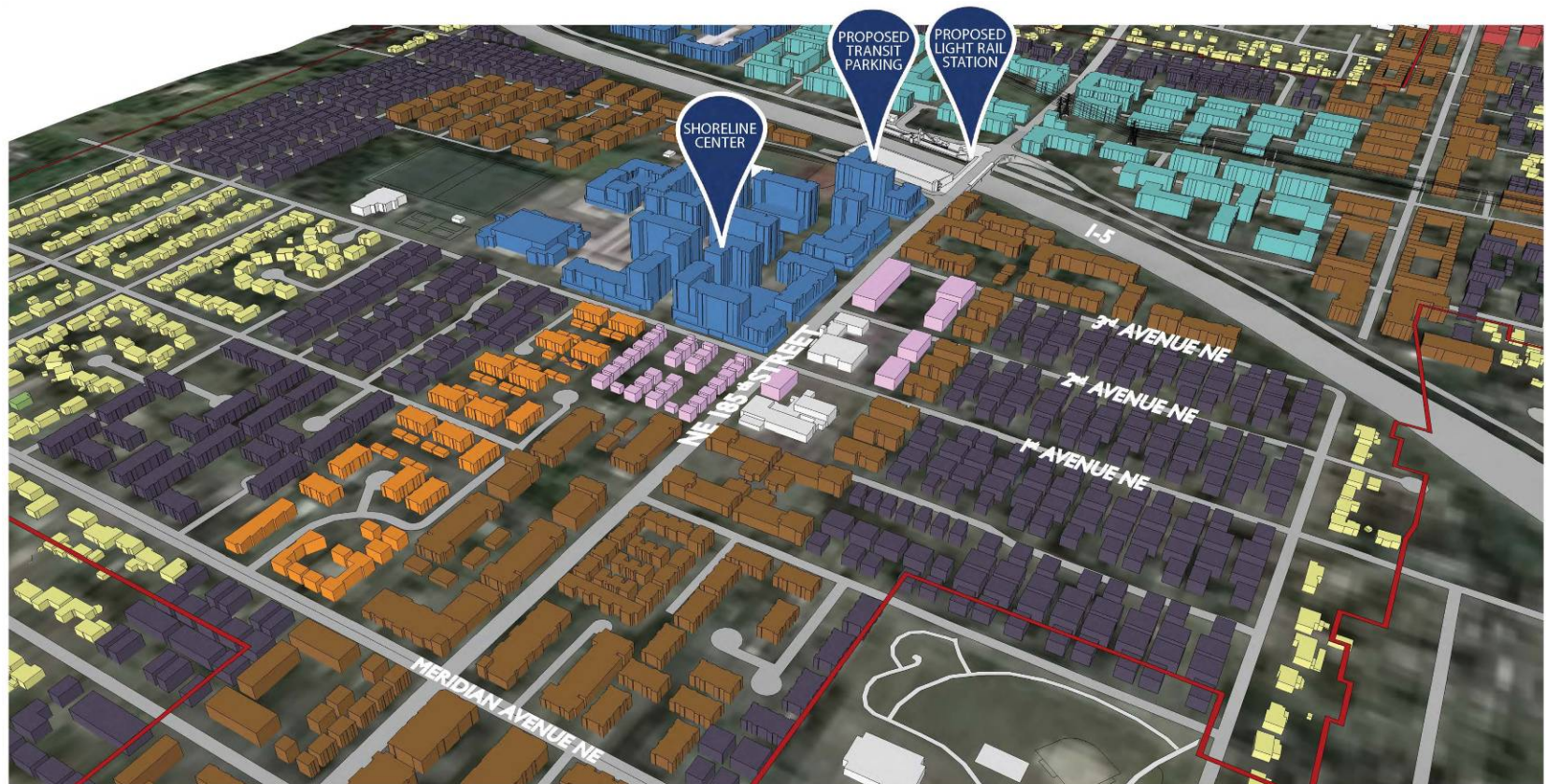
Sketch-Up Model View for Alternative 4—Preferred Alternative, Looking Westward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 4—Preferred Alternative, Looking Eastward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 3—Previous Most Growth, Looking Westward toward the Potential Light Rail Station



Sketch-Up Model View for Alternative 3—Previous Most 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 2—Some Growth, 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 1—No Action, Looking Eastward toward the Potential Light Rail Station



Conceptual possibility for N-NE 185th Street multimodal improvements, looking west



Conceptual possibility for the N 185th Street overpass, looking eastward, with solar panels and green roofs on the canopies



Conceptual possibility for sheltered crossing area at the N 185th Street overpass, looking eastward



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Possible layout concept for redevelopment in the subarea showing MUR-45' zoning

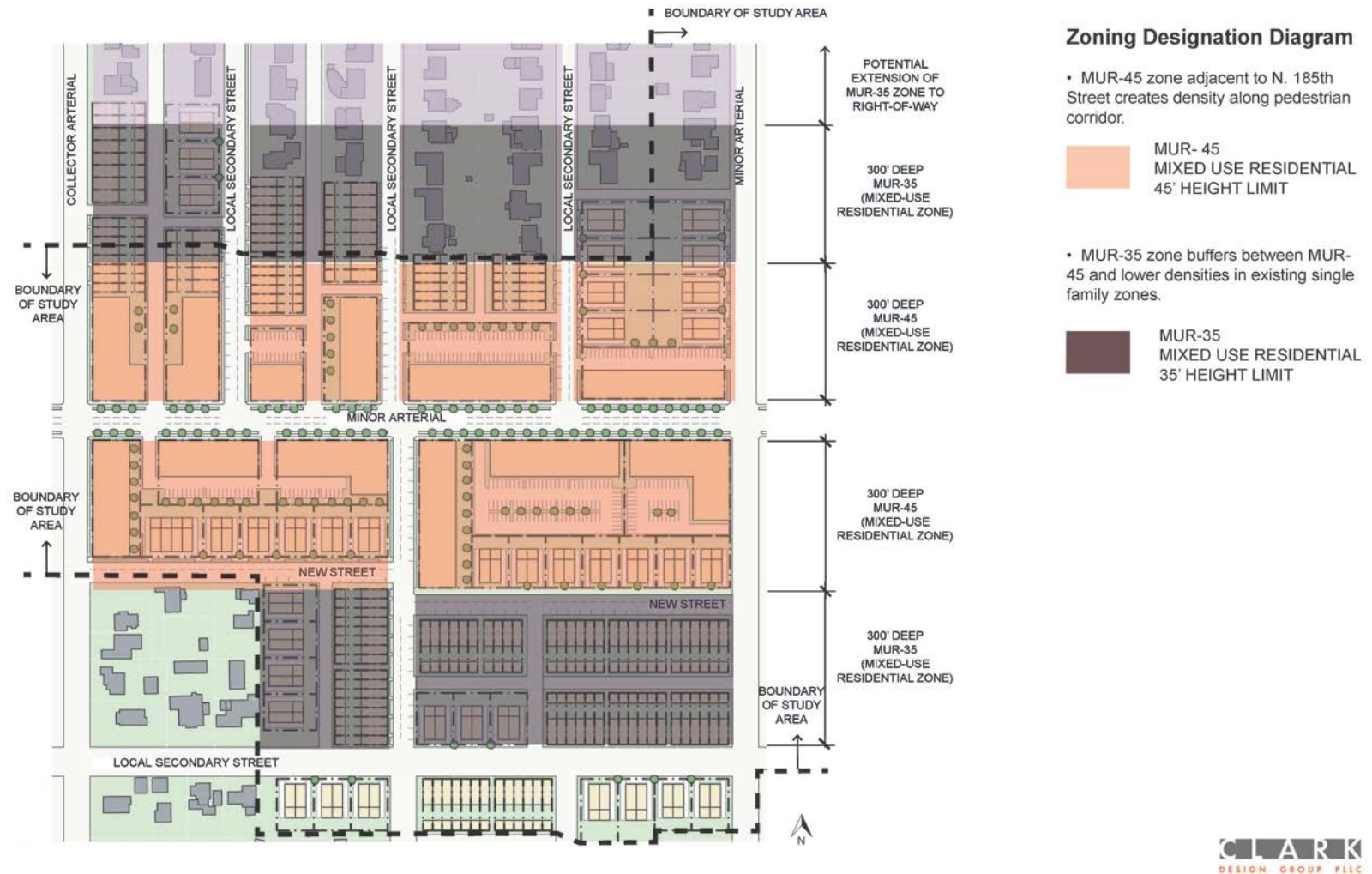


3-Story Residential Buildings with Surface or Below Grade Parking located behind or to the side of buildings

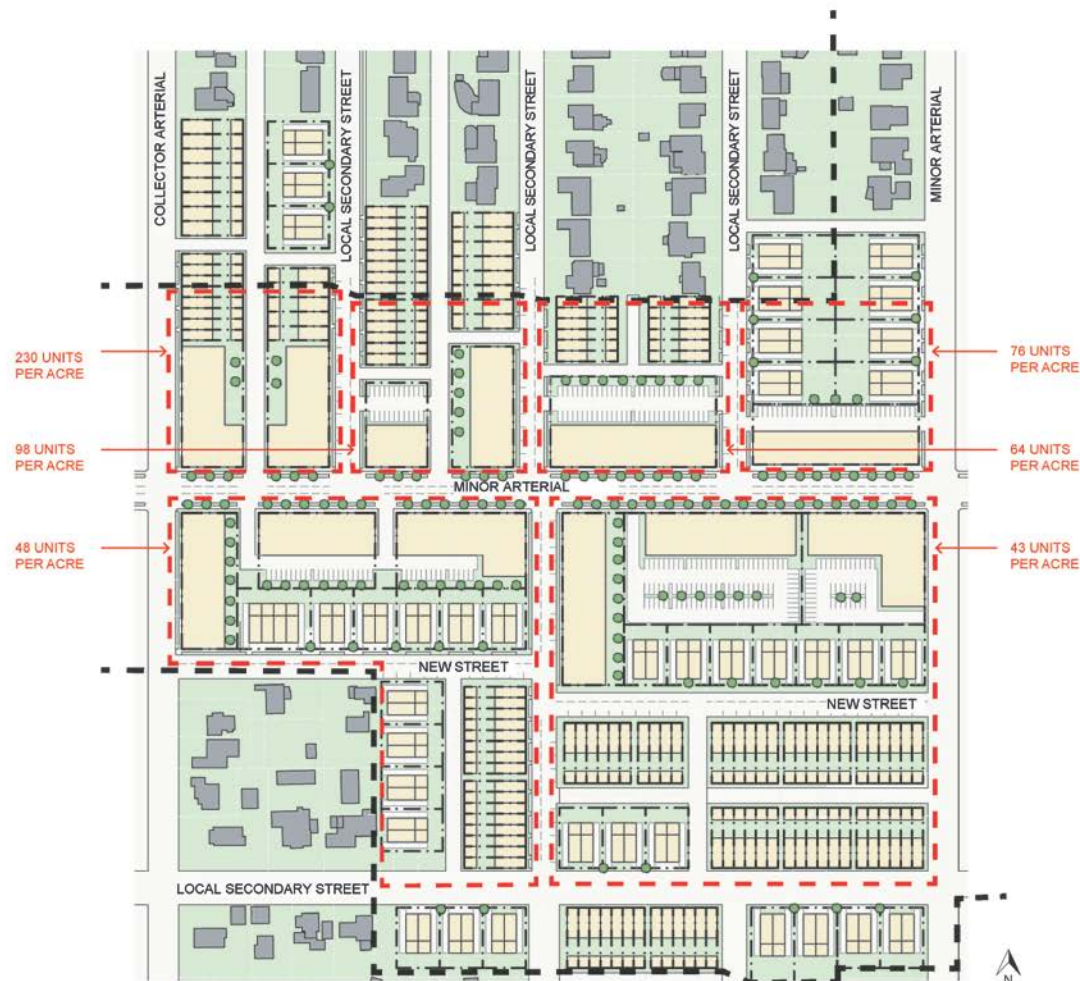
Shoreline - 185th Street Station Subarea Building Examples in Zone MUR-35 (Mixed-Use Residential with 35' Height Limit)

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Possible layout concept for redevelopment in the subarea showing MUR-35' zoning



Possible redevelopment concept showing MUR-45' and MUR-35' zoning



Density Diagram

- Diagram illustrates potential densities that can be achieved with 4-story mixed-use residential buildings along N. 185th Street and 2-3 story row and townhouses located one block off of N. 185th Street.
- Row and Townhouses reduce height of buildings while achieving range of 10-24 units/acre.

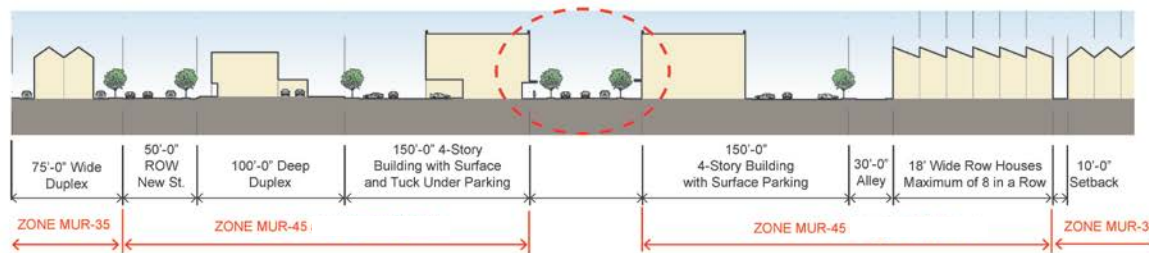
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Conceptual layout possibility illustrating potential density with MUR-45' and MUR-35' zoning



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Conceptual layout possibility showing various housing types and duplex and row house redevelopment as the transition between MUR-45' zoning and single family



Section Diagram

- MUR-45 zone adjacent to N. 185th Street creates density along pedestrian corridor.
- MUR-35 zone buffers between MUR-45 and lower densities in existing single family zones.



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***Conceptual layout plan and cross section view showing parcel depths
with MUR-45' and MUR-35' zoning***



Conceptual possibility for the 8th Avenue NE right-of-way, looking southwest, with shared use path, community gardens, and public spaces with MUR-45' and MUR-35' zoning; while the shared use path would be a longer-term improvement, it would help to increase bicycle connectivity in the subarea



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



Conceptual possibility for the NE 180th Street, looking southeast, public art commemorates the nearby NE 185th Street “Motorcycle Hill” history of subarea; MUR-85’ building example at the corner



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”; up to five and six story building examples

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 3-68.)

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.

Population Growth Trends and Forecasts

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. From July 1, 2012 to July 1, 2013, the Seattle-Tacoma-Bellevue metropolitan area ranked tenth in numerical population growth of metropolitan areas of the US, adding 57,514 people. According to Puget Sound Regional Council's 2040 Transportation Plan, our region will add 1.4 million people and 1.1 million jobs by 2040.

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.

In a review of other transit-oriented districts around light rail and high-capacity transit in the US, growth rates have varied greatly. However, average annual growth rates of around 2 percent are often achieved, but are influenced by a variety of factors.

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 also are forecasted to continue to grow over the next couple of decades.

The growth potential for the 185th Street Station Subarea is high; however, it is moderated by potential challenges related to redevelopment, such as the need to aggregate parcels to create sites large enough for mixed use and multifamily housing, as discussed in section 3.1. Uncertainty about the market and property owners' interests in redeveloping or selling their properties also moderates the forecast for growth.

With all of these considerations, the anticipated average annual growth forecasted for the subarea is around 1.5 percent to 2.5 percent. This is the assumed growth rate for purposes of subarea planning and environmental analysis.

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 have been set for the Preferred Alternative. These are discussed later in this section and elsewhere in this FEIS.

Assigned Growth Targets for Shoreline

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.) allowed under the proposed MUR-85' and MUR-45' zoning categories. Attached single-family homes, cottage housing, accessory dwelling units, duplexes, triplexes, and other multiplexes would be expected to develop as a result of the proposed MUR-35' zoning, and this area would serve as a transition between the more intensive density in the station

vicinity and the traditional detached single family neighborhoods in outer areas.

Refer to Section 3.1 for a more detailed explanation of expected urban form and neighborhood character.

Redevelopment Potential and Timing

The potential for growth and timing of redevelopment would 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, Alternative 3—Previous Most Growth, and Alternative 4—Preferred Alternative would maximize opportunities for future redevelopment. The Preferred Alternative would provide the most overall opportunities for growth, redevelopment, and economic development.

The North City school site is another opportunity site in the subarea. The School District has no plans for redevelopment of the site, which currently houses preschool and homeschooling facilities. 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. Also, with the anticipated growth of the subarea as a result of upzoning, there would be a need for new schools to serve new households in the coming decades, and this site could help in addressing that need.

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 FEIS 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 is estimated that it would take approximately 80 years to reach full build-out of Alternative 4—Preferred Alternative, and it would take at least 125 years to reach full build-out at a 1.5 percent annual growth rate.

Population Study Area for Purposes of the Subarea Plan and FEIS

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 FEIS (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 FEIS.

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 FEIS, as described and analyzed in Section 3.3 Multimodal Transportation.

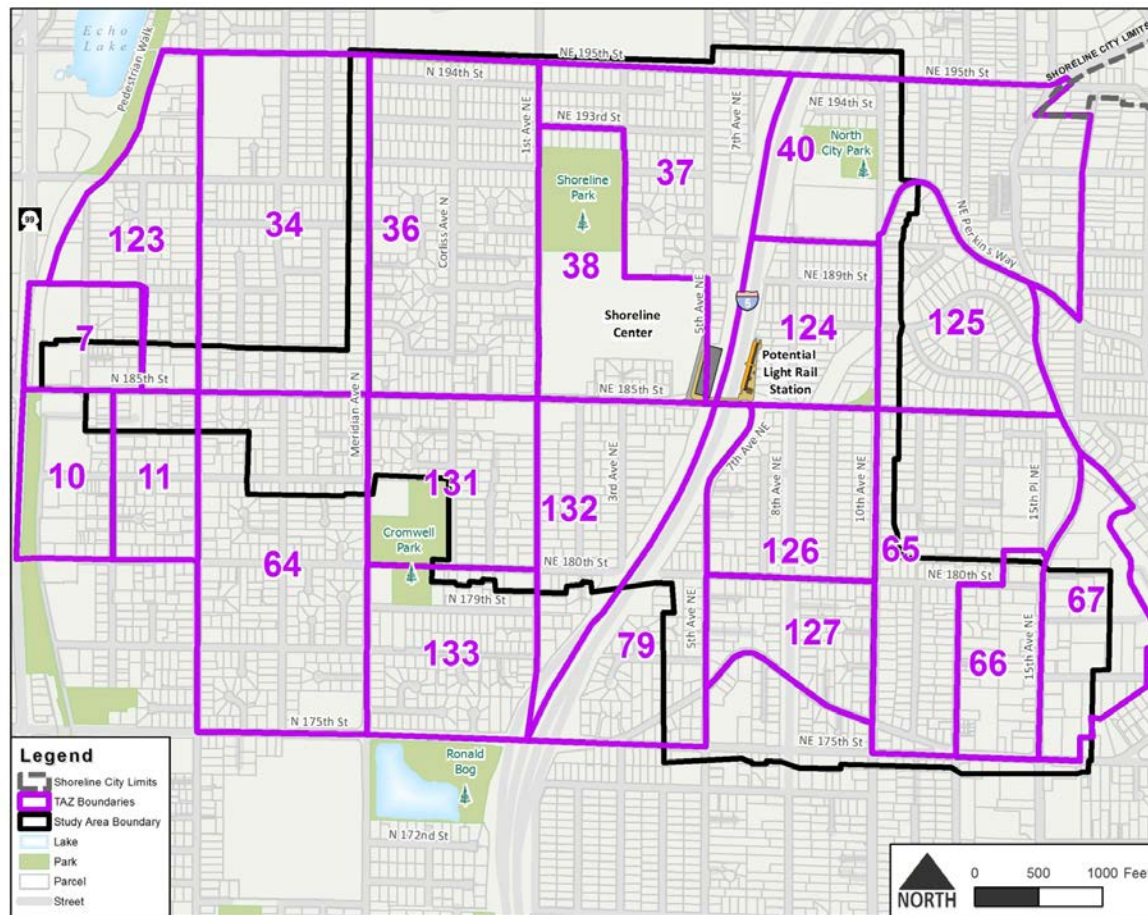


Figure 3.2-1 Traffic Analysis Zones (TAZs) in Proximity to 185th Street Station Subarea, Referenced for Population Calculations

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. Much of the housing stock is approaching 70 years of age and most is over 50 years old. More and more homeowners are either making substantial renovations to their homes or demolishing existing homes and replacing with new ones. This trend would likely continue absent upzoning in the subarea.

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 a 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).

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.

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 above highlights information pertaining to affordable housing metrics in Shoreline. **Figure 3.2-2** shows wage/income levels for various professions.

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

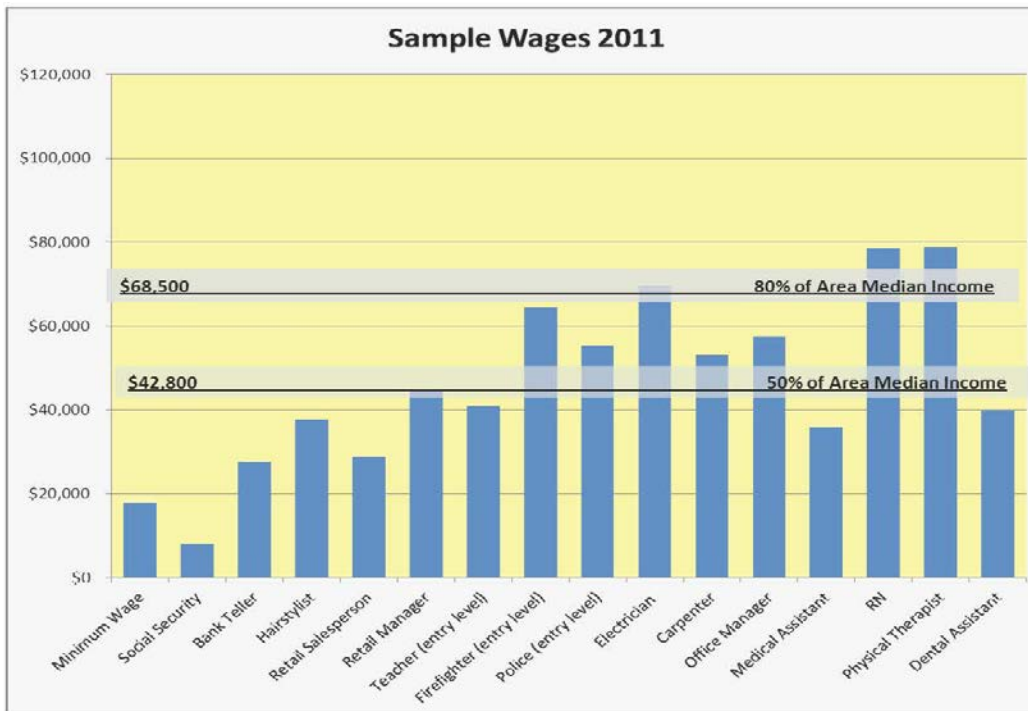


Figure 3.2-2 King County Median Income Levels/Wages of Various Professions

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.

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. 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, singles, empty nesters, seniors, and others 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 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 autos.

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.

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

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**.

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 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.

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

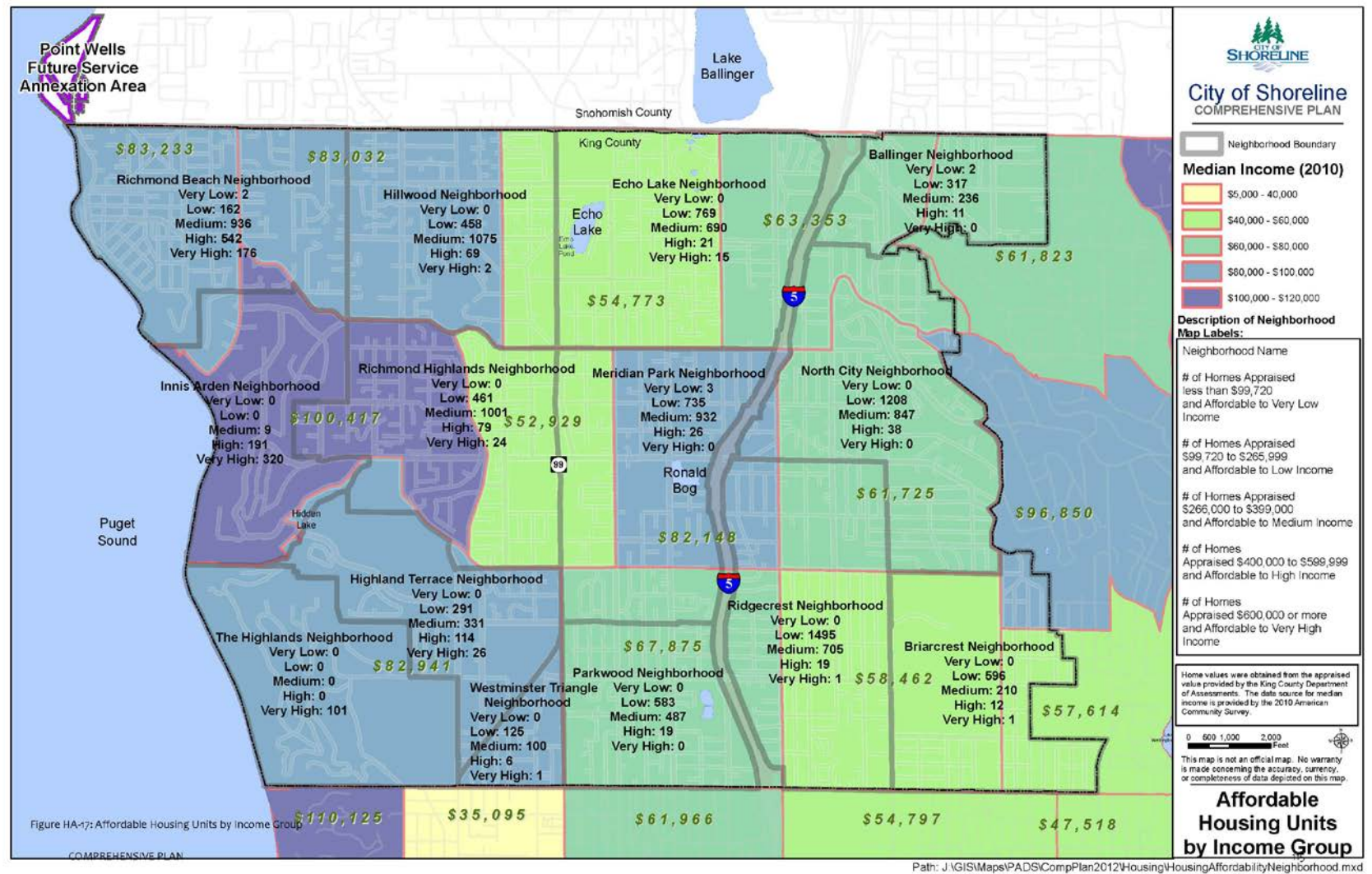
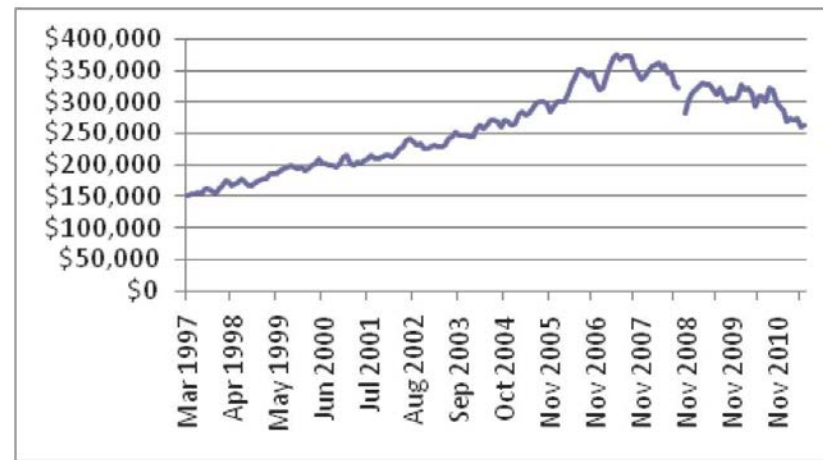
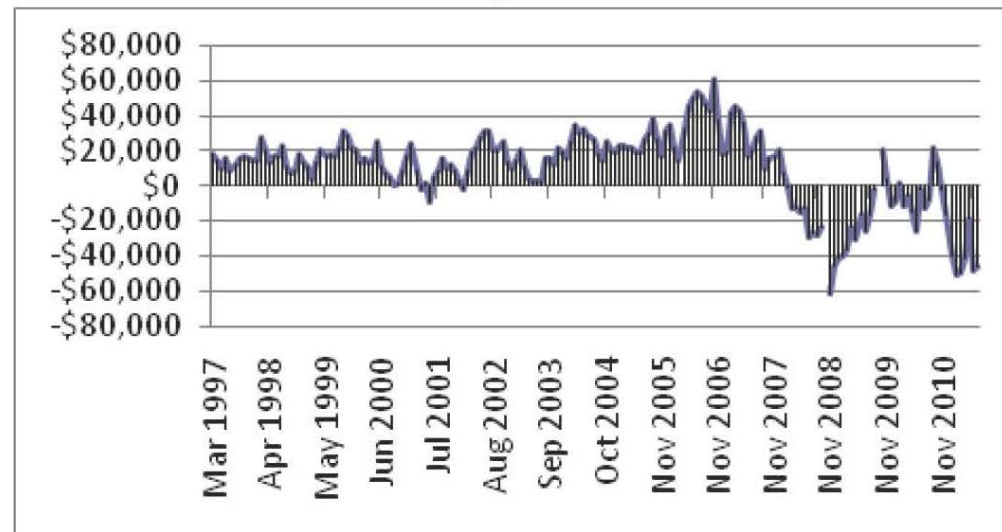


Figure 3.2-3 Affordable Housing Units by Income Group in Shoreline



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

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 centers and 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.

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.*

City of Shoreline Affordable Housing Policies and Requirements—Chapter 20.40.230 of the Development Code includes specific provisions for affordable housing. These provisions will be updated for specific application in the light rail station subareas. In addition, the City has developed specific draft policies for the subarea that address affordable housing needs. These policies and draft Development Code provisions are provided in Section 3.2.3 Mitigation Measures. Other Code provisions and development standards related to housing and mixed use development in the subarea are summarized in Section 3.1 of this FEIS.

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-to-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.

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

The City of Shoreline's Office of Economic Development Strategic Plan for 2012-2017 is summarized in Chapter 2 of this FIES. The plan seeks to achieve sustainable economic growth by supporting place making projects.

3.2.2 Analysis of Potential Impacts***Population, Housing, and Employment
Forecasts for Each Alternative***

Under all alternatives, the number of households and jobs would increase. Alternative 4—Preferred Alternative would result in the most housing opportunities and highest level of households of the action alternatives at full build-out. Alternative 3—Previous Most Growth would result in less housing than Alternative 3, but more than Alternative 2—Some Growth. Alternative 3—Previous Most Growth would result in the highest number of jobs based on the intensity of employment use assumed with redevelopment of the Shoreline Center site.

All three of the action alternatives would assist the City in meeting household and employment growth targets, consistent with the Countywide Planning Policies. However, Alternative 4—Preferred Alternative would provide the most capacity and flexibility to achieve the targets over time. Implementing Phase 1 zoning would not affect the ability to meet the growth targets since the same pace of average annual growth (1.5 percent to 2.5 percent) would be the same. Alternative 1 would have very limited ability to assist the City in meeting its growth targets.

Current population, households, and employment levels in the subarea are shown in **Table 3.2-12**. Forecasted growth in population, housing, and employment for each of the alternatives is summarized in more detail below and depicted in **Table 3.2-13**. The net change in population, households, and employment from current levels is shown in **Table 3.2-14**.

Alternative 4—Preferred Alternative

Under Alternative 4, the population would increase to 56,529 at full build-out with approximately 23,554 households and 15,340 jobs. Full build-out assumes that all rezoned areas in the full Alternative 4 proposal would be built out to at least their baseline allowable zoning, including a portion of the Town Center Subarea, all of the North City Subarea, and the Shoreline Center. This would take many decades.

The net increase of population, households, and jobs in the subarea over current levels would be 48,585 additional people, 20,244 additional households, and 13,892 additional jobs.

For Alternative 4, it is anticipated that full build-out would take approximately 80 to 125 years (2095 to 2140) to be realized at an estimated annual rate of growth between 1.5 percent and 2.5 percent.

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.

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 time frame of 80 to 125 years, only a portion of the 27,050 total jobs would be in place by 2035 to meet the target range. As mentioned previously, the city has the capacity elsewhere to meet the job growth target range.

The Next Twenty Years for Any Action Alternative

By 2035, any of the action alternatives would be anticipated to grow at the same pace (applying the estimated annual growth rate of around 1.5 percent to 2.5 percent).

Because of the higher densities allowed and the higher capacity for change, Alternative 4 could potentially build-out at a faster rate than Alternative 3 or 2, but the maximum growth rate would still be expected to be around the average annual 2.5 percent increase. If the Phase 1 zoning were adopted, build-out over the next twenty years and beyond would be contained within the proposed Phase 1 zoning area (see below).

Over the next twenty years, it is anticipated that the population of the subarea would grow to between 10,860 and 13,343 people—2,916 to 5,399 above today's current population in the subarea (including population within the TAZ boundaries that encompass the subarea).

A total of 4,450 to 5,500 households would be expected by 2035, as well as approximately 1,950 to 2,370 jobs. This would be an increase in households of approximately 1,140 to 2,190 and an increase in jobs of approximately 502 to 928 over today's levels.

Potential Phase 1 Zoning Build-Out Capacity

The Phase 1 zoning area provides more than enough capacity to accommodate the next twenty years of growth while also allowing some flexibility to respond to market forces and property owners' interests. While the City would plan to evaluate the status of the subarea in twenty years and potentially unlock the rest of the zoning under Alternative 4—Preferred Alternative at that time (if phased zoning is adopted), the Phase 1 zoning

area is large enough to accommodate additional growth beyond twenty years.

Alternative 3—Previous Most Growth

Identified as the “Most Growth” alternative in the Draft Environmental Impact Statement, Alternative 2 is now called “Previous Most Growth” because Alternative 4—Preferred Alternative proposes more growth overall than Alternative 3.

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.

Alternative 3 would result in more jobs than under Alternative 4 due to the assumption that the Shoreline Center would fully redevelop to the maximum allowed density under a Development Agreement and provide more commercial and employment uses than under the other alternatives. Alternative 4 assumes that more housing would be developed throughout the subarea and that density/height bonuses would be applied to 25 percent of the all areas zoned MUR-85’ in subarea at build-out.

It is anticipated that full build-out would take approximately 60 to 100 years (2075 to 2115). This alternative would add potentially 29,371 people, 12,238 households and 25,602 jobs in the subarea above current levels.

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 capacity.

This alternative would add potentially 9,566 people, 3,986 households, and 8,302 jobs to the subarea above the current levels. 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.

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. 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.

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.

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.

Table 3.2-12 Current (2014) Population, Households, and Employment Estimates for the Subarea

Estimated Totals for Subarea Based on Available GIS Data, 2014	
Population	7,944
Households	3,310
Employees	1,448

Note: the current estimated total population of the City of Shoreline is 54,790.

Table 3.2-13 Estimated Twenty-Year and Build-Out Population, Households, and Employment Projections

	Alternative 4— Preferred Alternative	Phase 1 Zoning Area of Alternative 4	Alternative 3— Previous Most Growth	Alternative 2— Some Growth	Alternative 1— No Action
2035 Population*	10,860 to 13,343	10,860 to 13,343	10,860 to 13,343	10,860 to 13,343	8,734
2035 Households*	4,450 to 5,500	4,450 to 5,500	4,450 to 5,500	4,450 to 5,500	3,639
2035 Employees*	1,950 to 2,370	1,950 to 2,370	1,950 to 2,370	1,950 to 2,370	1,736
Build-Out Population	56,529	41,719	37,315	17,510	**
Build-Out Households	23,554	17,383	15,548	7,296	**
Build-Out Employees	15,340	10,227	27,050	9,750	**
Build-Out Years	80 to 125 years by 2095 to 2140		60 to 100 years by 2075 to 2115	30 to 50 years by 2045 to 2065	**

* Projections assume 1.5 percent to 2.5 percent annual growth rate for the action alternatives from the time the rezoning is adopted.

** For Alternative 1—No Action, only projections through the twenty-year horizon of 2035 were analyzed. Build-Out was not analyzed because the timeframe for this is unknown and difficult to approximate.

Table 3.2-14 Projected Net Increases in Population, Households, and Employment over Current (2014) Levels

	Alternative 4— Preferred Alternative	Phase 1 Zoning Area of Alternative 4	Alternative 3— Previous Most Growth	Alternative 2— Some Growth	Alternative 1— No Action
2035 Population	+2,916 to +5,399	+2,916 to +5,399	+2,916 to +5,399	+2,916 to +5,399	+790
2035 Households	+1,140 to +2,190	+1,140 to +2,190	+1,140 to +2,190	+1,140 to +2,190	+328
2035 Employees	+502 to +928	+502 to +928	+502 to +928	+502 to +928	+288
Build-Out Population	+48,585	+33,775	+29,371	+9,566	
Build-Out Households	+20,244	+14,073	+12,238	+3,986	
Build-Out Employees	+13,892	+8,779	+26,602	+8,302	

The increase in the number of households projected for the next twenty years would be 1,140 at 1.5 percent growth and 2,190 at 2.5 percent growth under all action alternatives. Although the market assessment projected a demand for 700 households through 2035, that was a conservative estimate assuming the subarea would absorb 15 percent of the forecasted housing growth of 4,657 units for all of Shoreline by 2035. If the subarea supported 25 percent of the city's forecasted housing growth, the projection would be 1,164 additional units. There is also the potential that housing growth could occur more rapidly than projected given Seattle population growth in recent years. Zoning that provides more capacity for growth than projected provides flexibility to respond to market characteristics and homeowner preferences in the subarea.

Consistency with Housing and Employment Policies and Housing Choice Opportunities

Consistency with plans and policies is addressed in Section 3.1 of this FEIS. It is worth emphasizing in this section, however, that Alternative 4—Preferred Alternative would provide the most long term housing choice opportunities, as well as the greatest potential for affordable housing. Over time, a wider variety of housing types (multifamily and single family) would be developed

and there would be an increase in number households and housing choices in the subarea.

The range of housing types would be affordable to a wider diversity of income levels. With proposed density and building heights that support mixed use development with housing over several stories, there is a high likelihood that a variety of for sale and for rent housing accommodations would be offered.

The City intends to apply a variety of requirements and incentives to encourage affordable housing in the subarea. In addition the City will partner with other organizations to promote greater housing choice and affordability. One incentive includes transportation impact fee ordinance adopted by City Council in August 2014 that included an exemption for affordable housing. Other incentives would include reduced parking requirements for affordable housing and bonus height/density allowances (refer to 3.2.3 Mitigation Measures).

Economic Development Opportunities

The greatest opportunities for residentially-driven economic development (more residents in the area spending at local businesses, shops, restaurants, etc.) would occur under Alternative 4. The greatest opportunity for employment and jobs related economic development would occur under Alternative 3, which assumes that higher buildings would be developed at the Shoreline Center site, including office and commercial uses in greater amount than under the other action alternatives. However, the projected number of jobs under Alternative 4 is substantial and would help the City achieve its employment growth targets and improve its jobs-to-housing ratio. Increased population base and households would support funding for capital improvements and new development would provide jobs for residents of the neighborhood, Shoreline, and the region.

Under Alternative 1, economic development growth through increases in population and job opportunities would be minimal.

Property Values and Property Taxes

How implementation of light rail and rezoning might affect property values and property taxes in the subarea was a common question of existing homeowners during the subarea planning process.

The potential for a new transit station to increase land values for properties adjacent to it is a topic that has been researched extensively over the past two decades in conjunction with the construction of numerous light rail and heavy rail systems across the US, often in the context of determining a “value premium” that can be “captured” to contribute to system financing. While use of “value capture” for financing is not envisioned for the Lynnwood Link extension, the research that has been conducted on this topic provides information to address questions raised by Shoreline residents near the new station site as to what impact the station might have on their property values, and potentially their property taxes.

Value Premium Impacts

A substantial amount of research and analysis has been undertaken by policy experts to track and document the effects of fixed guideway transit systems (e.g., term includes heavy rail and light rail) on property values. This topic has commanded so much attention because many policymakers believe that fixed guideway transit systems create a value premium, i.e. an increase in property values or related economic factors as a result of the increased access and desirability of the land served by the fixed guideway transit. If increased value can be linked to the transit investments, a portion of this increase sometimes has the potential to be “captured” up front in the transit development process, and converted to a funding source for public improvements that support the transit system. Numerous

studies have used statistical models and other methods to examine whether premiums exist for real estate prices or lease rates near transit stops, particularly for commuter and light rail systems. A summary of various fixed guideway transit value premium studies was published in 2008 by the Center for Transit Oriented Development, a non-profit organization associated with Reconnecting America. Entitled *Capturing the Value of Transit*, the publication reviews the concepts associated with this topic, and summarizes the findings of more than 20 analyses of the effect of fixed guideway transit on different land uses around the US. Many of these studies, in turn, identified a range of value premiums associated with fixed guideway transit, and utilized a variety of techniques to come to this conclusion.

A 1995 study, by Dr. John Landis at the University of California, Berkeley, found that values for single family homes within 900 feet of light rail stations in Santa Clara County were 10.8 percent lower than comparable homes located further away, and no value premium could be identified for commercial properties within one-half mile of BART stations in the East Bay of the San Francisco Bay Area. Compared to other research though, the potential for decrease in values is rare and likely influenced by other factors.

One of the most thorough analyses conducted after 2000, when contemporary fixed guideway transit systems had established their resurgence as a modern, desirable form of transportation in urban America, was conducted by Dr. Robert Cervero at the University of California, Berkeley. This study, a survey of other studies covering only housing value premiums associated with

fixed guideway transit, found that among the seven locations (Philadelphia, Boston, Portland, San Diego, Chicago, Dallas, and Santa Clara County), value premiums ranged from 6.4 to over 40 percent. The authors concluded that value premiums depended on a variety of factors, including traffic congestion, local real estate market conditions, and business cycles.

Transit in Europe can also provide insight to ways of measuring value capture. A study of 15 light rail systems in France, Germany, the United Kingdom, and North America measured housing prices, residential rent, office rent, and property values in each of the cities, concluding that there was a positive value premium in all but two cities. These two cities initially experienced negative value impacts from fixed guideway transit due to the noise associated with the light rail system. Technological improvements have since reduced noise levels and most modern light rail systems are fairly quiet.

One key aspect of the literature is the separation of fixed guideway transit's impacts on existing real estate versus its impacts on new development. In many situations, once a fixed guideway transit system is planned, local governments also increase zoning densities or implement policies that densify allowable development. This makes sense, because fixed guideway transit allows the movement of people without commensurate automobile traffic impacts. However, studies of value premiums often face the challenge of controlling the analysis for changes in zoning (to allow for denser development) and the effects of related development policies. Conversely, increases in allowable development through denser zoning, even in the absence of fixed guideway transit, will almost always result

in a higher land value, because a developer can build more units on the same site under the increase in allowed density.

Based on the analysis of value premiums, and considering the range of outcomes for previous projects, it would be reasonable to assume a potential value premium ranging from five percent up to 10 percent for properties located within one-half mile of the new transit station (one-half mile is considered the point at which resident interest in walking to a transit station substantially decreases). This value premium would represent a one-time increase in values that would be associated with a new transit station, and would also capture the benefit of changes in zoning and other City implementation actions to encourage TOD projects.

Property Tax Impacts

An increase in property values does not result in a proportional increase in property taxes (e.g., a five percent increase in property value leading to a five percent increase in property taxes) due to the overlapping effects of three state constitutional and statutory measures:

- One-Percent Constitutional Limit: the State Constitutions limits the regular combined property tax rate for all agencies to one percent, except for voter approved levies for schools or other agencies (such as the increase in the tax rate approved by Shoreline voters in 2010);
- Levy Increase Limit: Taxing districts, such as cities, are limited to a levy limit (limit on increase in property tax revenues) of no more than one percent of prior year property tax revenues, except for increases due to new construction, annexation, or voter approved increases; and

- Levy Amount Limit: There is a statutory limit on the maximum total levy for various types of taxing districts. The current maximum amount for cities is 0.59 percent of assessed value, excluding any voter-approved additional levies.

King County reassesses properties to fair market value on an annual basis. However, because of the One-Percent Constitutional Limit and Levy Amount and Levy Increase Limits, an increase in property values and assessed values does not automatically lead to an equivalent increase in property taxes.

For example, each taxing district must on an annual basis adjust its levy (property tax) rate so that the increase in property taxes, excluding new construction, annexations, or voter-approved increases, does not exceed one percent. Other adjustments to levy rates may need to be made to stay within the One-Percent Constitutional and Levy Amount limits.

As described previously, there may be a potential for a *one-time* increase of between five to ten percent in property values within one-half mile of the NE 185th Street Station. The one-time increase in property values will need to be evaluated against overall changes in Shoreline property values to determine how it would impact property taxes for homeowners around the new 185th Street Station. For example, if the new NE 185th Street Station leads to a five percent increase in value, but this occurs in a hot real estate market where property values are increasing at a faster rate on an annual basis, the increase in assessed values for properties around the station may be driven more by market conditions than the new transit station.

Only in a flat market could homeowners around the new station possibly experience a one-time increase in property tax rates that could approach the rate of increase in property values. It should be noted that an increase in property values represents a 100 percent increase in homeowner equity.

Because of the complexity of the overlapping limits, it is not possible to make a specific forecast for how much property taxes might increase around the station area. Instead, one would need to run a series of multiple scenarios with varying assumptions for market-based increases in property values, the increase in the value of properties around a new transit station, and evaluation of how the constitutional and statutory limit affect Shoreline to come up with a projection for a range of possible outcomes. For homeowners who might be severely affected by a property tax increase, King County operates several programs to assist homeowners who may face difficulty paying property taxes for any reason. This includes a property tax exemption for senior citizens and disabled persons, based on household income, that freezes valuation and can create some exemptions from regular property taxes.

Another program provides property tax deferrals for homeowners with limited income. The State also provides a property tax deferral program, administered by county assessors, that allows for full or partial deferral of property taxes. Another State program provides means-tested direct grant assistance for property tax payments to seniors and disabled persons who are widows or widowers of veterans, which for eligible households could help offset an increase in property taxes if it occurs.

3.2.3 Mitigation Measures

Affordable Housing

Alternative 4—Preferred Alternative, there would still be an ongoing need to require and encourage affordable housing in the subarea. The City has drafted specific policies and development provisions for the subarea plan related to affordable housing. These are provided on the following pages for reference.

Draft Subarea Plan Policies for Housing

- Develop the systems necessary to implement and administer the City's new affordable housing program.
- Investigate financing and property aggregation tools to facilitate creation of affordable housing.

Note: This policy should not be construed to mean use of eminent domain. It provides guidance to examine potential tools recommended by partner organizations, which were more complex than those included in draft Development Code regulations for the subarea plan.

Draft Development Code Provisions Related to Housing

20.20.010 A definitions.

Affordable Housing

Housing reserved for occupancy to households whose annual income does not exceed a given percent of the King County median income, adjusted for household size, and have housing expenses no greater than thirty (30) percent of the same percentage of median income. For the purposes of Title 20, the percent of King County median income that is affordable is specified in SMC 20.40.235.

20.20.016 D definitions.

Dwelling, Live/Work

Live-work unit means a structure or portion of a structure: (1) that combines a commercial activity that is allowed in the zone with a residential living space for the owner of the commercial or manufacturing business, or the owner's employee, and that person's household; (2) where the resident owner or employee of the business is responsible for the commercial or manufacturing activity performed; and (3) where the commercial or manufacturing activity conducted takes place subject to a valid business license associated with the premises.

20.20.024 H definitions.

Housing Expenses, Ownership Housing

Includes mortgage and mortgage insurance, property taxes, property insurances and homeowner's dues.

Housing Expenses, Rental Housing

Includes rent and appropriate utility allowance.

Household Income

Includes all income that would be included as income for federal income tax purposes (e.g. wages, interest income, etc.) from all household members over the age of eighteen (18) that reside in the dwelling unit for more than three (3) months of the year.

20.30.355 Development Agreement (Type L).

C. Development Agreement Contents for Property Zoned MUR-85' in order to achieve increased development potential: Each Development Agreement approved by the City Council for property zoned MUR-85' shall contain the following:

1. 20 percent of the housing units constructed onsite shall be affordable to those earning less than 60 percent of the median income for King County adjusted for household size for a period of no less than 50 years. The number of affordable housing units may be decreased to 10 percent if the level of affordability is increased to 50% of the median income for King County adjusted for household size. A fee in lieu of constructing the units may be paid into the City's affordable housing program instead of

constructing affordable housing units onsite. The fee is specified in SMC Title 3.

20.40.235 Affordable housing, Light Rail Station Subareas.

A. The purpose of this index criterion is to implement the goals and policies adopted in the Comprehensive Plan to provide housing opportunities for all economic groups in the City's Light Rail Station Subareas. It is also the purpose of this criterion to:

1. Ensure a portion of the housing provided in the City is affordable housing;
2. Create an affordable housing program that may be used with other local housing incentives authorized by the City Council, such as a multifamily tax exemption program, and other public and private resources to promote affordable housing;
3. Use increased development capacity created by the Mixed Use Residential zones to develop voluntary and mandatory programs for affordable housing.

B. Affordable housing is permitted and voluntary in MUR-35' and MUR-45'. Affordable housing is required in MUR-85'. The

following provisions shall apply to all affordable housing units required by, or allowed through, any provisions of the Shoreline Municipal Code:

1. The City provides various incentives and other public resources to promote affordable housing.

C. Mixed Use Residential zone affordable housing requirements.

The following provisions shall apply to all affordable housing units required by, or created through, any incentive established in the Shoreline Municipal Code, unless otherwise specifically exempted or addressed by the applicable code section for specific affordable housing programs or by the provisions of an approved development agreement:

1. Duration: Affordable housing units shall remain affordable for a minimum of fifty (50) years from the date of initial owner occupancy for ownership affordable housing. At the discretion of the Director a shorter affordability time period, not to be less than thirty (30) years, may be approved for ownership affordable housing units in order to meet federal financial underwriting guidelines.

Specific regulations providing for affordable housing are described below:

Location	Use	Targeted Affordability Level and Incentives	Mandatory or Voluntary Program
Mixed Use Residential – 85'	Residential	<p>15 percent of rental units are affordable to families making 70 percent or less of the median income for King County adjusted for household size; or</p> <p>15 percent of all owned units are affordable to households earning 80 percent or less of the median income for King County adjusted for household size.</p> <p>Incentives provided: Eligible for Property Tax Exemption Program and entitlement of 85-foot height and no density limits.</p> <p>Bonus incentive: 10 percent of the rental units affordable to households earning 80 percent or less the median income for King County adjusted for household size; or 10 percent of individual for sale/ownership units affordable to households earning 90 percent the median income for King County adjusted for household size for the first 300 units in the MUR-85' zone.</p>	Mandatory*
Mixed Use Residential – 45'	Residential	<p>15 percent of rental units are affordable to households earning 60 percent or less of the median income for King County adjusted for household size.</p> <p>15 percent of all for sale/individual ownership units are affordable to households earning 80 percent or less of median income for King County adjusted for household size.</p> <p>Incentive: Eligible for: Property Tax Exemption Program, permit fee reduction.</p>	Voluntary

Mixed Use Residential – 35'	Residential	10 percent of rental units are affordable to families making 60 percent or less of the median income for King County adjusted for household size; or 10 percent of all for sale/individual ownership units are affordable families making 80 percent or less of the median income for King County adjusted for household size. Incentive: Eligible for: Property Tax Exemption Program, permit fee reduction.	Voluntary
Mixed Use Residential – 85' w/ Development Agreement	Residential	20 percent of housing units constructed for rent or sale/individual ownership on site that are affordable to households earning 60 percent or less of the median income for King County adjusted for household size; or 10 percent of housing units constructed for rent or sale/individual ownership on site that are affordable to households earning 50 percent of the King County adjusted for household size. Incentive: Height may be increased above 85 foot limit; eligible for Property Tax Exemption Program.	Mandatory*

* Payment in lieu of constructing mandatory units is available.
See SMC 20.40.235(E)(1)

2. Designation of Affordable Housing Units: The Director shall review and approve the location and unit mix of the affordable housing units, consistent with the following standards, prior to the issuance of any building permit:

a. Location: The location of the affordable housing units shall be approved by the City, with the intent that they are generally mixed with all other dwelling units in the development.

b. Tenure: The tenure of the affordable housing units (ownership or rental) shall be the same as the tenure for the rest of the housing units in the development.

c. Size (Bedroom): The affordable housing units shall consist of a range of the number of bedrooms that are comparable to the units in the overall development.

- d. Size (Square Footage): Affordable housing units shall be the same size as market housing units with the same number of bedrooms unless approved by the Director. The Director may approve smaller units when: (a) the size of the affordable housing is at least ninety (90) percent of the size of the market housing in the project with the same number of bedrooms; and (b) the affordable units are not less than five hundred (500) square feet for a studio unit, six hundred (600) square feet for a one (1) bedroom unit, eight hundred (800) square feet for a two (2) bedroom unit and one thousand (1,000) square feet for a three (3) bedroom unit.
3. Timing/Phasing: The affordable housing units shall be available for occupancy in a time frame comparable to the availability of the rest of the dwelling units in the development unless the requirements of this section are met through SMC 20.40.235(E), Alternative compliance. The affordable housing agreement provided for in SMC 20.40.235(D) shall include provisions describing the phasing of the construction of the affordable units relative to construction of the overall development. If the development is phased, the construction of the affordable units shall be interspersed with the construction of the overall development.
4. Development Standards:
- a. Off-Street Parking: Off-street parking shall be provided for the affordable housing units consistent with SMC 20.50.390 unless reduced by the Director in accordance with SMC 20.50.400.
- b. Recreation Space: The recreation/open space requirements for housing units affordable to families making 60% or less of Adjusted Median Income for King County shall be calculated at fifty (50) percent of the rate required for market housing.
5. Depending on the level of affordability provided, the affordable housing units may be eligible for transportation impact fee waivers as provided in SMC 12.40.070(G).
6. In the event of a fractional affordable housing unit, payment in lieu in accordance with SMC 20.40.235(E)(1) is allowed for the fractional unit.
- D. Affordable housing agreement.** An affordable housing agreement shall be recorded with the King County Recorder's Office prior to the issuance of a building permit for any development providing affordable housing pursuant to the requirements or incentives of the Shoreline Municipal Code.
1. The recorded agreement shall be a covenant running with the land and shall be binding on the assigns, heirs, and successors of the applicant.
2. The agreement shall be in a form approved by the Director and the City Attorney and shall address price restrictions, homebuyer or tenant qualifications, affordability duration, phasing of construction, monitoring of affordability and any other topics related to the provision of the affordable housing units.

3. The agreement may, at the sole discretion of the City, establish a monitoring fee for the affordable units. The fee shall cover the costs to the City to review and process documents to maintain compliance with income and affordability restrictions of the agreement.
4. The City may, at its sole discretion, agree to subordinate any affordable housing regulatory agreement for the purpose of enabling the owner to obtain financing for development of the property.

E. Alternative compliance. The City's priority is for residential and mixed use developments to provide the affordable housing on site. The Director, at his/her discretion, may approve a request for satisfying all or part of a project's on-site affordable housing with alternative compliance methods proposed by the applicant. Any request for alternative compliance shall be submitted at the time of application and must be approved prior to issuance of any building permit. Any alternative compliance must achieve a result equal to or better than providing affordable housing on site.

1. Payment in Lieu of constructing mandatory affordable units – Payments in lieu of constructing mandatory affordable housing units are subject to the following requirements:
 - a. Payments in lieu of constructing for sale/individual ownership units shall be based on the difference between the price of a typical market rate unit, and the price an income constrained household as defined in SMC 20.40.235(B)(1) can pay for the same unit adjusted for

household size. Payments in lieu of construction for rental units shall be based on the present net value of the difference between the market and affordable rents as defined in SMC 20.40.235(B)(1) for the same units adjusted for household size. The fee shall be updated in the fee ordinance as part of the City's budget process.

b. The payment obligation shall be due prior to issuance of any certificate of occupancy for the project. Collected payments shall be deposited in the City's Housing Trust Fund account.

2. Any request for alternative compliance shall:

- a. Include a written application specifying:
 - i. The location, type and amount of affordable housing; and
 - ii. The schedule for construction and occupancy;
- b. If an off-site location is proposed, the application shall document that the proposed location:
 - i. Is within a ¼ mile radius of the project triggering the affordable housing requirements or the proposed location is equal to or better than providing the housing on site or in the same neighborhood;
 - ii. Is in close proximity to commercial uses, transit and/or employment opportunities;

c. Document that the off-site units will be the same type and tenure as if the units were provided on site; and

d. Include a written agreement, signed by the applicant, to record a covenant on the housing sending and housing receiving sites prior to the issuance of any construction permit for the housing sending site. The covenants shall describe the construction schedule for the off-site affordable housing and provide sufficient security from the applicant to compensate the City in the event the applicant fails to provide the affordable housing per the covenants and the Shoreline Municipal Code. The intent is for the affordable housing units to be provided before, or at the same time as, the on-site market housing. The applicant may request release of the covenant on the housing sending site once a certificate of occupancy has been issued for the affordable housing on the housing receiving site.

20.40.245 Apartments

Apartments are allowed in the MUR zones. Microapartments are not allowed in the MUR zones. Microapartments are defined as a structure that contains single room living spaces with a minimum floor area of 120 square feet and a maximum floor area of 350 square feet. These spaces contain a private bedroom and may have private bathrooms and kitchenettes (microwaves, sink, and small refrigerator). Full scale kitchens are not included in the single room living spaces. These single room living spaces share a common full scale kitchen (stove, oven, full sized or multiple refrigeration/freezers), and may share other common areas such as bathroom and shower/bath facilities, recreation areas, and/or eating spaces.

Refer to Title 20 Development Code of the Shoreline Municipal Code, and in particular 20.30 General Development standards for additional information pertaining to regulations for housing and mixed use development.

Other Recommended Mitigation Measures

- The City would continue to monitor and support economic development opportunities in the subarea.
- The City would explore public/private and public/public partnerships for redevelopment that might help to encourage and catalyze growth.
- The City would prioritize investment of capital improvements related to transportation, infrastructure, public parks, and other facilities in the subarea to support growth for the next twenty years and over the long term.

3.2.4 Significant Unavoidable Adverse Impacts

Implementation of Alternative 4—Preferred Alternative would provide increased opportunities for housing, including affordable housing and a variety of housing choices to fit various income levels. Redevelopment also would create jobs and economic development opportunities over time.

With the planned growth in the subarea, some single family homeowners may decide to move because of concerns over how the neighborhood may change over time, and potential increases in property values could help them in this process. On the other

hand, if property taxes increase, this could be an added burden on some residents.

Overall with the gradual pace of growth expected, continual monitoring of conditions in the subarea by the City, and implementation of the mitigation measures, significant adverse unavoidable impacts would not be anticipated.

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 adopted transportation plans. It includes an assessment of the current infrastructure and operating conditions for all transportation modes. Additionally, in this section, impacts to transportation facilities and services resulting from the proposed land use alternatives will be assessed to determine applicable mitigation measures needed to accommodate the changes. In order to provide relevant details and constructive analysis, the project team conducted field visits, utilized existing data (such as traffic counts and transit timetables) and reviewed relevant plans for the area, including:

- 2013 Sound Transit Draft Environmental Impact Statement (DEIS) for the Lynnwood Link Extension
- City response letter to the 2013 Sound Transit Draft Environmental Impact Statement (DEIS) for the Lynnwood Link Extension

- 2011 Shoreline Transportation Master Plan (TMP) and amendments
- 2012 Shoreline Comprehensive Plan (CP)
- City of Shoreline Vision 2029 Plan
- City of Shoreline 2014-2019 Capital Improvement Plan (CIP)
- City of Shoreline 2015-2020 Transportation Improvement Plan (TIP)
- 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
- Point Wells Expanded Traffic Impact Analysis Report 2011

Existing Street Network

Regional Access

Interstate 5 (I-5) is a limited access freeway classified as a highway of statewide significance. It provides access from the subarea south to Northgate, the University District, Capitol Hill, 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 to I-5 from the subarea are the NE 145th Street, NE 175th Street, and NE 205th Street interchanges.

Subarea Street Network

SR-99/Aurora Avenue N is a managed access highway and is also classified as a highway of statewide significance. It serves as a principal arterial in Shoreline. It lies directly west of the subarea, providing north-south mobility and business access along the corridor.

The principal arterials in the subarea are N-NE 175th Street and 15th Avenue NE, which form the southern and eastern edges. Minor arterials within the subarea 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 classifications of the roadways within the subarea. The proposed light rail station location is identified on the map along with the proposed parking lot to the west of I-5.

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-NE 195th Street (pedestrian/bicycle only).

Existing Roadway Operations

Concurrency Management System

The Washington State 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. The City of Shoreline has an adopted concurrency methodology to balance growth, congestion, and capital investment.

Level of Service Criteria for Intersections

A common 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, unsignalized intersecting arterials, and roadway segments on Principal and Minor Arterials¹.

¹ 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.

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 and Minor arterials within the City of Shoreline is 0.9. 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. Within the subarea, the most congested corridors include N-NE 175th Street and Meridian Avenue N, with V/C ratios in the PM peak period 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.

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) during the PM peak period.

² Using the HCM 2010 methodology

Collision History

As shown in the **Figure 3.3-4**, there are a relatively low number of vehicle collisions within the subarea, 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. Between 2008 and 2011, this 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 subarea for the time period of 2008 to 2011. All other intersections in the subarea 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. Bicycle accidents occurred in the subarea at the intersections of NE 175th Street and 5th Avenue NE, N 175th Street and Meridian Avenue N, and N 185th Street at Meridian Avenue N³.

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 City of Shoreline 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 City of Shoreline 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 Subarea

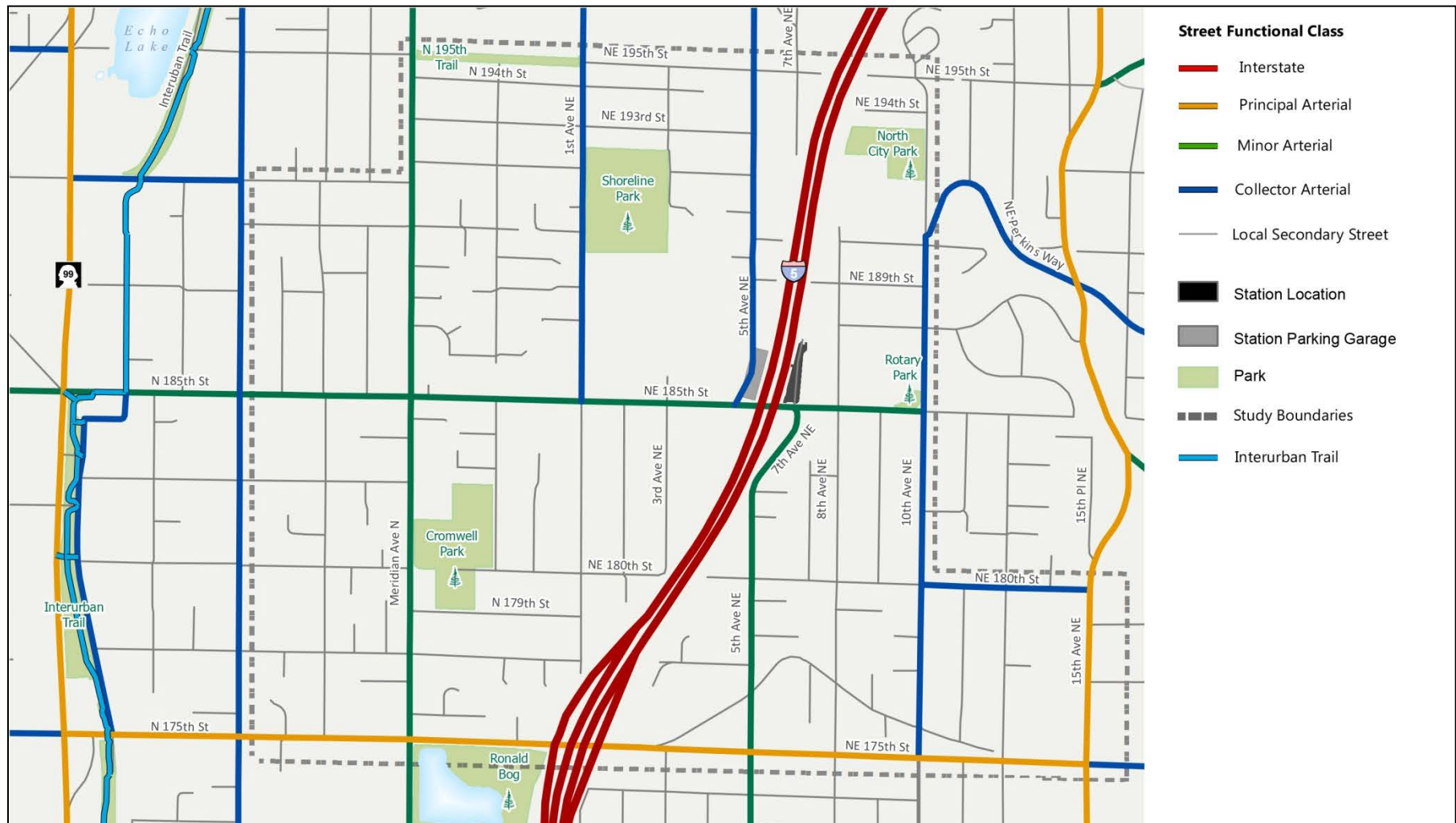


Figure 3.3-2 Average Daily Traffic and PM Peak Congestion (Existing Conditions)

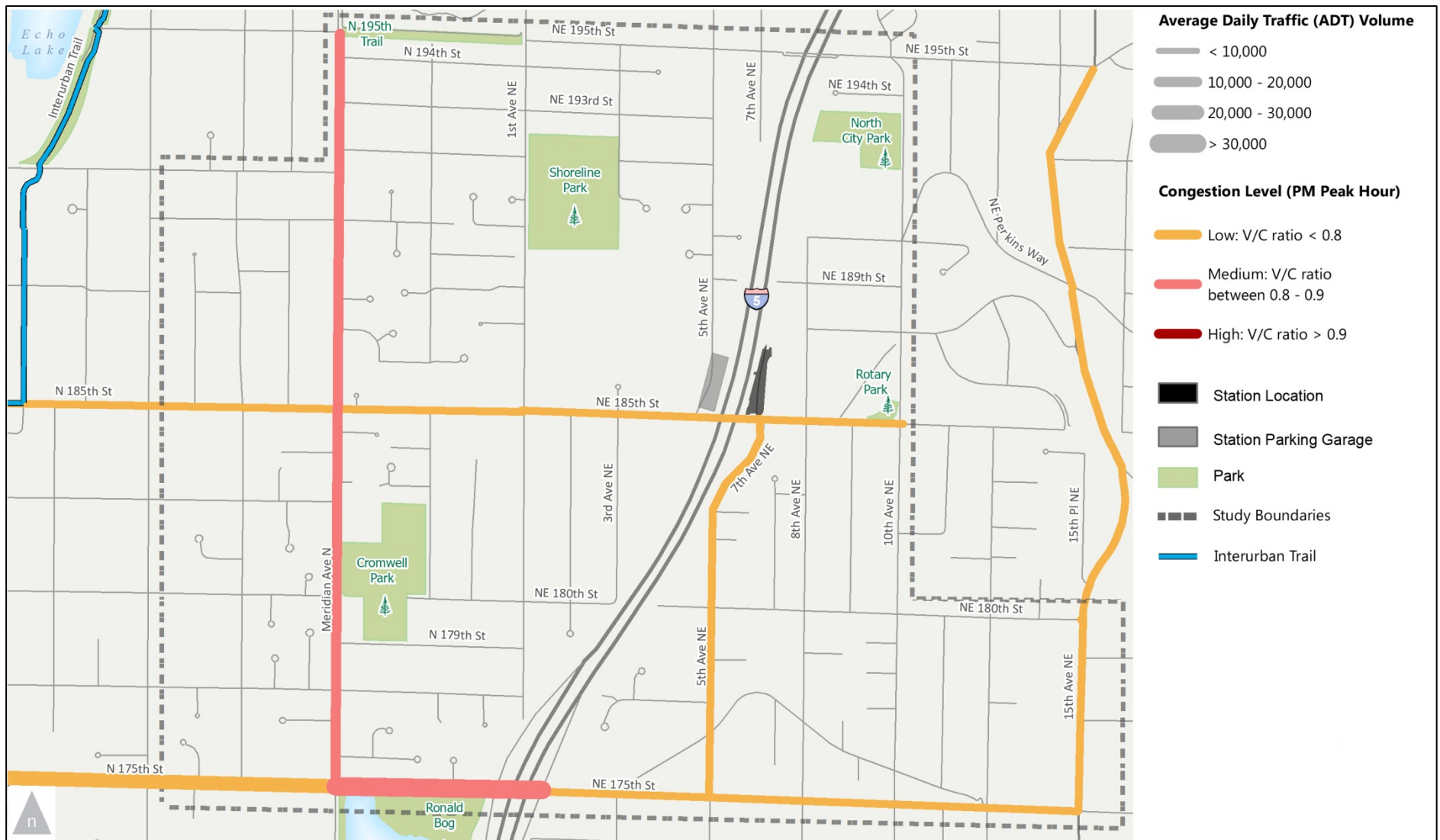


Figure 3.3-3 Intersection Level of Service (Existing Conditions)

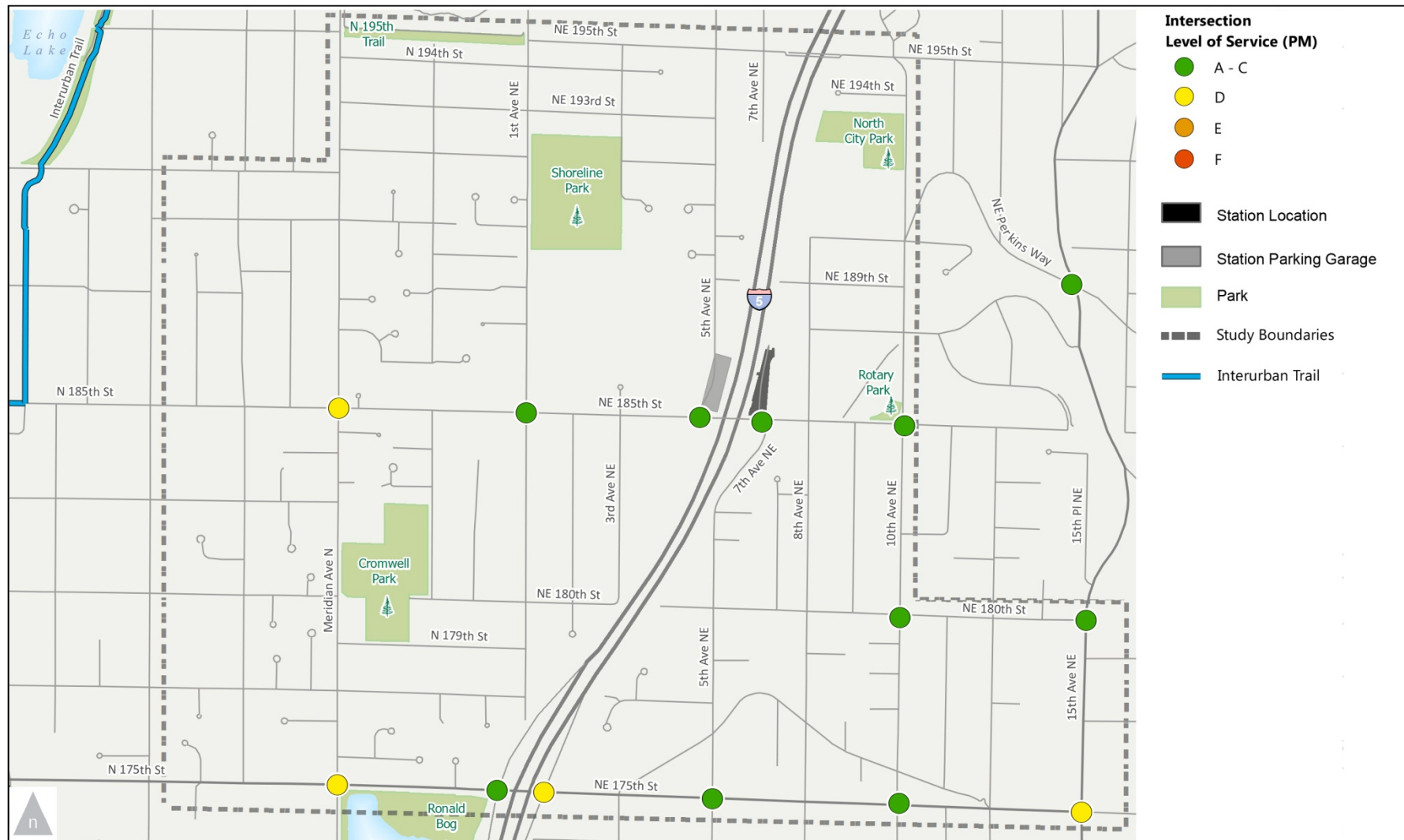
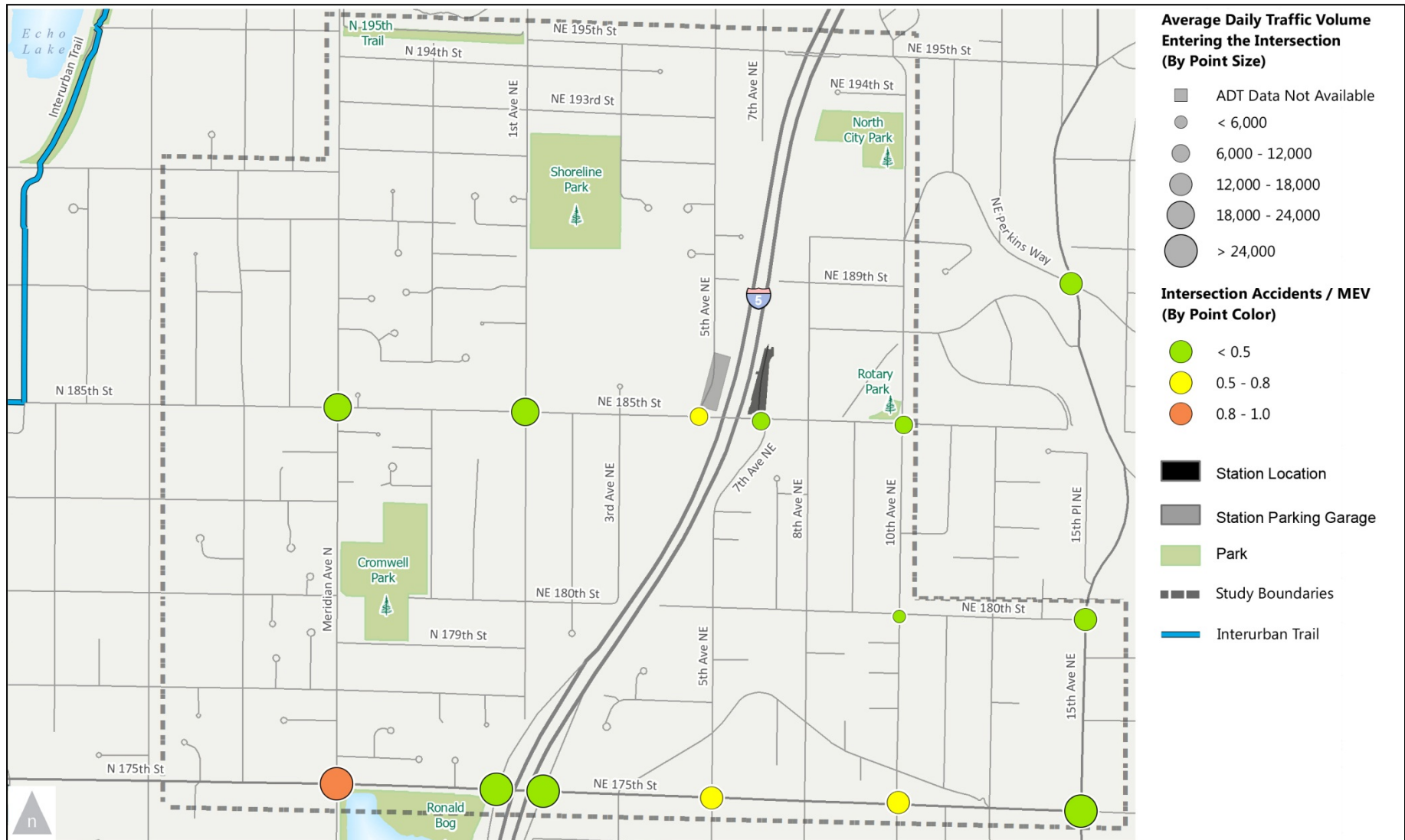


Figure 3.3-4 Accident Rate (Existing Conditions)



Transit Service Provision

Existing Conditions

The transit coverage within the subarea 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. Most of the area is within a half-mile walk from a transit stop served during the peak periods. Direct service to the future light rail station location is currently 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. The North City area along 15th Avenue NE is served by 30 minute peak and midday headways, and the combined frequency on NE 175th Street between 5th Avenue NE and 15th Avenue NE is every 15-20 minutes 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, which provides service to Everett along SR-99, and this assumption was incorporated into the Sound Transit DEIS. The Sound Transit DEIS analysis also assumed that five King County Metro routes would serve the 185th Street station with 15 minute peak headways and 15-30 minute off-peak headways.

Table 3.3-3 Existing Transit Service

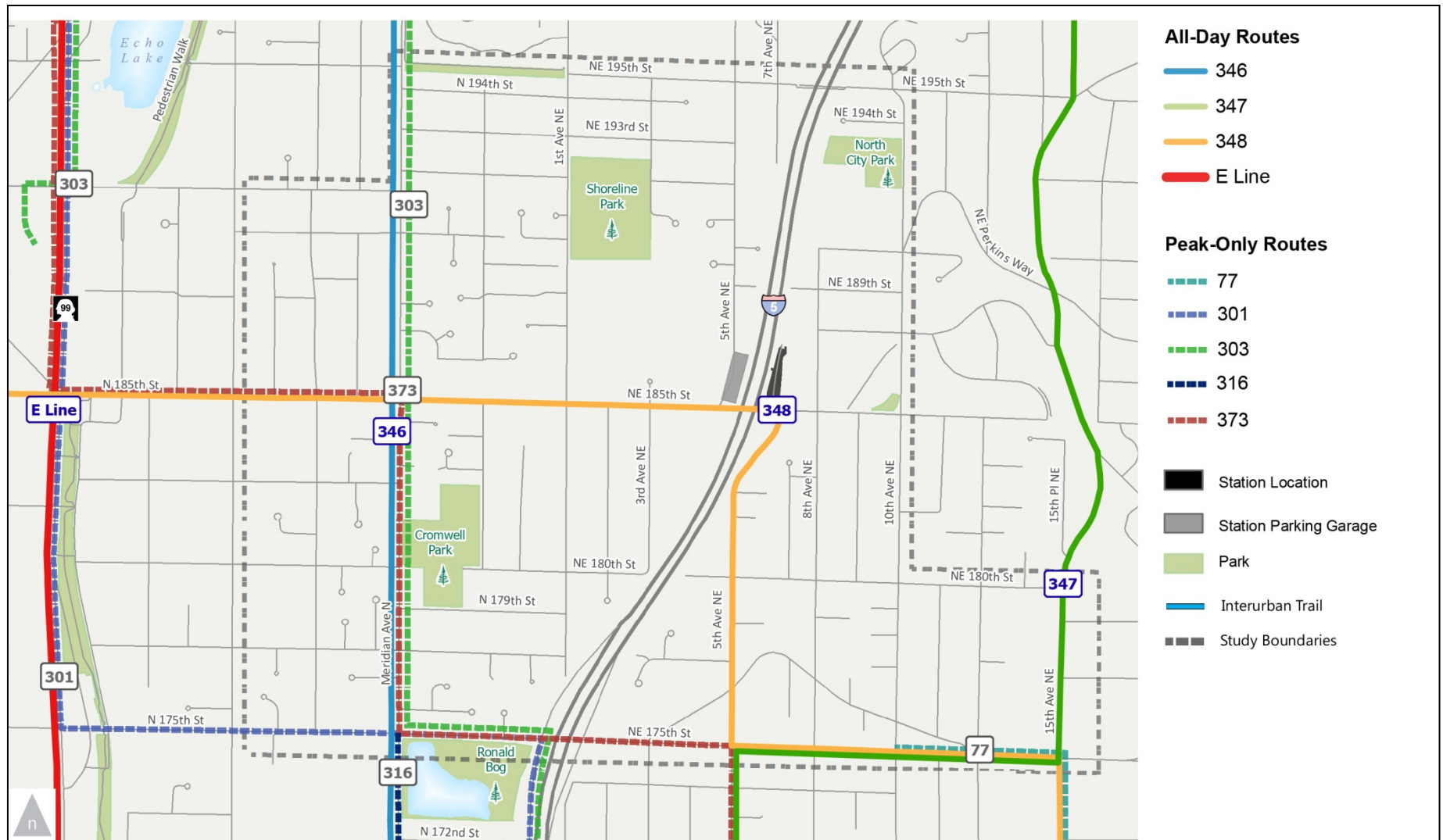
Route	Weekday Headways (in minutes)				Destinations Served
	AM Peak (6-9am)	Midday	PM Peak (3-6pm)	Evening	
All-day Routes					
346	30	30	30	60	Aurora Village Transit Center, Meridian Park Northgate
347	30	30	30	60	Northgate, Ridgecrest, North City, Mountlake Terrace
348	30	30	30	60	Richmond Beach, North 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, Aurora Village Transit Center, Shoreline Park and Ride, 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, Maple Leaf, University District,

Source: King County Metro, 2014

*One outbound trip to Shoreline after 6 pm

** Provides limited bi-directional service during the AM and PM peak periods

Figure 3.3-5 Existing Transit Service



Existing Parking Conditions

Existing On-Street Parking Conditions

A substantial portion of the subarea 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 analysis 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 EIS during the periods in which residential on-street parking utilization is typically higher, such as evenings and weekends. Within the entire subarea, 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 non-arterial 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 subarea. 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 capacity on weekdays⁷. As part of the Lynnwood Link Extension Preferred



An example of low on-street parking utilization along residential streets in the station area

Alternative, a 500 parking space facility potentially 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. The Sound Transit DEIS assumed that the garage would be fully utilized during the weekday 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 estimated that 200 vehicles would enter the garage and 50 would exit.

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.

⁷ King County Metro Park and Ride utilization report First Quarter 2014

Existing Pedestrian and Bicycle Facilities

Existing Conditions

The subarea includes a variety of bicycle facility types, including sharrows, bike lanes, and separated paths. **Figure 3.3-6** details the current sidewalk and bicycle infrastructure while highlighting some gaps in connectivity within the station area. Currently, sharrows are present on some streets but there are no sidewalks or bicycle lanes connecting the North City area or areas south of NE 175th Street 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).

The neighborhoods within the subarea were primarily developed from the 1940s through the 1970s when the area was part of unincorporated King County. The street standards at that time did not require sidewalks, and as such, most of the non-arterial streets today do not have them. Bicycle lanes are not present on non-arterial streets as well.

When the City of Shoreline incorporated in 1995, it assumed jurisdiction of this area. The City works with the community to identify and prioritize capital transportation and infrastructure improvements throughout the city through development of the TMP, Transportation Improvement Plan, and Capital Improvement Plan.

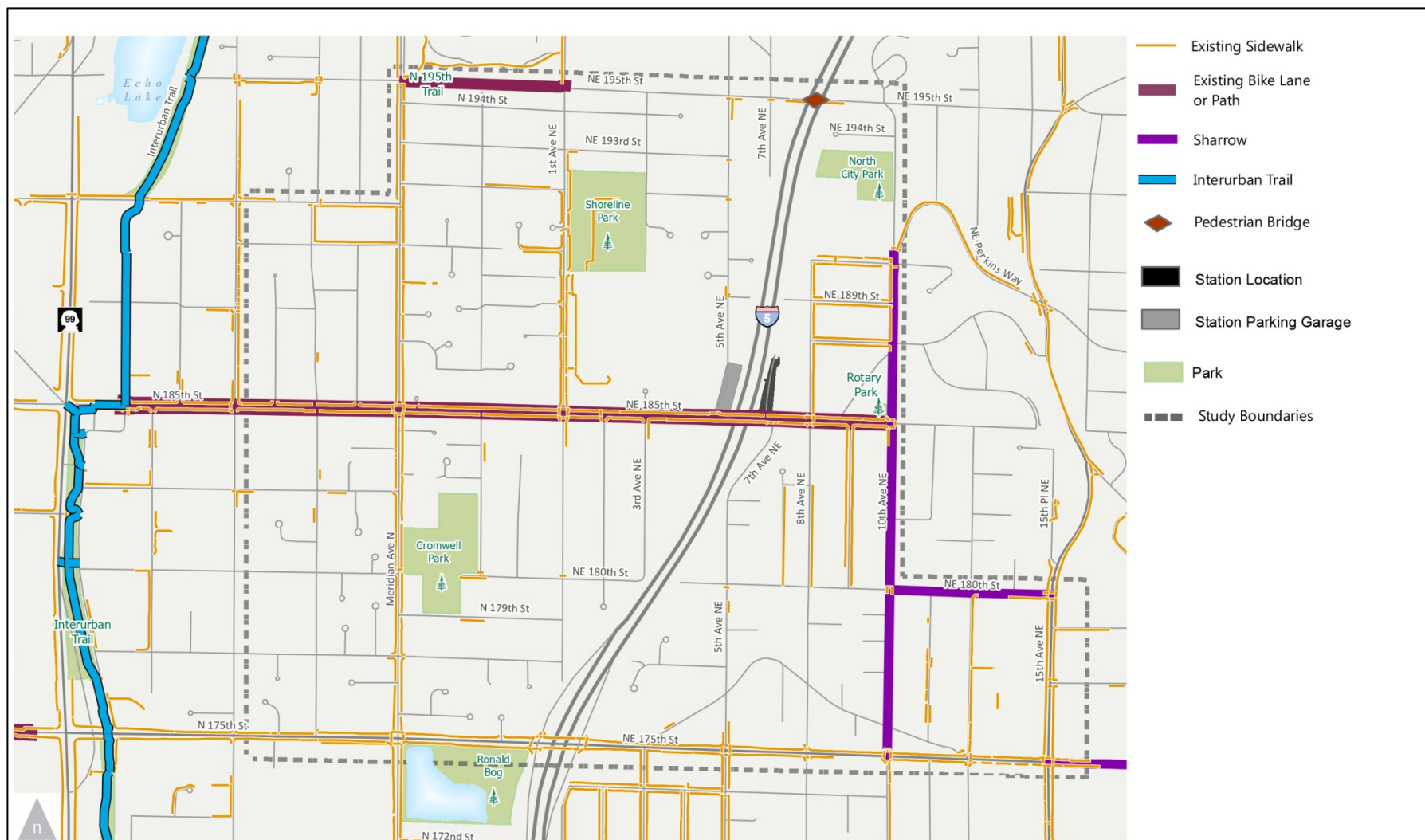


Existing N 195th Street Trail



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 nonmotorized improvements within the subarea, some of which have recently been completed or are currently funded. The Interurban-Burke Gilman Connector on N-NE 195th Street, 10th Avenue NE and NE Perkins Way, as shown in **Figure 3.3-7**, is currently funded. This connector is a combination of on-street facilities, 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. This plan includes both existing sidewalks as well as those needed in order to create a complete pedestrian network in Shoreline. Planned sidewalks would provide a connection from the light rail station to the North City neighborhood through NE 180th Street and 10th Avenue NE. The Lynnwood Link Extension Preferred Alternative includes pedestrian improvements to the NE 185th Street bridge in order to provide a more comfortable walking environment and to connect the parking garage with the station.

Vehicle Traffic Improvements

Figure 3.3-9 highlights projects identified in the TMP that are needed to accommodate future planned growth and maintain the City's adopted transportation level of service standard. The two intersections of N 175th Street and N 185th Street along Meridian

Avenue N have been identified for improvements (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. N 175th Street would have a similar treatment from Stone Avenue N to Meridian Avenue N. The TMP also identifies rechannelization of NE 185th Street with a two-way left turn lane from 1st Avenue NE to 10th Avenue NE to accommodate future traffic growth. 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 / 7th 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 Transportation Master Plan

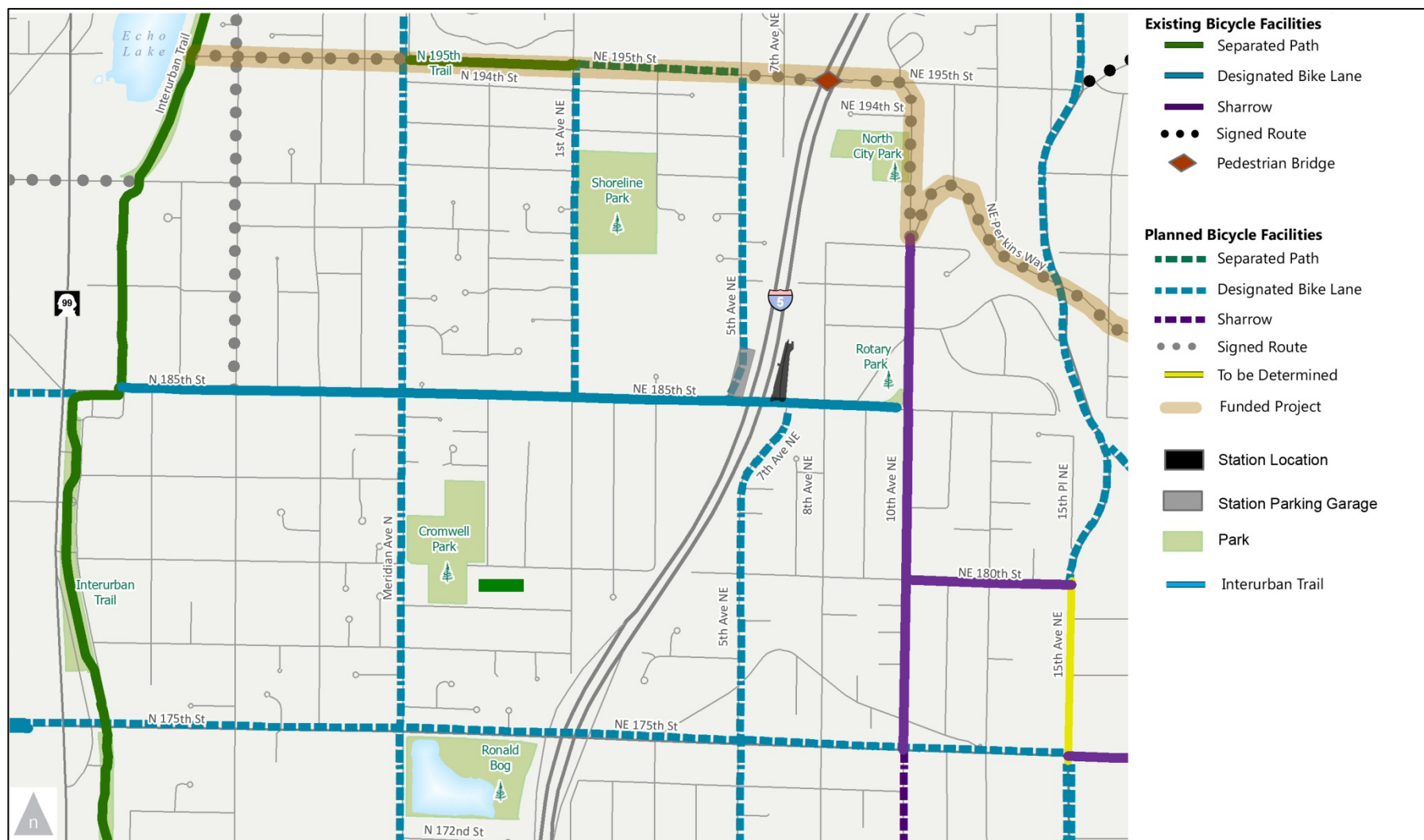


Figure 3.3-8 Pedestrian System Plan from the Transportation Master Plan

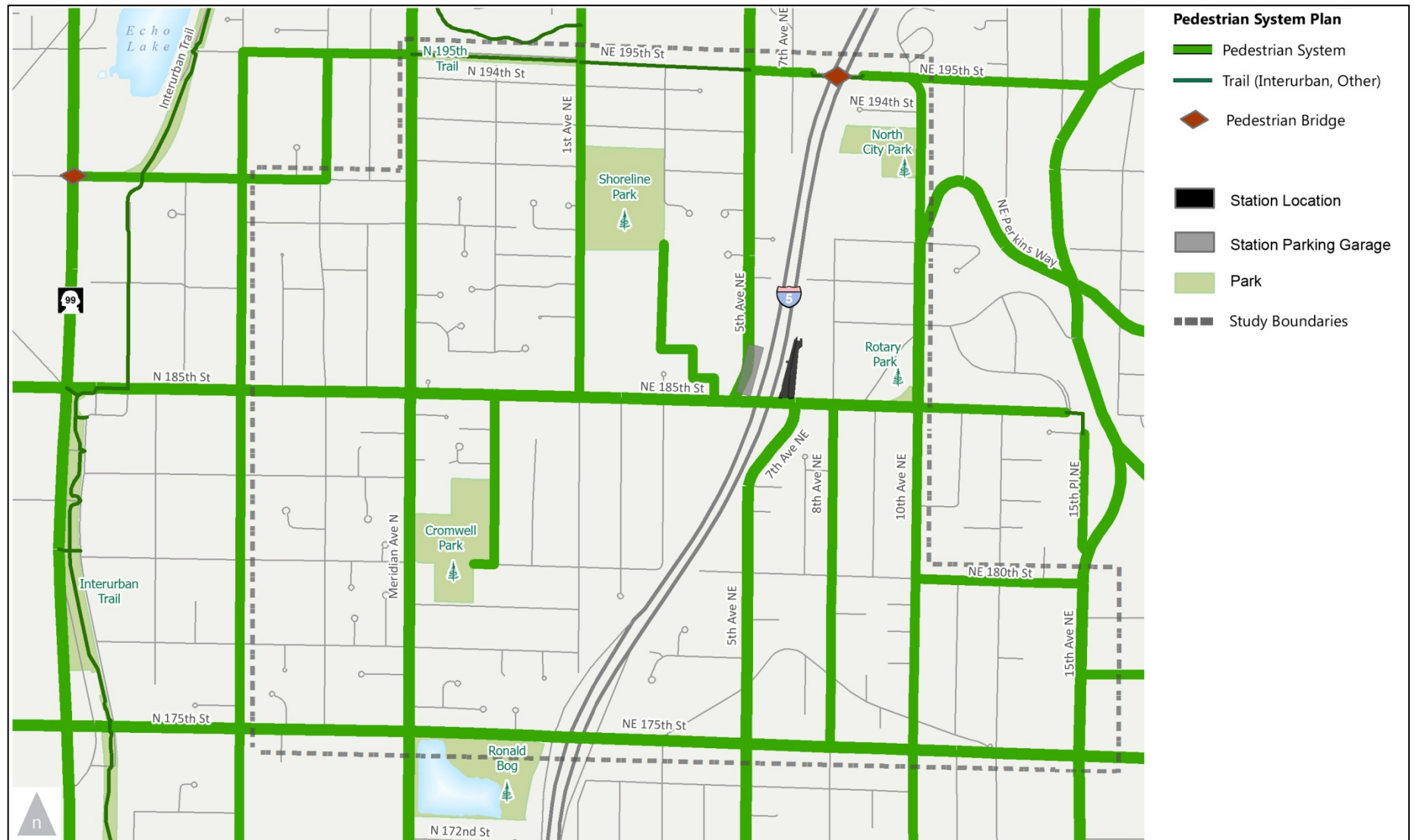
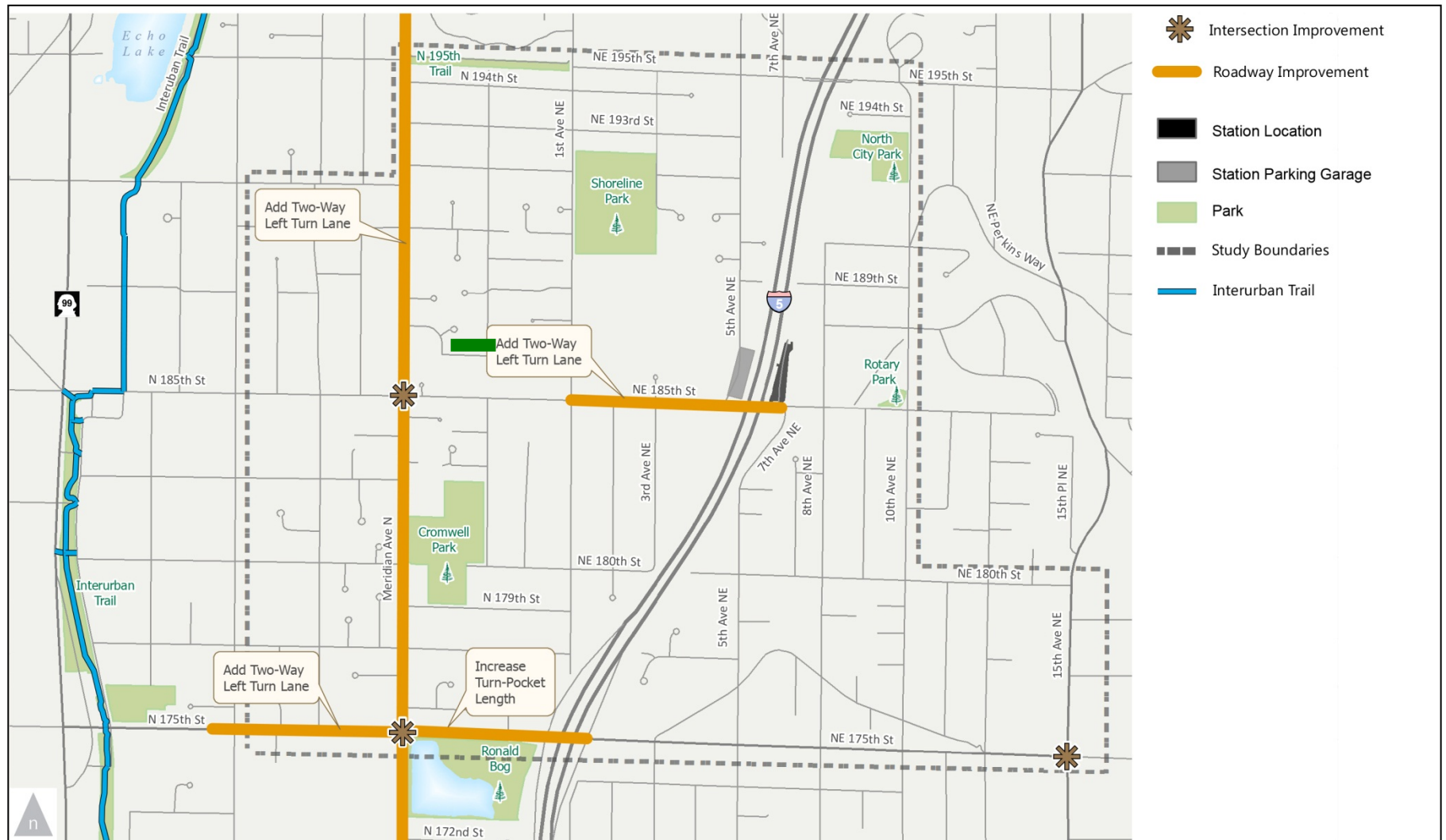


Figure 3.3-9 Roadway Improvements to Accommodate Growth Identified in the Transportation Master Plan



3.3.2 Analysis of Potential Impacts

Introduction

This section describes potential impacts as a result of changes in land use within the subarea. It includes a description of the forecast methodology as well as a detailed account of the results of the transportation impact analysis. The four alternatives evaluated during this process included:

- **Alternative 4—Preferred Alternative**, which envisions an additional 23,554 households and 15,340 jobs total in the subarea, building out in 80 to 125 years or more.
- **Twenty Year/2035**, for which the analysis addresses potential impacts through 2035 and provides recommended mitigation measures/capital improvement projects to support this growth (4,450 to 5,500 households and 1,950 to 2,370 jobs). Given the growth rate applied, the twenty year projection would be the same regardless of which action alternative is implemented.
- **Alternative 3—Previous Most Growth**, which envisions an additional 15,548 households and 27,050 jobs total in the subarea, building out in 60 to 100 years or more.
- **Alternative 2—Some Growth**, which envisions an additional 7,296 households and 9,750 jobs total in the subarea, building out in 30 to 50 years or more.
- **Alternative 1—No Action**, which assumes 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.

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 subarea. The 2011 TMP update included forecasts of year 2030 traffic volumes. 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 multiple 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 development⁸. Trips forecast in the Point Wells Expanded Traffic Impact Analysis were added on top of the alternatives, including Alternative 4—

⁸ The Point Wells planned mixed-use development is a 61 acre site located in an unincorporated portion of Snohomish County adjacent to the northern border of Shoreline and the Puget Sound.

Preferred Alternative, Alternative 3—Previous Most Growth, Alternative 2—Some Growth, and Alternative 1—No Action.

To analyze how the three action alternatives (Alternatives 4, 3 and 2) would result in different travel patterns due to their mix of land uses and connectivity, the project team used an innovative trip generation analysis technique known as the mixed-use development

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.

(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 **density**, **diversity** of land uses, **destinations** (accessibility), **development** scale, **pedestrian** and bicycle **design**, **distance** to transit services, and **demographics**. ***The model correlates density and high-capacity transit ridership, reinforcing how density can support transit.***

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 full development within the subarea. As the table shows, the proposal to increase land use intensity for the Some Growth, Previous Most Growth, and Preferred Alternatives results in a higher proportion of short distance trips that could be made via walking, bicycling, and transit.

To evaluate how streets and intersections in the subarea would operate under the alternatives, traffic volume estimates were developed with the following methodology. For the No Action Alternative, traffic volumes were generated from the "Dispersed" land-use model. The analysis for each of the growth alternatives utilized the No Action traffic volumes plus the additional auto trips related to the land use changes for that alternative. Note that distribution of trips was based on existing travel patterns and expected shifts as a result of regional traffic growth⁹.

The MXD method was also applied to the alternatives to evaluate transportation-related greenhouse gas (GHG) emissions associated with each. This GHG calculation considers emissions from motor vehicles only and does not include other emissions related to the built environment. While the Preferred Alternative resulted in more GHG emissions than the No Action Alternative, it should be noted that the No Action Alternative assumed substantially less overall housing and employment.

⁹ With adjustments for the extra five years of traffic growth and potential development at Point Wells

To provide a more even comparison amongst the alternatives, a version of the Dispersed land-use model was run with housing and employment growth equivalent to the Preferred Alternative. Under this scenario, the built environment would be similar to the No Action Alternative, which is less conducive to bicycling, walking, and transit and results in more overall vehicle travel.

Similarly, this scenario would generate much higher levels of transportation-related GHG-emissions, as shown in **Table 3.3-4**. In a later section, improvements for the next 20 years are described based on a housing and employment growth rate to 2035. The forecast mode splits, trips generated, and GHG emissions are also identified in **Table 3.3-4**

Table 3.3-4 Percentage of Trips by Mode

Action Alternatives	External Walk/Bike Trips	External Transit Trips	Internal Trips	External Auto Trips	Total PM Peak Trips Generated	External PM Auto Trips Generated	Daily Transportation-Related GHG Emissions
Dispersed Land-Use Model w/ Alt. 4—Preferred Alternative Population and Employment totals	4%	4%	25%	66%	20,111	13,312	640
Alternative 4—Preferred Alternative	10%	11%	35%	45%	20,111	8,967	320
First Twenty Years (Up to 2035)	5%	8%	29%	57%	8,289	4,725	169
Alternative 3—Previous Most Growth	9%	11%	34%	46%	20,370	9,390	308
Alternative 2—Some Growth	6%	8%	31%	56%	12,310	6,890	211

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 Ave N and N 175th St intersection
- Intersection improvements at 15th Ave NE and NE 175th St intersection

Alternative 4—Preferred Alternative

Street Access and Circulation

Similar to Alternative 3—Previous Most Growth, changes in redevelopment under the Preferred Alternative would allow for the creation of new internal streets and paths. If redeveloped, the Shoreline Center site could provide additional connections through the site to 3rd Avenue NE or NE 190th Street.

Additionally, redevelopment and parcel consolidation in other areas could establish a denser grid of paths for improved pedestrian and bicycle access. However, the area would still be constrained to N-NE 175th Street, N-NE 185th Street, and N-NE 195th Street (pedestrian/bicycle only) as primary connections across I-5.

Collector Arterials (such as 1st Avenue NE, 5th Avenue NE north of 185th Street, NE 180th Street, and Perkins Way) are not subject to the City's concurrency standard. While it is not anticipated that Perkins Way would see substantial traffic resulting from new development within the station area, other Collector Arterials in the subarea may. As future travel patterns change, some of these streets may be candidates for potential traffic calming measures or for reclassification to Minor Arterials.

Traffic Volumes

Under the Preferred Alternative, 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 3.3-10** and **Table 3.3-5**. 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 lower classified streets (such as 1st Avenue NE and 5th Avenue NE) 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 subarea would result in substantial growth in ADT volumes along roadway corridors as shown in **Table 3.3-6** and **Figure 3.3-11**. Meridian Avenue N, 5th Avenue NE, and N-NE 185th Street would experience the largest percentage change, with growth of between 116 and 260 percent as compared to existing conditions, while the growth along N-NE 175th Street would be between 60 and 72 percent. V/C ratios for many of the major corridors would exceed .90 during the PM peak period.

Vehicle-Miles-Traveled and Greenhouse Gas Emissions

Based on the land use forecasts, the total VMT generated from land uses within the subarea under the Preferred Alternative would amount to roughly 525,000 miles per day. In total, future land use and transportation would generate roughly 320 metric tons of CO₂ per day under the Preferred Alternative. In comparison, Alternative 1--No Action would generate approximately 1,110,000 daily VMT and 640 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 speed and reliability along N-NE 185th Street, Meridian Avenue N, and N-NE 175th Street if no transit priority treatments are provided. Because of a higher amount of density forecasted in the Preferred Alternative, the area could support more routes and more frequent service. Additional transit service may be provided along 10th Avenue NE and NE 180th Street to support a connection between the Aurora Town Center, the light rail station and the North City area. 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 39,000 spaces more than Alternative 1—No Action (a total of 45,000), 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 the Preferred Alternative. Based on existing and future supply provided by new development at current rates specified in the zoning code, approximately 49,700 spaces would exist within the subarea.

Pedestrian and Bicycle Mobility

Pedestrian and bicycle mobility should improve as new sidewalk and bicycle facilities are installed as capital projects or with new development.

City code stipulates that any multifamily residential uses must have a minimum of one short-term bicycle parking space per ten dwelling units, one long-term bicycle parking space per studio or one-bedroom unit, and two per unit having two or more bedrooms. Commercial development must have one short-term bicycle stall per twelve vehicle parking spaces and one long-term space per 25,000 square feet of commercial floor area.

Consolidation of parcels may allow for non-motorized paths to close current gaps in the roadway network and connect to other on- and off-street facilities. 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; 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. A shared use path under the power lines along 8th Avenue NE could be a future option for relieving bike stress.

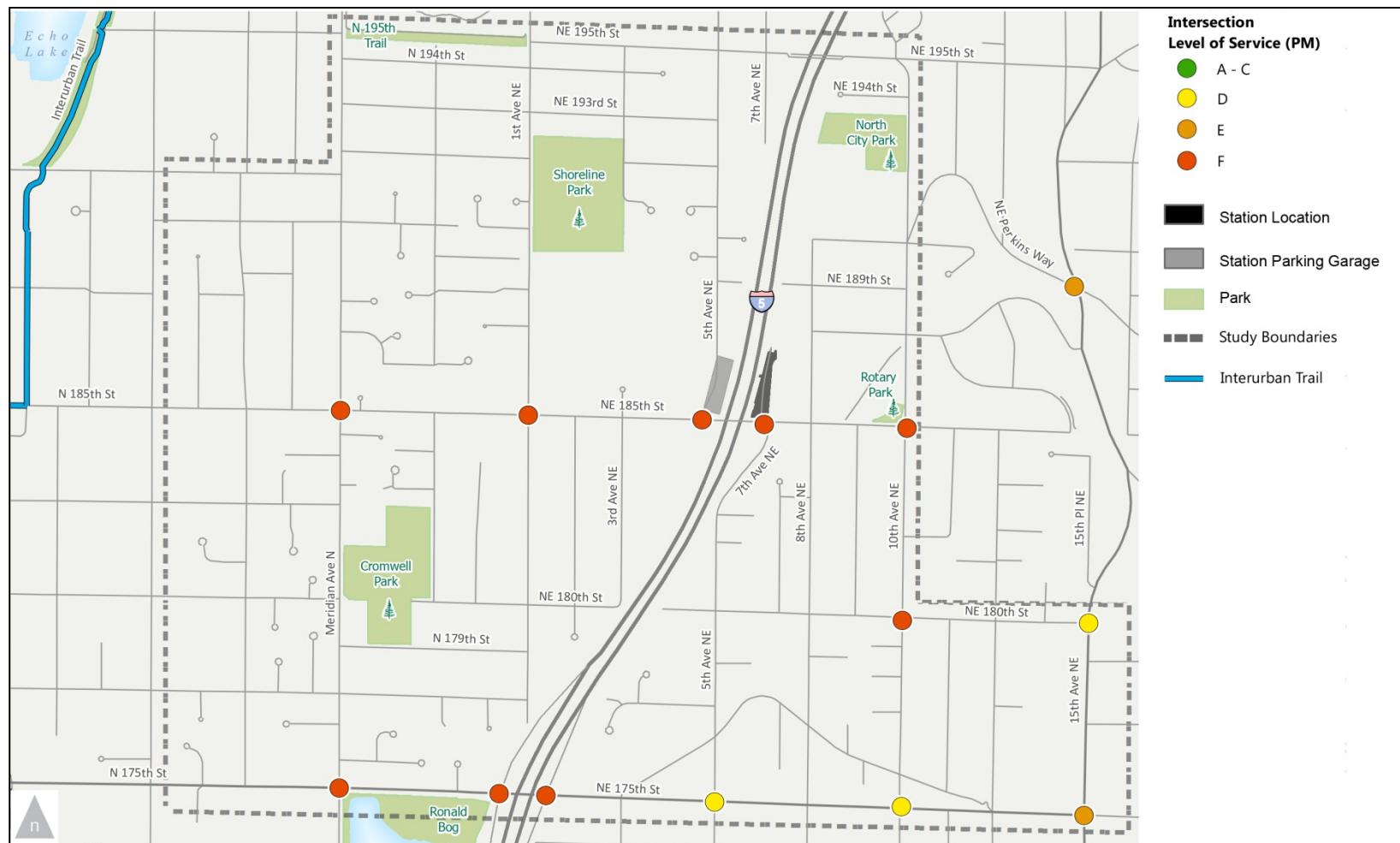


Table 3.3-5 PM Peak Period Intersection Level of Service
for the Full Build-out of Alternative 4—Preferred Alternative

Signal Type	Intersection	Existing LOS	Existing Delay (sec. / veh.)	No Action LOS	No Action Delay (sec. / veh.)	Preferred Alternative LOS	Pref. Alt Delay (sec. / veh.)
Signalized	185th St / Meridian Ave	D	54	D	45	F	>120
Signalized	185th St / 1st Ave	A	<10	B	14	F	>120
Unsignalized	185th St / 5 th Ave	B	23	F	>120	F	>120
Unsignalized	185th St / 7 th Ave	B	20	E	36	F	>120
Unsignalized	185th St / 10th Ave	A	11	C	21	F	108
Signalized	15th Ave / Perkins Way	C	21	D	53	E	59
Unsignalized	180th St / 10th Ave	A	<10	C	20	F	>120
Signalized	180th St / 15th Ave	A	<10	C	22	D	38
Signalized	175th St / Meridian Ave	D	51	D	54	F	110
Signalized	175th St / I-5 SB Ramps	C	30	E	79	F	>120
Signalized	175th St / I-5 NB Ramps	D	45	F	>120	F	>120
Signalized	175th St / 5th Ave	C	25	C	26	D	34
Signalized	175th St / 10th Ave	A	<10	B	16	D	48
Signalized	175th St / 15th Ave	D	47	D	53	E	69

Note: bold numbers signify intersections that would fall below the City's LOS standard.

**Figure 3.3-10 Intersection Level of Service
for the Full Build-out of Alternative 4—Preferred Alternative**

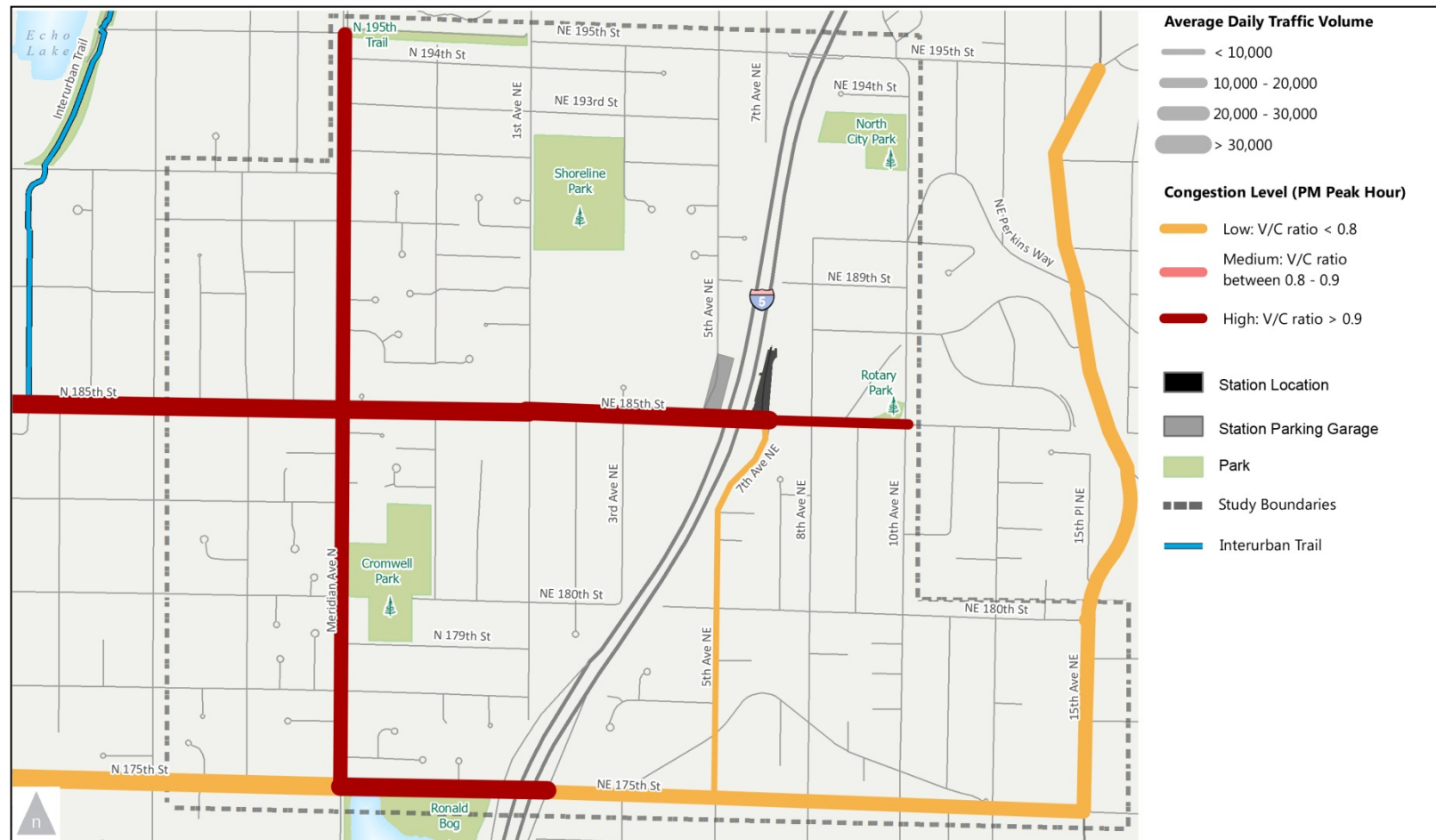


**Table 3.3-6 Average Daily Traffic Volumes and PM Peak Period Congestion
for the Full Build-out of Alternative 4—Preferred Alternative**

Street	Segment	Existing ADT	No Action ADT	Preferred Alt. ADT	Pref. Alt. PM Peak Hour Volume ¹⁰	Preferred Alt. V/C
East-West Corridors						
175th Street	West of I-5	30,770	39,490	52,820	2,115	>1.0
175th Street	East of I-5	18,010	21,180	28,590	1,186	0.76
185th Street	West of I-5	9,700	17,180	34,620	1,831	>1.0
185th Street	East of I-5	7,130	11,360	17,080	937	.94
North-South Corridors						
5th Avenue NE	South of N 185 th Street	3,360	5,700	8,770	399	0.57
15th Avenue NE	North of N 175 th Street	15,040	20,340	21,610	1,470	0.79
Meridian Avenue N	North of N 175 th Street	12,070	15,140	26,100	1,602	>1.0

¹⁰ One-directional volume only, signifying the direction with the highest volume

**Figure 3.3-11 Average Daily Traffic and PM Peak Congestion
for the Full Build-out of Alternative 4—Preferred Alternative**



The First Twenty Years (Up to 2035) for Any Action Alternative

Introduction

While the impacts and mitigation measures specified for the Preferred Alternative would occur over the projected 80 to 125 year timespan, this section describes the mitigation measures that would be needed to address impacts in the near-term, specifically over a twenty-year horizon. Given the growth rate applied, the twenty-year projection would be the same for all action alternatives.

Growth Forecast

Based on a 1.5 to 2.5 percent growth rate over the next 20 years, a total of 1,950 to 2,370 employees and 4,450 to 5,500 households would be located within the subarea. The assumed growth rates are based on historical trends in the region and may fluctuate around the average of 1.5 and 2.5 percent annually depending on actual market conditions. Additionally, while the analysis assumed an equal distribution of development

throughout the subarea, particular parcels may redevelop at a higher or lower rate than the average. Actual distribution of development would impact where and when specific roadways and areas experience a change in travel patterns.

Average Daily Traffic and Intersection Level of Service

As shown in **Figure 3.3-12** and in **Figure 3.3-13**, additional trips resulting from redevelopment as part of the Preferred Alternative in the subarea would increase average vehicle delay at intersections and along roadways. However, many intersections would still operate at or better than LOS D during the PM peak period. Congestion along N-NE 185th Street would be influenced by actual development patterns and the access routes to the new development. Intersections directly adjacent to the station and the parking garage would most likely require signalization as a result of trips generated specifically for station access, however no added lane capacity would be required at those intersections. While impacts from light rail implementation are addressed in the Lynnwood Link Extension DEIS, the following section identifies specific steps the City may take to address any potential impacts within the subarea.

**Figure 3.3-12 Average Daily Traffic and PM Peak Congestion
for the First Twenty Years (up to 2035)**

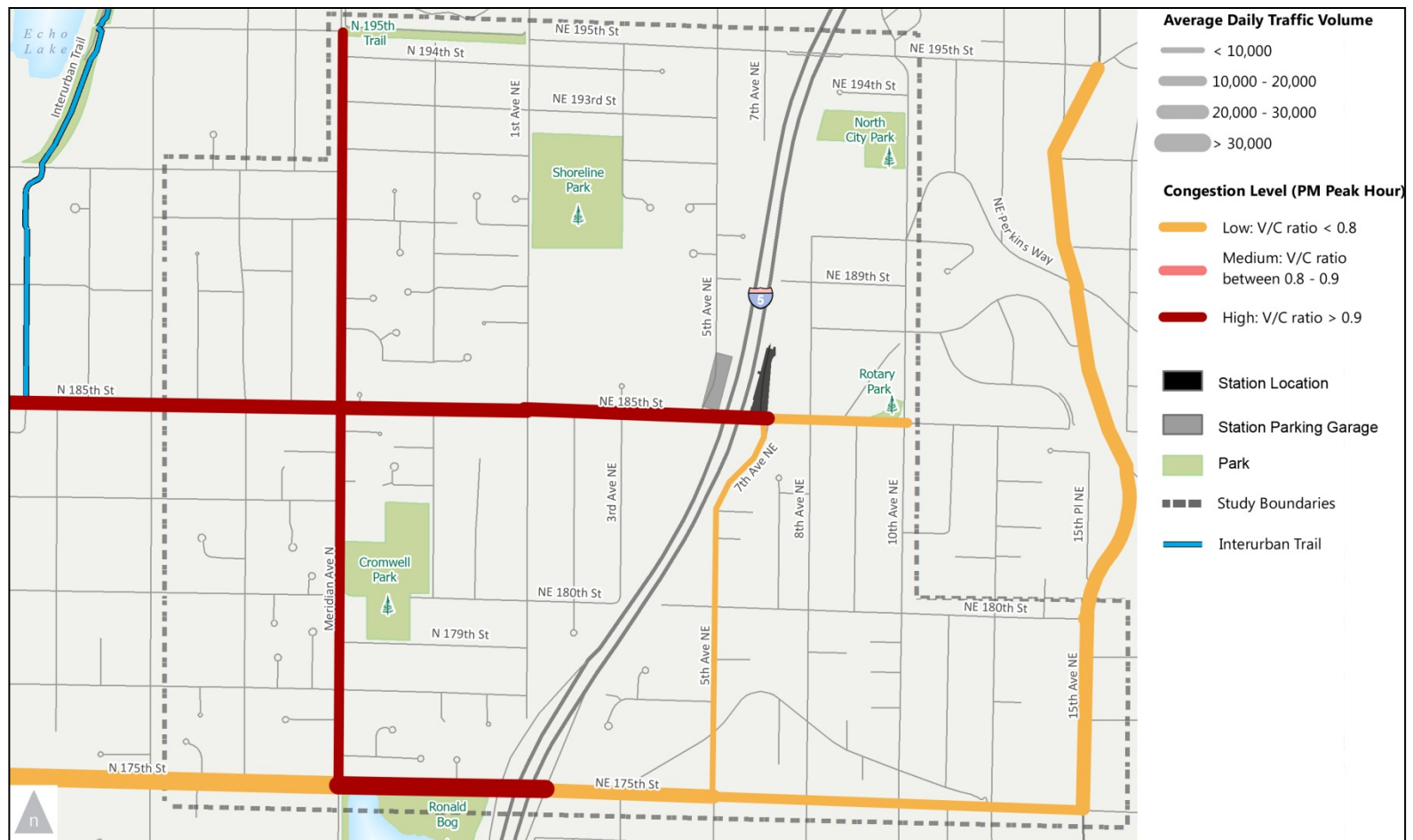
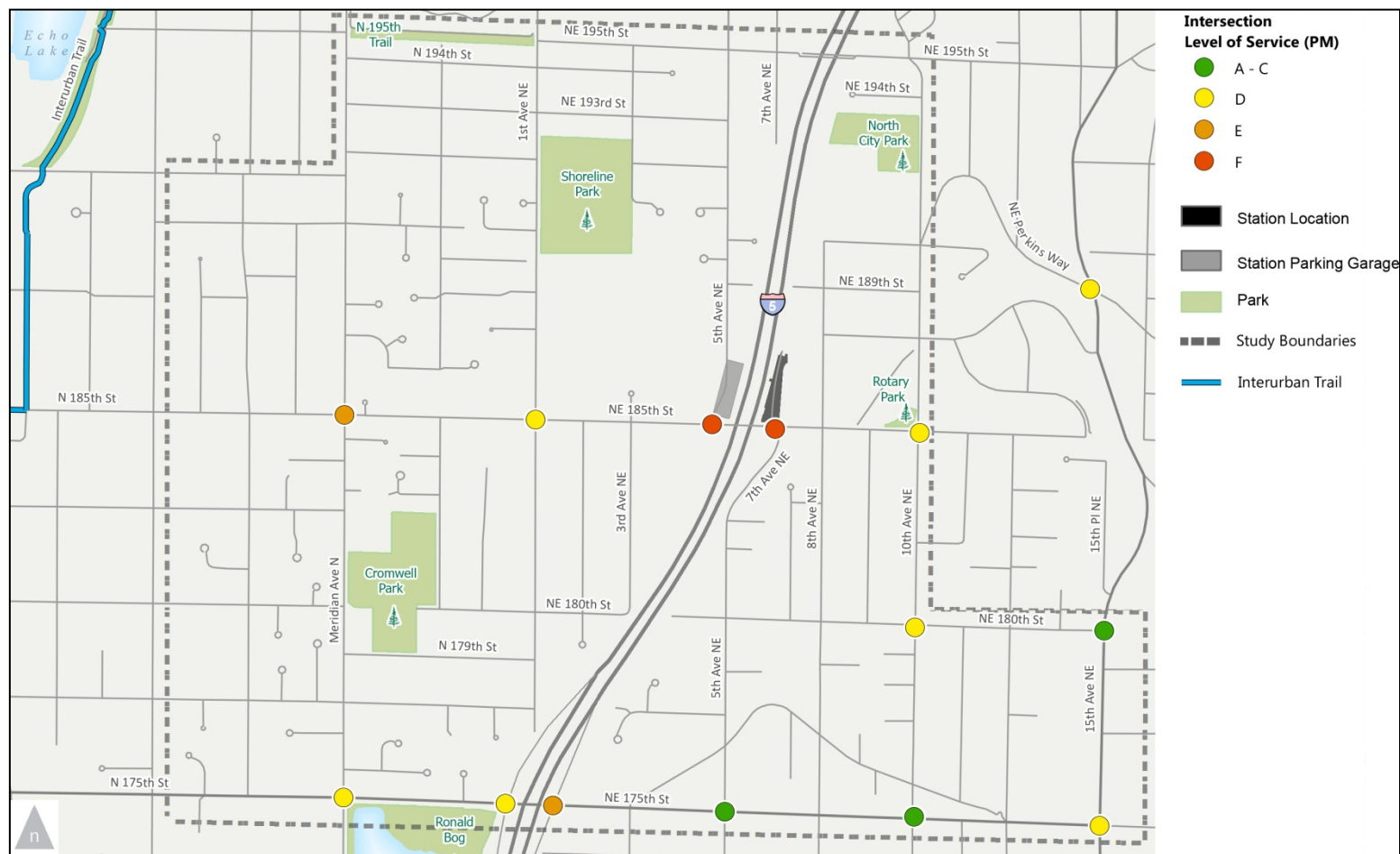


Figure 3.3-13 Intersection Level of Service for the First Twenty Years (up to 2035)



Alternative 3—Previous Most Growth

Street Access and Circulation

Changes in redevelopment under Alternative 3—Previous Most Growth would allow for the creation of new internal streets and paths. The Shoreline Center site could provide additional connections through the site to 3rd Avenue NE or NE 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 (pedestrian/bicycle only) as primary connections across I-5.

Collector Arterials (such as 1st Avenue NE, 5th Avenue NE north of 185th Street, NE 180th Street, and Perkins Way) are not subject to the City's concurrency standard. While it is not anticipated that Perkins Way would see substantial traffic resulting from new development within the station area, other Collector Arterials in the subarea may. As future travel patterns change, some of these streets may be candidates for potential traffic calming measures or for reclassification to Minor Arterials.

Traffic Volumes

Under Alternative 3—Previous Previous 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 3.3-7**. 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 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 or from lower classified streets (such as 1st Avenue NE and 5th Avenue NE) 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 subarea would result in substantial growth in ADT volumes along roadway corridors as shown in **Table 3.3-8** 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 100 and 250 percent as compared to existing conditions, while the growth along N-NE 175th Street would be roughly 60 percent. V/C ratios for many of the major corridors would exceed .90 during the PM peak period.

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—Previous Most Growth would amount to roughly 502,000 miles per day. In total, future land use and transportation would generate roughly 308 metric tons of CO₂ per day under Alternative 3—Previous 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 speed and reliability along N-NE 185th Street, Meridian Avenue N, and N-NE 175th Street if no transit priority treatments are provided. Because of a higher amount of density forecast in Alternative 3—Previous Most Growth, the area could support more routes and more frequent service. Additional transit service may be provided along 10th Avenue NE and NE 180th Street to provide connection between the Aurora Town Center, the light rail station, and North City. 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 radius, conditions that future development would meet under Alternative 3—Previous 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 should improve as new sidewalk and bicycle facilities are installed as capital projects or with new development.

City code stipulates that any multifamily residential uses must have a minimum of one short-term bicycle parking space per ten dwelling units, one long-term bicycle parking space per studio or one-bedroom unit, and two per unit having two or more bedrooms. Commercial development must have one short-term bicycle stall per twelve vehicle parking spaces and one long-term space per 25,000 square feet of commercial floor area.

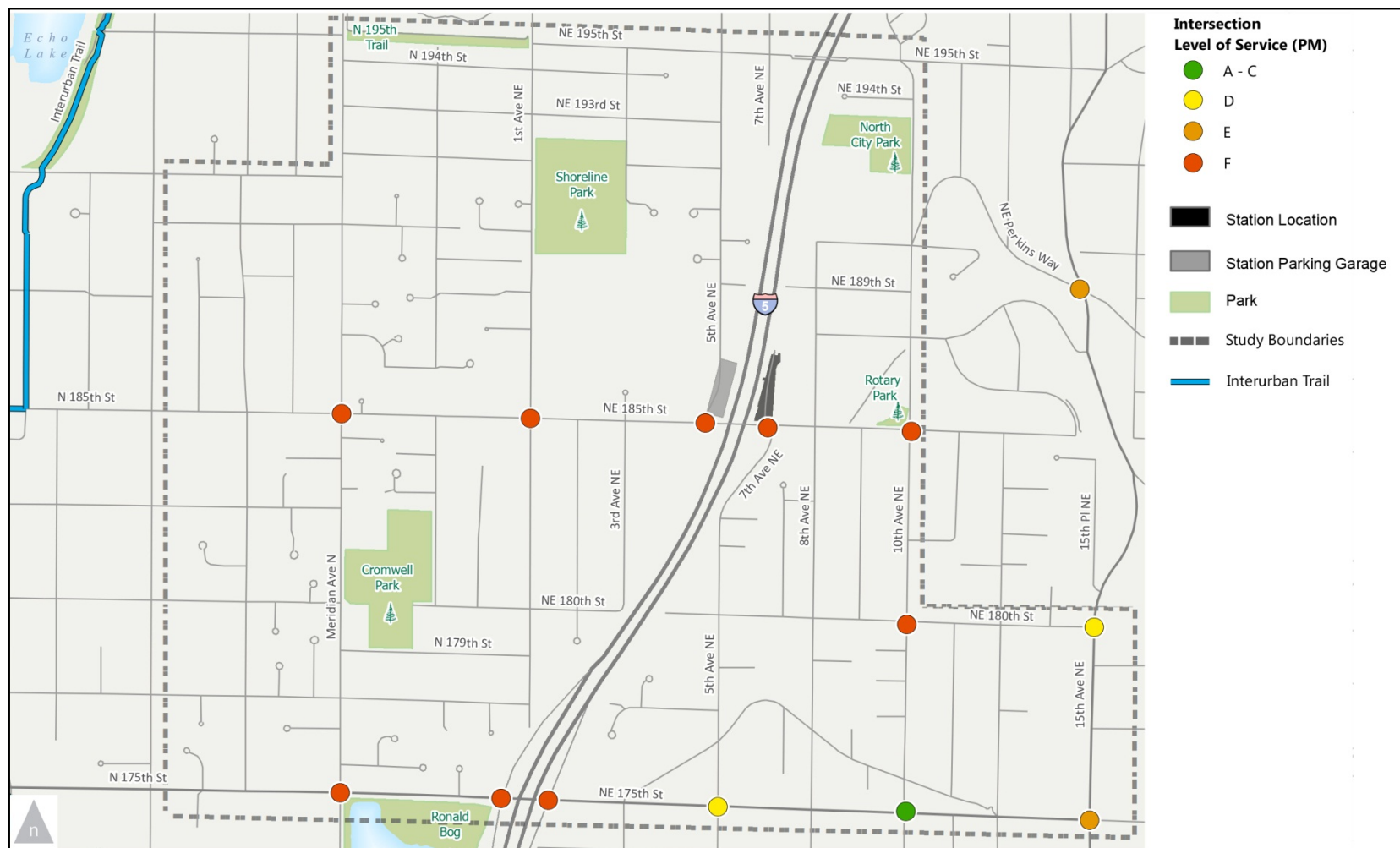
Consolidation of parcels may allow for pedestrian-only paths to close current gaps in the roadway network. That said, significant increase in traffic volumes in the subarea may increase overall bicycle stress for a number of roadway segments. Bicycle connections from the Interurban Trail may be impacted by increased vehicle traffic along N-NE 185th Street, Meridian Avenue N, and 1st Avenue NE, causing a higher bicycling stress environment; more separated facilities may be required.

**Table 3.3-7 PM Peak Period Intersection Level of Service
for Alternative 3—Previous Most Growth**

Signal Type	Intersection	Existing LOS	Existing Delay (sec. / veh.)	No Action LOS	No Action Delay (sec. / veh.)	Previous Most Growth LOS	Previous Most Growth Delay (sec. / veh.)
Signalized	185th St / Meridian Ave	D	54	D	45	F	>120
Signalized	185th St / 1st Ave	A	<10	B	14	F	>120
Unsignalized	185th St / 5 th Ave	B	23	F	>120	F	>120
Unsignalized	185th St / 7 th Ave	B	20	E	36	F	>120
Unsignalized	185th St / 10th Ave	A	11	C	21	F	90
Signalized	15th Ave / Perkins Way	C	21	D	53	E	60
Unsignalized	180th St / 10th Ave	A	<10	C	20	F	>120
Signalized	180th St / 15th Ave	A	<10	C	22	D	43
Signalized	175th St / Meridian Ave	D	51	D	54	F	87
Signalized	175th St / I-5 SB Ramps	C	30	E	79	F	100
Signalized	175th St / I-5 NB Ramps	D	45	F	>120	F	>120
Signalized	175th St / 5th Ave	C	25	C	26	D	37
Signalized	175th St / 10th Ave	A	<10	B	16	C	31
Signalized	175th St / 15th Ave	D	47	D	53	E	72

Note: bold numbers signify intersections that would fall below the City's LOS standard.

Figure 3.3-10 Intersection Level of Service for Alternative 3—Previous Most Growth

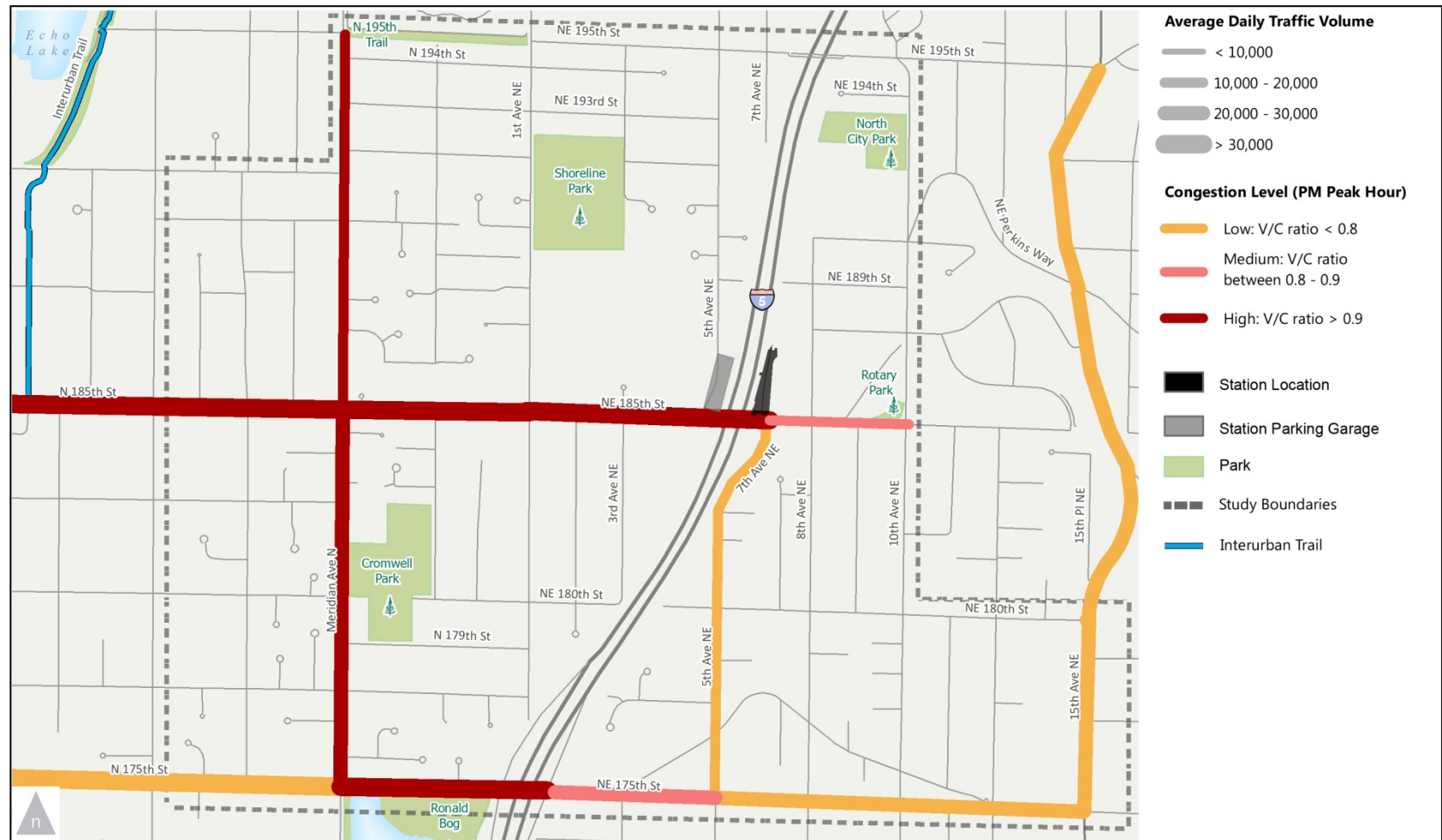


**Table 3.3-8 Average Daily Traffic Volumes and PM Peak Period Congestion
for Alternative 3—Previous Most Growth**

Street	Segment	Existing ADT	No Action ADT	Previous Most Growth ADT	Previous Most Growth PM Peak Hour Volume ¹¹	Previous 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 3.3-11. Average Daily Traffic and PM Peak Congestion
Alternative 3—Previous Most Growth**



Alternative 2—Some Growth

Street Access and Circulation

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 Shoreline Center site could provide additional alley or side street connections through the site to 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 (pedestrian/bicycle only).

Collector Arterials (such as 1st Avenue NE, 5th Avenue NE north of 185th Street, NE 180th Street, and Perkins Way) are not subject to the City's concurrency standard. While it is not anticipated that Perkins Way would see substantial traffic resulting from new development within the station area, other Collector Arterials in the subarea may. As future travel patterns change, some of these streets may be candidates for potential traffic calming measures or for reclassification to Minor Arterials.

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 3.3-16** 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 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 NE and 5th Avenue NE) 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 subarea would result in substantial growth in ADT volumes along roadway corridors as shown in **Table 3.3-10** and **Figure 3.3-17**. 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.

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, Alternative 1--No Action would generate approximately 1,110,000 daily VMT and 640 metric tons of CO₂ per day based on existing land use patterns and the anticipated amount of driving.

Transit Service and Mobility

The higher density provided under Alternative 2—Some Growth would support more robust public transit service within the subarea. 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 service along 10th Avenue NE or 1st Avenue NE may be needed to accommodate demand generated from increased development. The growth in vehicle traffic could impact overall transit speed and reliability 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 ten dwelling units, and one long-term bicycle parking space per studio or one-bedroom unit, and two per unit having two or more bedrooms. Commercial development must have one short-term bicycle stall per twelve vehicle parking spaces and one long-term space per 25,000 square feet of commercial floor area.

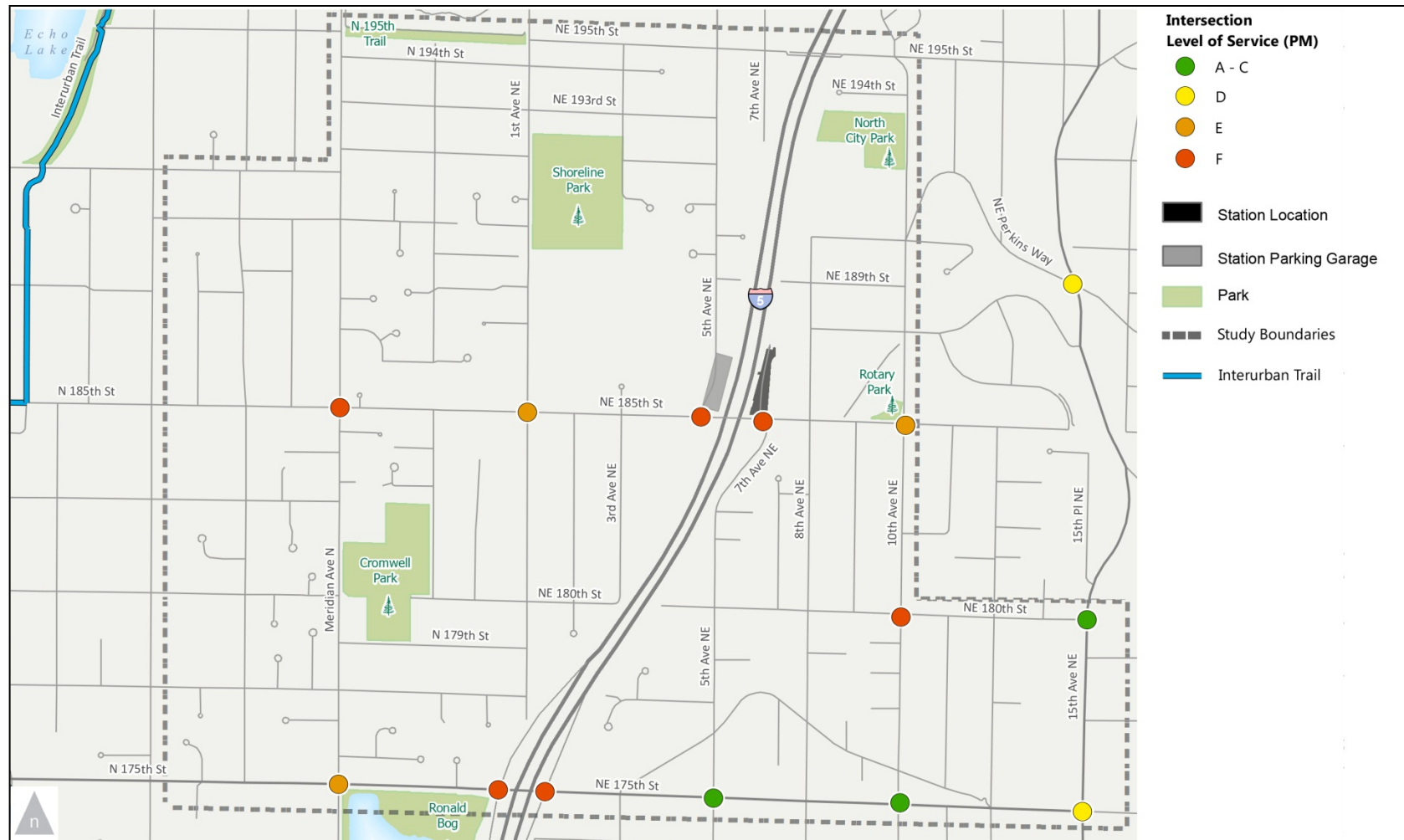
Conditions for development could be structured to allow for the creation of non-motorized paths within larger parcels to connect with other on- and off-street pedestrian and bicycle facilities. Similar to Alternative 1—No Action, the increase in vehicle traffic along N-NE 185th Street and Meridian Avenue N over time will impact bicycle stress along these streets; more separated facilities may be required.

Table 3.3-9 PM Peak Period Intersection Level of Service
for Alternative 2—Some Growth

Signal Type	Intersection	Existing LOS	Existing Delay (sec. / veh.)	No Action LOS	No Action Delay (sec. / veh.)	Previous Most Growth LOS	Previous Most Growth Delay (sec. / veh.)
Signalized	185th St / Meridian Ave	D	54	D	45	F	>120
Signalized	185th St / 1st Ave	A	<10	B	14	E	76
Unsignalized	185th St / 5th Ave	B	23	F	>120	F	>120
Unsignalized	185th St / 7th Ave	B	20	E	36	F	>120
Unsignalized	185th St / 10th Ave	A	11	C	21	E	49
Signalized	15th Ave / Perkins Way	C	21	D	53	D	39
Unsignalized	180th St / 10th Ave	A	<10	C	20	F	56
Signalized	180th St / 15th Ave	A	<10	C	22	C	29
Signalized	175th St / Meridian Ave	D	51	D	54	E	67
Signalized	175th St / I-5 SB Ramps	C	30	E	79	E	111
Signalized	175th St / I-5 NB Ramps	D	45	F	>120	F	>120
Signalized	175th St / 5th Ave	C	25	C	26	C	29
Signalized	175th St / 10th Ave	A	<10	B	16	C	23
Signalized	175th St / 15th Ave	D	47	D	53	D	55

Note: bold numbers signify intersections that would fall below the City's LOS standard.

Figure 3.3-16 Intersection Level of Service (Alternative 2—Some Growth)

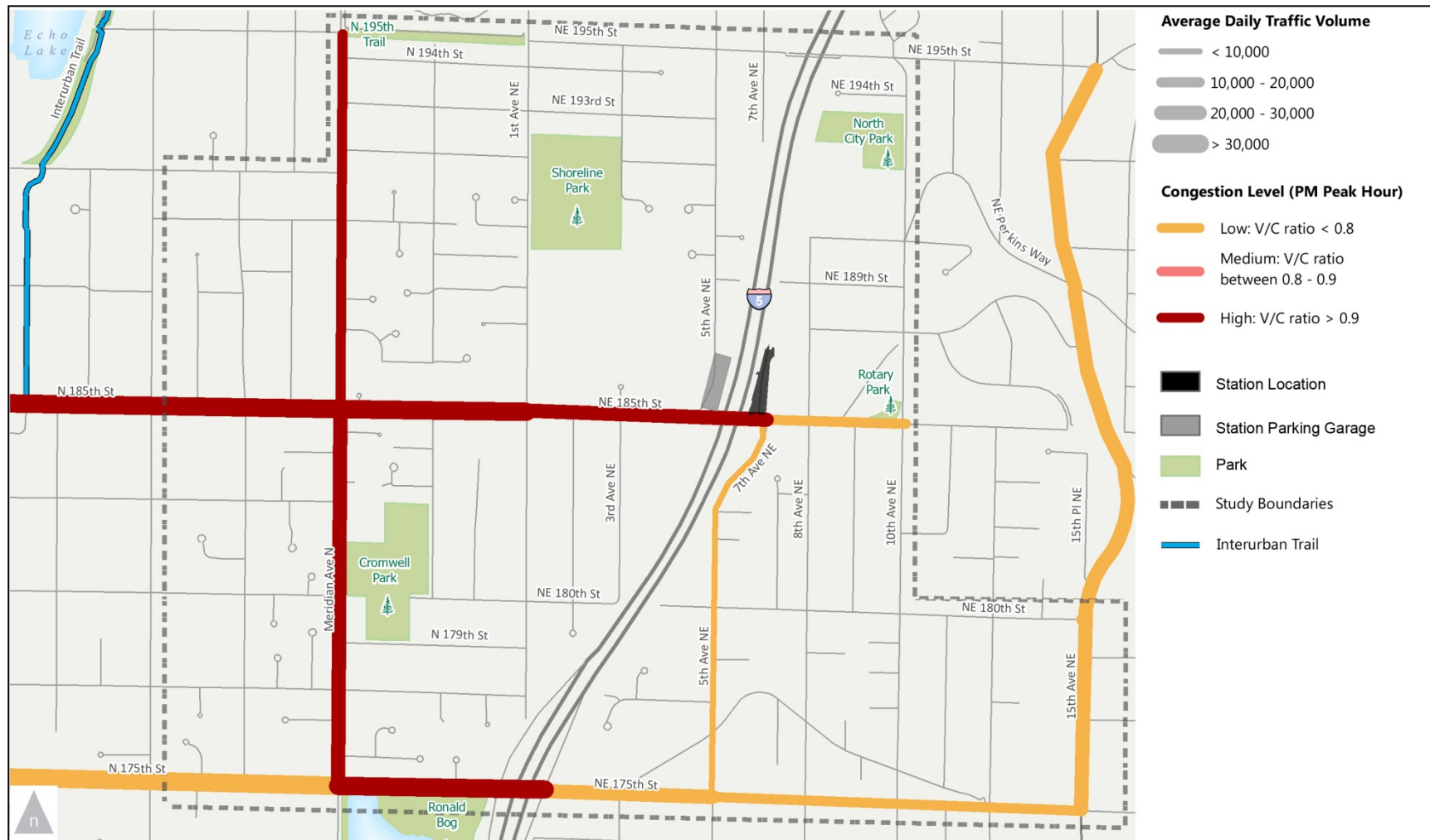


**Table 3.3-10 Average Daily Traffic Volumes and PM Peak Period Congestion
for Alternative 2—Some Growth**

Street	Segment	Existing ADT	No Action ADT	Some Growth ADT	Some Growth PM Peak Hour Volume ¹²	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 175th 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

¹² One-directional volume only, signifying the direction with the highest volume

Figure 3.3-12 Average Daily Traffic and PM Peak Congestion for Alternative 2—Some Growth



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.

Traffic Impact Analysis

Under Alternative 1—No Action, some signalized intersections would fail to meet the City's LOS standard. These intersections are shown in **Figure 3.3-18** and **Table 3.3-11**. 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, 5th Avenue NE, and NE 185th Street are also expected to exceed the City's standard due to their 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 3.3-12**, average daily traffic volumes and congestion under Alternative 1—No Action are expected to grow along major roadway segments compared to today. **Figure 3.3-19** shows expected traffic volumes on roadways and the projected V/C ratios on principal and minor arterials within the subarea. 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 City's adopted threshold of .90.

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 because of the long distances between origins and destinations. In total, future land uses within the subarea would generate roughly 150 metric tons of carbon dioxide (CO₂) per day from additional transportation demand. 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, as the existing land uses and densities 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 N 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 subarea, 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 opportunity for development of complementary uses, the amount of parking that could be shared would be limited.

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 Perkins Way, NE 180th Street, and 10th Avenue NE, the bicycling stress may increase without facilities that accommodate bicycles.

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.

**Table 3.3-11 PM Peak Period Intersection Level of Service
for Alternative 1—No Action**

Signal Type	Intersection	Existing LOS	Existing Delay (sec. / veh.)	No Action LOS	No Action Delay (sec. / veh.)
Signalized	185th St / Meridian Ave	D	54	D	45
Signalized	185th St / 1st Ave	A	<10	B	14
Unsignalized	185th St / 5 th Ave	B	23	F	>120
Unsignalized	185th St / 7 th Ave	B	20	E	36
Unsignalized	185th St / 10th Ave	A	11	C	21
Signalized	15th Ave / Perkins Way	C	21	D	53
Unsignalized	180th St / 10th Ave	A	<10	C	20
Signalized	180th St / 15th Ave	A	<10	C	22
Signalized	175th St / Meridian Ave	D	51	D	54
Signalized	175th St / I-5 SB Ramps	C	30	E	79
Signalized	175th St / I-5 NB Ramps	D	45	F	>120
Signalized	175th St / 5th Ave	C	25	C	26
Signalized	175th St / 10th Ave	A	<10	B	16
Signalized	175th St / 15th Ave	D	47	D	53

Note: bold numbers signify intersections that would fall below the City's LOS standard.

Figure 3.3-13 Intersection Level of Service (Alternative 1—No Action)

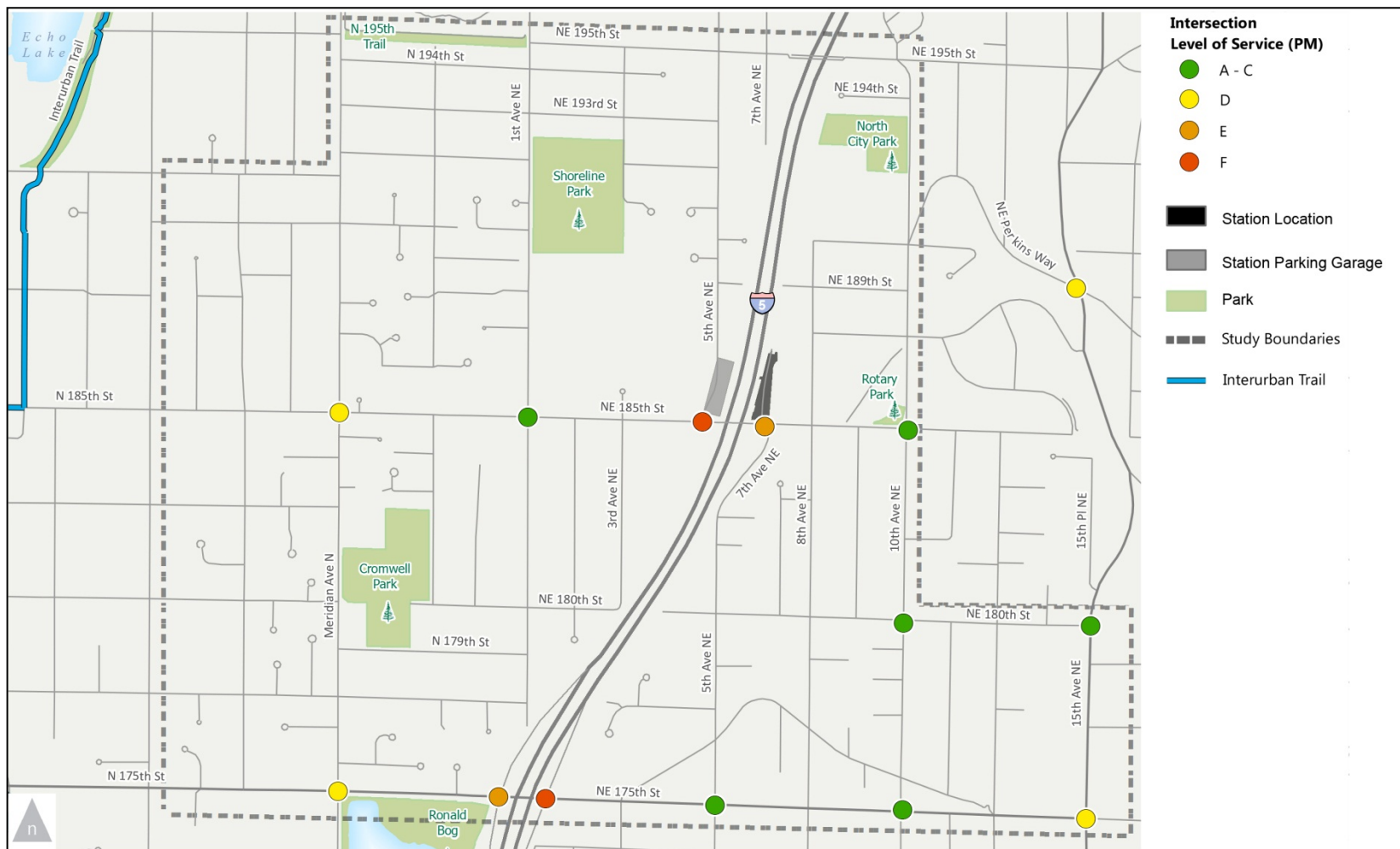
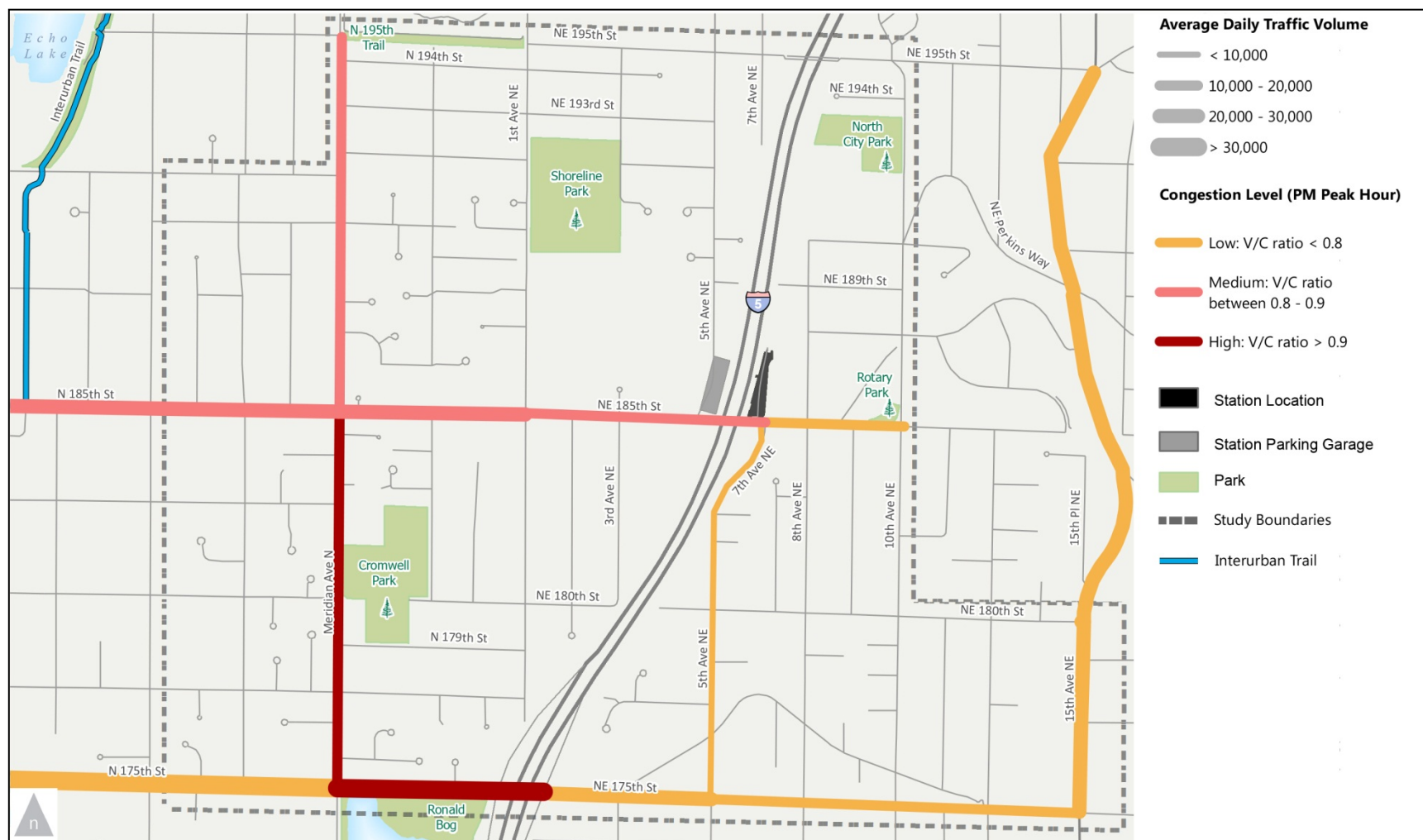


Table 3.3-12 Average Daily Traffic Volumes and PM Peak Period Congestion for Alternative 1—No Action

Street	Segment	Existing ADT	No Action 2035 ADT	No Action PM Peak Hour Volume ¹³	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 175th 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

¹³ One-directional volume only, signifying the direction with the highest volume

Figure 3.3-19 Average Daily Traffic and PM Peak Congestion (Alternative 1—No Action)



3.3.3 Mitigation Measures

Introduction

This section describes the mitigation measures that would be needed to address impacts under each of the future alternatives. It is important to note that the land use changes proposed and the traffic impacts identified in the previous section are based upon full build-out scenarios for each alternative. While this build-out would occur over a long period of time and would not be fully implemented for any of the alternatives 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. A later section will highlight the near-term projects needed based on a 2035 scenario for any of the action alternatives.

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.

In July 2014, the City Council adopted Shoreline's first Transportation Impact Fees (TIFs). TIFs are charged during the building permitting process and used to fund projects to maintain or improve levels of service on Shoreline's streets. The intent is to share the financial responsibility of providing transportation facilities, such as roads and intersections that support future growth with the development that grows the city's population and economy.

As of January 1, 2015, all projects that add trips to City streets are required to pay the impact fee. This includes accessory dwelling units (ADUs or Mother in Law apartments) or any project that creates space for extra 'trip' generating residents or uses on a property. The fee is proportionate to the size of the development or change in use. There are a number of exemptions, including for affordable housing.

Mitigation Measures for Street and Intersection Impacts

With full build-out, the level of planned development would be substantial under Alternative 4—Preferred Alternative and Alternative 3—Previous Most Growth, and while less substantial under Alternative 2—Some Growth, implementation of any of the action alternatives would require substantial multimodal transportation investments to mitigate the impacts. Additional mitigation measures likely also would be needed for Alternative 1—No Action to maintain the City's current LOS standards in 2035.

It is estimated that Alternative 4 – Preferred Alternative would take 80 to 125 years or more to reach build-out of the proposed zoning capacity. Alternative 3—Previous Most Growth could take 60 to 100 years or more and Alternative 2—Some Growth would take 30 to 50 years or more to reach build-out.

Multimodal transportation improvements required to support the growth of any of the 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, if implemented, enhance connectivity in the corridor. The improvements conceptualized would improve mobility for pedestrians, bicyclists, and transit services, as well as automobile traffic. The concept envisions a raised 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). **Figure 3.3-20** and **Figure 3.3-21** illustrate this conceptual design.

If current travel patterns continue, the build-out of Alternative 2—Some Growth (30 to 50 years from now or more) may necessitate widening of N-NE 185th Street beyond three lanes from Aurora Avenue N to 5th Avenue NE. Similarly, with full build-out of Alternative 3—Previous Most Growth and Alternative 4 –

Preferred Alternative (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, non-motorized facilities, 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.

The City intends to work with transit providers to increase connectivity to and from the station. The City is also interested in exploring bike station programs and other actions.

Many of the projects identified as mitigation for the alternatives 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. These could be determined through a corridor development plan, which would need to be completed following adoption of the subarea plan. 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. Also, behavioral change and new technologies (such as driverless cars) may increase road capacity, making future expansion of 185th beyond three lanes unnecessary.

Figure 3.3-14 Conceptual Cross Section for N-NE 185th Street

Figure 3.3-15 Perspective View of N-NE 185th Street Concept



Mitigation Measures for Each Alternative

In addition to the roadway improvements called out in the TMP¹⁴, the following measures are recommended for the alternatives analyzed in this FEIS.

Alternative 4—Preferred Alternative (Build-Out) and Alternative 3—Previous Most Growth (Build-Out)

Mitigation measures for Alternative 4—Preferred Alternative and Alternative 3—Previous Most Growth are the same given that these would generate similar levels of traffic at full build-out.

General Street and Intersection Improvement Mitigation Measures

- Additional through-lanes along N-NE 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 between N 175th Street and N 205th Street with a right-turn pocket on the northbound approach to N 185th Street

¹⁴ 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.

- 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
- Signalization or roundabout conversion of the following intersection:
 - 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

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 non-arterial streets to prevent cut-through traffic both to the light rail station and new development sites. The City of Shoreline has a Neighborhood Traffic Safety Program to help address the safety concerns on residential streets stemming from higher speed and/or cut-through traffic. This program includes enhanced enforcement and education, along with engineering solutions such as traffic circles, speed humps, and narrowed lanes. Solutions to address traffic issues are discussed and implemented as part of a public process to ensure they appropriately address a given circumstance.

Transit Service Mitigation Measures

For all alternatives, at least 22 buses are expected to serve 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 Integration Plan (TSIP) 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. 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 TSIP. Additionally, on-demand transport such as the King County Metro Access and the Hyde Shuttles should have direct service to the light rail station bus access point in order to improve service for those with mobility limitations.

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 ("Pronto"). An analysis of potential demand for these services should be conducted to determine their relative feasibility.

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 options 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 radius
- Concurrence with King County Right Size Parking data, census tract data, and other parking demand analysis results

While the Preferred Alternative has more development and higher trip generation than other alternatives, it also provides 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 non-arterial 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. Additional measures that may be taken to address parking impacts include:

- Install signage and driver information to direct commercial and light rail users towards available off-street parking garage locations near commercial development
- Implement variable parking time limits and prices to moderate parking demand and ensure sufficient supply during peak parking periods
- Evaluate the provision of additional off-street parking supply near commercial areas

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. One possible measure to properly accommodate all modes could be a cycle track from the Interurban Trail to 10th Avenue NE. 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. The Preferred Alternative 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.

A dedicated path along the I-5 right-of-way near the proposed light rail alignment could provide a connection between the station and the pedestrian and bicycle bridge at NE 195th Street, and would provide a connection to the regional trails such as the Interurban Trail and the Burke-Gilman Trail. Additionally, bicyclists from Lake Forest Park and areas to the northeast and east of the subarea may utilize Perkins Way as an access route to the station.

While the City is currently upgrading Perkins Way with bicycle signage as part of the Interurban and Burke-Gilman Connector project, a more separated facility to accommodate bikes may be needed. Conversely, traffic volumes from new development along 10th Avenue NE may necessitate the installation of bicycle lanes to provide a safer bicycling environment.

The City is interested in exploring opportunities for bicycle sharing and bicycle storage facilities near the station to encourage and enhance bike access to transit. This likely would encourage more use of the N-NE 185th Street/10th Avenue NE/NE 180th Street corridor as a bicycle connection to and from the station.

The First Twenty Years (Up to 2035) for Any Action Alternative

As stated in previous sections, the length of time until full build-out of any action alternative would enable the City to monitor growth and proactively plan for needed improvements. This should occur as development proceeds in order to provide a sustainable and efficient transportation system within the subarea.

In the meantime, the next twenty years will bring an important focus on funding and implementing projects to support anticipated growth through 2035. This section details specific actions the City can take to address growth that is forecast for 2035.

N-NE 185th Street

The main corridor within the subarea is also the primary connection to the station and will most likely experience the largest amount of trip growth. Current daily volumes of up to 9,700 along the corridor are far below capacity and do not necessitate any infrastructure improvements beyond what has already been identified in the Shoreline Transportation Master Plan and the Lynnwood Link Extension Preferred Alternative. Based on forecast volumes, N-NE 185th Street may carry up to 20,000 vehicles per day; approaching the theoretical capacity of the corridor. Beyond what has already been identified in the TMP, the City should take the following actions as appropriate during the 20-year horizon to properly manage changes in travel patterns along this corridor.

- Travel demand management strategies to reduce overall vehicle trips along the corridor. This includes continued

expansion of the bicycle and pedestrian network along with transit service priority measures

- Continue to monitor traffic volumes on a bi-annual basis to identify changes in congestion patterns
- Employ access management strategies for new development to reduce the number of curb cuts and access points along N-NE 185th Street
- Expand signal coordination and other Intelligent Transportation Systems (ITS) strategies.
- Consistent with the TMP, reconfigure the intersection of N 185th Street and Meridian Avenue N
- Provide protected/permitted phasing for northbound and southbound left-turn movements at N 185th Street and Meridian Avenue N
- Signalization of the intersections along N-NE 185th Street at 5th Avenue NE and 7th Avenue NE may be necessary depending on actual station and parking garage-access volumes with implementation of light rail service in 2023
- As traffic volumes approach the capacity of N-NE 185th Street, evaluate adding lane capacity from Aurora Avenue N to 7th Avenue NE.

Parking Management Strategies

Monitoring and managing parking issues in the subarea should be an important focus of the first twenty years of implementation. As demand for parking shifts with the light rail service and changes in development, the City has a number of parking

management strategies that are common elements in Transit-Oriented Development.

- *Residential Parking Zones (RPZ)* – Implementation of an RPZ would help discourage long-term parking within residential areas by retail or light rail station users.
- *Time limits and restrictions* – Time limits can help limit parking spillover into residential areas and can also improve parking turnover in commercial areas.
- *Parking location signage* – Information directing drivers to available off-street parking locations can improve vehicle circulation and ensure that parking supply is utilized.
- *Variable parking pricing* – Changes in parking rates based on time period and demand can help moderate available supply.
- *Additional off-street parking supply*– If existing parking facilities are being efficiently used, then the City or property owners may consider adding off-street parking to ease the pressure off of on-street supply.

Transit Service Improvements

Transit service integration and improvements will be an important priority after the light rail station is operating. As part of the TSIP currently under development, the City should specifically focus on the N-NE 185th Street/10th Avenue/180th Street corridor to ensure transit vehicles can operate efficiently through the subarea. Strategies the City may employ include the construction of signal priority systems, queue jumps, and bus bulbs. Specifically, these solutions should target potential chokepoints along N-NE 185th Street, such as Meridian Avenue N and/or 5st Avenue NE. Additionally the plan should evaluate the potential signalization of NE 185th Street and 7th Avenue NE to allow for efficient access of busses into and out of the light rail station.

Pedestrian and Bicycle Facilities Mitigation Measures

The mitigation measures listed for Alternative 4—Preferred Alternative (Build-Out) should all be an important focus of the first twenty years of implementation. Refer to the measures listed on pages 3-156 and 3-158.

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 to support full build-out 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 between N 175th Street and N 205th Street if transportation demand strategies are unsuccessful
- 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
- Signalization or roundabout conversion of the following intersections:
 - 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 Street 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

N-NE 175th Street

- Consistent with the TMP, reconfigure the intersection of N 175th Street and Meridian Avenue N
- NE 175th Street and the I-5 Ramps are within WSDOT jurisdiction and may require additional mitigation

1st Avenue NE

- Consistent with the TMP, add bicycle lanes along 1st Avenue NE from the 195th Street trail to NE 185th Street

5th Avenues NE

- Consistent with the TMP, reconstruct 5th/7th Avenue NE with full sidewalk coverage and bicycle lane provision from NE 175th Street NE to NE 185th Street, and 5th Avenue NE from NE 185th Street to NE 195th Street.

Meridian Avenue N

- Continue to monitor traffic volumes on a bi-annual basis to identify changes in congestion patterns
- Consistent with the TMP, convert Meridian Avenue N to a three-lane profile with a two-way left-turn lane and bicycle lanes

10th Avenue NE

- Consistent with the TMP, install sidewalks on both sides of the street from NE 175th Street to NE 195th Street

NE 180th Street

- Consistent with the TMP, install sidewalks on both sides of the street from 15th Avenue NE to 10th Avenue NE

Perkins Way

- While future traffic volumes for Perkins Way are forecast to be within the capacity of the roadway, the City should continue to evaluate bicycle facilities to improve connections from northeast of the station.

Potential I-5 Non-Motorized Trail

- Work with Sound Transit to identify potential locations for a non-motorized trail along the right-of-way secured for the light rail alignment on the east side of I-5. This trail would provide a dedicated north-south connection from the NE 195th Street pedestrian and bicycle bridge to the station.

Alternative 1—No Action

- Timing adjustment and phase changes for northbound and southbound 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

3.3.4 Significant Unavoidable Adverse Impacts

Under all alternatives, the subarea would be anticipated to experience growth in traffic levels. Given that growth is expected to occur incrementally over many decades, the City and other agencies responsible for transportation services would be able to proactively monitor changes, update plans, and implement needed improvements to address the increased transportation demand. Behavioral changes in the way people travel (such as reduced vehicle household trips in a more walkable neighborhood, use of bike share and car share programs, and increased use of the high-capacity transit system) also would help to offset some of the demand over time. Given these considerations and with implementation of mitigation measures, no significant unavoidable adverse impacts would be anticipated.

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; and other public services and facilities. Public facilities and community facilities within the subarea and 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 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 the central offices of the school district, as well as 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 proposed under Alternative 4—Preferred Alternative, as well as Alternative 2—Some Growth and Alternative 3—Previous

Most Growth. Allowable building height and form at the site would facilitate redevelopment into a variety of diverse 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. Decisions related to redevelopment will be entirely up to the School District. 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.

There is the potential that this school and site would need to be reinstated in the future for elementary school or other education use to serve growth within the subarea.

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 its 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, 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, and 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 replacement levies would 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.

In recent years, a number of elementary school sites have been converted to other uses (Aldercrest Annex and Cedarbrook, North City, and Sunset elementary school sites). The school district intends to retain these properties in case they are needed for future school use. Although the school district currently has no plans for building new schools, it is recognized that additional schools and facilities may be needed in the future to serve growth in the subarea.

Analysis of Potential Impacts

Alternative 4—Preferred Alternative

Under the Alternative 4—Preferred Alternative, population and housing growth would place increased demands on the school district for additional facilities and employees. This increased demand would be higher than under the other alternatives. The total population would be expected to rise to 56,529 people living in 23,554 households under Alternative 4—Preferred Alternative. This is 48,585 more people and 20,244 more households than under today's levels.

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.

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, population increases would create a higher demand for other types of public school services, such as preschool and extracurricular activities.

Using a factor of .33 students per household based on current enrollment in the district, approximately 16,033 students would be generated by the anticipated growth. 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.

Applying the proportional factors per school level based on today's demographics, this would equate the following student population at build-out (based on current attendance at each school level):

- 7,891 elementary school students
- 2,439 middle school students
- 5,703 high school students.

In addition to increased student enrollment, Alternative 4 would create a higher demand for other types of public school services, such as preschool and extracurricular activities, than under the other alternatives. Full build-out under Alternative 4 would not be anticipated to occur by 2035. 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 80 to 125 years (or by 2094 to 2139) or more.

The projected student populations above at the elementary, middle, and high school levels due to increased population in the subarea under Alternative 4—Preferred Alternative would 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 (at the estimated average annual growth rate of 1.5 percent to 2.5 percent), 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.

It is 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 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 given the trends described above, 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 as a result of providing new and varied housing opportunities.



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
School Name		Grades Served	2013 Enrollment	Location
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.

Table 3.4-2
Enrollment by School Level—Shoreline School District
(2012-2013 School Year)

Number of Students	Percentage of Total	School Level
4,289	49.22%	Elementary School
1,325	15.21%	Middle School
3,100	35.57%	High School
8,714	100%	Total Number of Students

The Next Twenty Years (Up to 2035) for Any Action Alternative

Under all action alternatives, there would be an increased demand for schools and school facilities over the next twenty years. It is estimated that there potentially would be the following total student populations in the subarea per school level:

- 723 to 893 elementary students
- 223 to 276 middle school students
- 522 to 646 high school students

The Shoreline School District will review these numbers as part of their ongoing planning for school facilities and begin to determine how to address the population growth in the coming years.

Alternative 3 – Previous Most Growth

Under the Alternative 3—Previous 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 higher than under Alternatives 1 and 2, but less than Alternative 4. The total population would be expected to increase to 37,315 people living in 15,548 households under Alternative 3—Previous 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 the following estimated student population:

- 2,526 elementary school students
- 780 middle school students
- 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, but less than under Alternative 4.

As under the other action alternatives, it should be noted that full build-out under Alternative 3 would not be anticipated to occur by 2035. 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—Previous 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.

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
- 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.

As with the other action alternatives, 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.

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 1 - No-Action

Under Alternative 1—No Action, there would be no changes to zoning, but ongoing population growth and new housing construction in the subarea would place additional demands on school services and facilities. The population of the subarea would be 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. For Alternative 1, it is estimated that of 1,201 new students generated over the period from 2014 to 2035, there would be:

- 591 elementary school students
- 183 middle school students
- 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.

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 support 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 reorganization of site uses could create 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 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 be 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. See more discussion later in this section under "Open Space, Trees, Vegetation, and Habitat."
- **Special Use Facilities:** These facilities and places provide unique recreational experiences and although not all are located in the subarea, they provide a citywide level of service (and as such, would serve future residents of the subarea). These include the Shoreline Pool, Spartan Recreation Center, Kruckeberg Garden, and the Interurban and North Crosstown Connector Trails.
- **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 N 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 NE and Meridian Avenue N. 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 continue 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 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 within community park service areas and portions are located within neighborhood park service areas. Areas of the subarea not served by 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). However, it is important to note that some of these school sites may be re-converted back to school use in the future, reducing their level of service for neighborhood park use (although school grounds and facilities such as the gyms could still serve some neighborhood recreation

functions).

In review of the overlapping service areas mapped by the City, 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, the mapping shows that there is a current lack of neighborhood parks to serve the existing population. This would continue with future redevelopment if no additional neighborhood parks are created (as discussed later under impacts analysis). While the proximity of schools could help to serve residents' needs in the subarea, there will be a need for parks to serve the neighborhood in the future. The City anticipates placing more focus on this need and identifying potential parks and recreation opportunities for the subarea in the coming years.

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—parking improvements and park expansion (underway)

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 (currently being hosted at City Hall on Saturdays, June through October)
- Trail Connectors

Other desired amenities identified in the plan include a variety of recreational facilities, such as:

- | | |
|--|-------------------------|
| • Basketball courts | • Freeride bike parks |
| • Barrier-free playground | • Off-leash dog areas |
| • Community gardens | • Putt-putt golf course |
| • Disc golf courses | • Pickleball courts |
| • Signage (directional, entry, interpretive) | • Tennis courts |
| • Skate parks | • Water trails |
| • Spray parks | • Wi-Fi in parks |
| • Swings | |

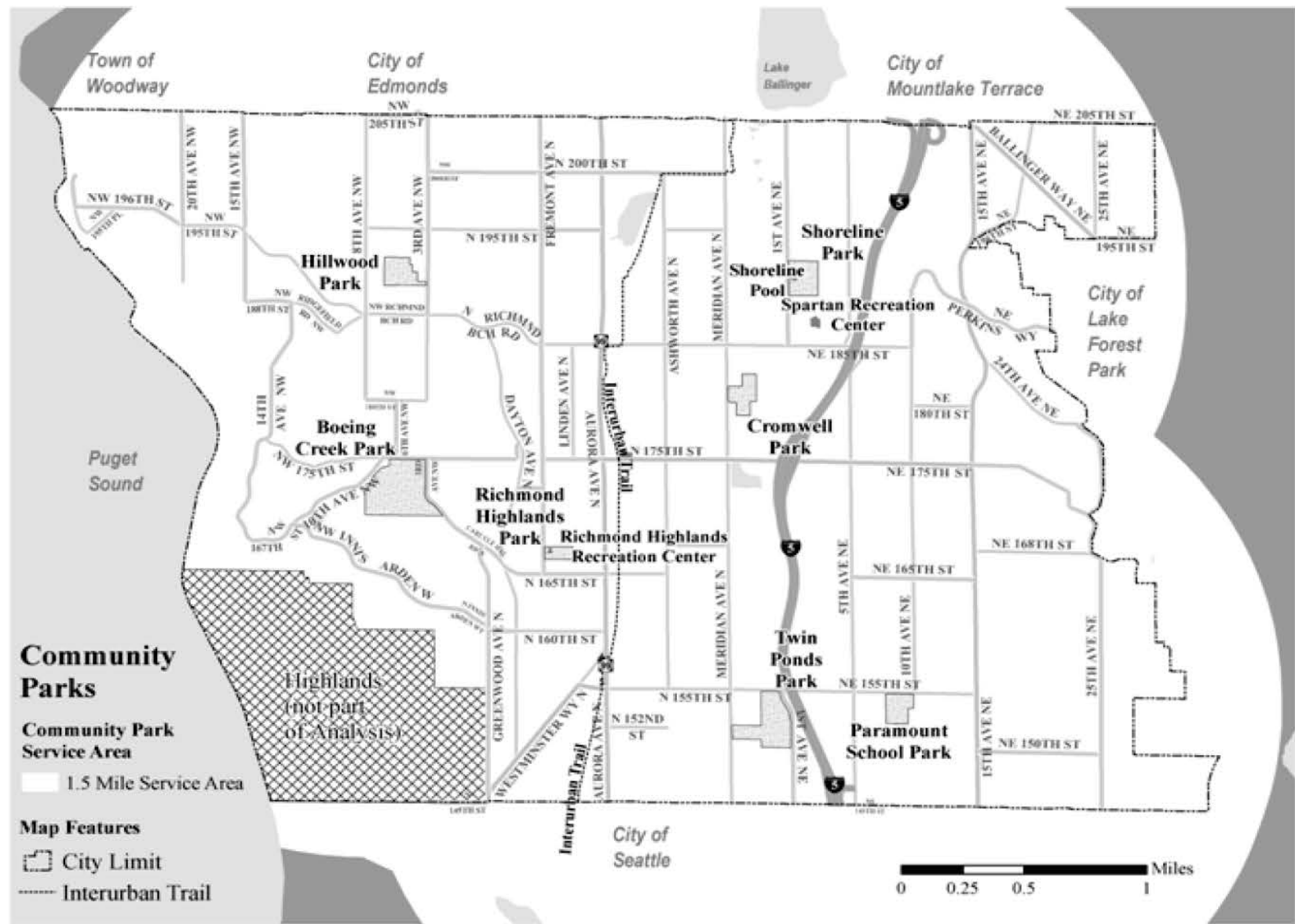


Figure 3.4-3 Neighborhood Park Service Area



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.

Open Space, Trees, Vegetation, and Habitat

Residents characterize Shoreline as a wooded community; this is often cited as a key reason for locating in the area. Large evergreen trees can be seen rising above residential neighborhoods, on hilltops, and even on the periphery of Aurora Avenue. As the city becomes more urbanized, it is a priority to maintain and enhance the tree canopy, and in 2012, the City took steps to be recognized as a Tree City. The City has also developed Vegetation Management Plans for parks, and will track tree canopy over time to gauge the effect of policies related to tree retention and replacement.

Forested open space, wetlands, and native vegetation found on steep slopes and in open space areas are important resources that should be preserved. Trees help stabilize soils on steep slopes, and act as barriers to wind and sound. Plants replenish the soil with nutrients, generate oxygen, and clean pollutants from the air. Native vegetation provides habitat for wildlife. Wetlands and riparian vegetation provide surface water storage and help clean surface water of pollutants and sediment. Aerial photos show that the community is a mosaic of various types of vegetation. The largest, most contiguous areas of native vegetation in Shoreline are primarily found in city parks, publicly owned open space, and privately owned open space areas. These

areas include the highest quality wildlife habitat found in the city. However, areas of less intensive residential development also contain mature trees and other native vegetation, which provide secondary wildlife habitat and substantially contribute to the quality of life in Shoreline.

Lakes and wetlands also provide valuable habitat in Shoreline. There are two lakes in proximity to the subarea: Echo Lake and Ronald Bog. Shoreline's lakes contain pollutants and contaminated runoff, including fertilizers and pesticides from lawns and gardens; oils, greases, and heavy metals from vehicles; and fecal coliform bacteria. The quality of the water in the lakes is a concern to many residents and City staff. Ronald Bog was historically dredged. As urban development has occurred, the process by which the nutrient level and vegetation in these lakes increases has accelerated. It is anticipated that Ronald Bog will eventually revert to a bog.

Wetlands perform valuable functions that include surface and flood water storage, water quality improvement, groundwater exchange, stream base flow augmentation, and biological habitat support. With the exception of the Puget Sound estuarine system, all wetlands in the city are palustrine systems (freshwater). The largest palustrine system is Echo Lake, located to the northwest of the subarea. Ronald Bog also is a large wetland.

Most wetlands in the city are relatively isolated systems and surrounded by development. Under the Shoreline Municipal Code, wetlands are designated using a tiered classification system (from Type I to Type IV) based on size, vegetative complexity, and the presence of threatened or endangered species. No wetlands

in the city have received a Class I rating. All wetlands, regardless of size, are regulated under the Shoreline Municipal Code. When a development is proposed on a site with known or suspected wetlands, a wetland evaluation is required to verify and classify wetlands and delineate boundaries and buffer areas. The State Department of Ecology mandates minimum wetland buffer areas based on typology and other factors.

All of the documented wetlands within the city have experienced some level of disturbance as a result of development and human activity. Disturbances have included major alterations, such as wetland excavation, fill, or water impoundment. Some wetland areas occur within parks that receive constant use by people, threatening the wetlands with impacts from human activity, such as trash and trampling of vegetation.

Habitat Protection

The process of urbanization can result in the conversion of wildlife habitat to other uses. The loss of certain types of habitat can have significant, adverse effects on the health of certain species. Fish and wildlife habitat conservation areas are those that are necessary for maintaining species within their natural geographic distribution so that isolated subpopulations are not created. Designated habitats are those areas associated with species that State or federal agencies have designated as endangered, threatened, sensitive, or candidate species. Currently in the Puget Sound, the bald eagle and Chinook salmon are listed as threatened species by the federal government under the Endangered Species Act.

Priority Habitat Areas— The Washington Department of Fish and Wildlife (WDFW) indicates bald eagle territory in the Richmond Beach and Point Wells areas, outside the subarea. WDFW maps and the City's stream inventory indicate the presence of Chinook salmon in portions of McAleer, Thornton, and Boeing Creeks, outside the subarea. Other sources have indicated the presence of fish in other streams within the city, although the full extent of fish habitat has not been confirmed.

To help restore healthy salmon runs, local governments and the State must work proactively to address salmon habitat protection and restoration. WDFW has developed the Priority Habitats and Species (PHS) Program to help preserve the best and most important habitats, and provide for the life requirements of fish and wildlife. The City has developed mapping of PHS areas based on data provided by the WDFW and other mapping resources.

WDFW provides management recommendations for priority species and habitats that are intended to assist landowners, users, and managers in conducting land use activities in a manner that incorporates the needs of fish and wildlife. Management recommendations are developed through a comprehensive review and synthesis of the best scientific information available. The City has reviewed the PHS management recommendations developed by WDFW for species identified in Shoreline, and used them to guide the development of critical areas regulations that fit the existing conditions and limitations of Shoreline's relatively urbanized environment.

Refer to Figure 3.4-5 for a depiction of urban forest and priority habitat areas that the City has mapped in the vicinity of the subarea. Ronald Bog is the only priority habitat area in the

subarea. Urban forest areas are shown in green and include areas such as Shoreline Park, North City Park, Rotary Park, and sloped topographic areas along the interstate corridor and elsewhere.

Critical Areas Ordinance— The City of Shoreline has an adopted Critical Areas Ordinance and correlating Code requirements (Chapter 20.80). The ordinance specifies regulations related to habitat protection. For example Section 20.80.300 describes mitigation performance standards and requirements, as follows:

- A. Relevant performance standards for other critical areas (such as wetlands and streams) that may be located within the fish and wildlife habitat conservation area, as determined by the City, shall be incorporated into mitigation plans.
- B. The following additional mitigation measures shall be reflected in fish and wildlife habitat conservation area mitigation planning:
 - 1. The maintenance and protection of habitat values shall be considered a priority in site planning and design.
 - 2. Buildings and structures shall be located in a manner that preserves and minimizes adverse impacts to important habitat areas. This may include clustering buildings and locating fences outside of habitat areas.
 - 3. Retained habitat shall be integrated into open space and landscaping.
 - 4. Where possible, habitat and vegetated open space shall be consolidated in contiguous blocks.

5. Habitat shall be located contiguous to other habitat areas, open space or landscaped areas both on and offsite to contribute to a continuous system or corridor that provides connections to adjacent habitat areas.

6. Native species shall be used in any landscaping of disturbed or undeveloped areas and in any enhancement of habitat or buffers.

7. The heterogeneity and structural diversity of vegetation shall be emphasized in landscaping.

8. Significant trees, preferably in groups, shall be preserved, consistent with the requirements of Chapter 20.50 SMC, Subchapter 5, Tree Conservation, Land Clearing and Site Grading, and with the objectives found in these standards. (Ord. 398 § 1, 2006; Ord. 238 Ch. VIII § 4(E), 2000).

Department of Ecology Surface Water Management

Regulations—The Department of Ecology (DOE) requires surface water management compliance of development projects. DOE regulations list preservation of native trees, vegetation, and undisturbed ground, along with other tools and best practices, as effective methods for managing surface water runoff and enhancing water quality. More information about DOE regulations is provided in Section 3.5 of this FEIS.

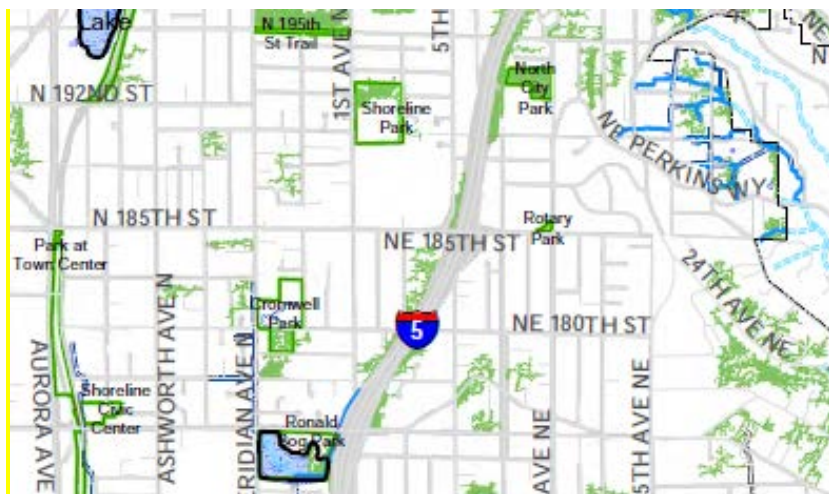


Figure 3.4-5 Urban Forest and Priority Habitat Areas (Ronald Bog and Echo Lake) mapped in the vicinity of the subarea.

Analysis of Potential Impacts

The anticipated demand for parks and recreation facilities under the alternatives is analyzed below. Table 3.4-3 provides a summary of the estimated demand for parks under the alternatives.

Alternative 4—Preferred Alternative

Under the Alternative 4—Preferred Alternative, population growth (both housing and employment) would result in increased demands for parks, recreation, and open space resources. This increased demand would be higher than under the other alternatives. The total population would be expected to rise to 56,529 people living in 23,554 households under Alternative 4—Preferred Alternative. This is 48,585 more people and 20,244

more households than under today's levels. It is estimated that there also would be an additional 15,340 employees in the subarea at build-out.

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.

While there appear to be adequate regional and community parks in Shoreline to serve future growth, neighborhood parks will be needed in the subarea as the population increases.

Neighborhood parks can vary in size, from one acre to up to fifteen acres. Most existing neighborhood parks in the City of Shoreline are between one acre and five acres in size.

Based on traditional National Park and Recreation Association (NPRA) standards, it is advisable to have a neighborhood park serving a half-mile area with population of up to 5,000 people. However, it should be noted that these standards are used with discretion in determining park needs, because every community is different and they may have various types of recreation

facilities that meet the demand even if they do not have the acreage.

So with consideration of the NPRA standard, the number of new residents in the subarea under Alternative 4—Preferred Alternative at build-out would be 48,585 (over today's existing number). Assuming that some existing facilities in the subarea and in surrounding areas are currently meeting neighborhood park needs, there could be an additional demand for approximately nine new neighborhood parks. Some of this demand could continue to be served by neighborhood school facilities as well as neighborhood parks in areas bordering the subarea. Most of the demand would need to be met by new parks, recreation, and open space facilities. Neighborhood parks could be integrated into the redevelopment of large parcels (such as the Shoreline Center site if it were to redevelop).

Implementation of urban plazas, pocket parks, playgrounds, trail corridors, and other open space as part of redevelopment projects could certainly also serve some of the demand for neighborhood park space.

Given the lack of available land and limited resources of the City to purchase land for development of new parks, dispersed mini-parks and urban plazas/public gathering spaces, which are smaller (one-half acre or less), could help to serve the demand in the subarea if incorporated into redevelopment projects. Every new development should be required to provide some level of park and open space use for residents, and the City should continually evaluate the best possible locations for creating new neighborhood parks as the subarea grows (see Mitigation Measures).

While multiple small neighborhood parks could be accommodated within the subarea as part of redevelopment and with the redevelopment of the Shoreline Center site and adjacent City property, it is unlikely that there would be enough geographic space for nine new neighborhood parks in the subarea. It is important to remember that the other level of service standard referenced is for neighborhood parks to serve an area within one-half mile. As such, if two to three new neighborhood parks were developed within the subarea, and other types of parks, recreation, and open space facilities are provided as part of redevelopment, the level of service likely would be sufficient for an urban neighborhood. (This assumes that existing neighborhood parks in areas near the subarea would be able to serve some of the growing population. In some cases, these existing neighborhood parks may need new facilities such as play equipment or other elements to improve their recreation capacity for use by the surrounding residents.)

The City intends to continue to monitor the need for parks as the neighborhood grows and to seek funding for, acquire property, and develop new neighborhood park facilities in the subarea to serve the growing population's needs. One of the important objectives of developing a subarea plan is to identify these key areas of need, so that the City and its partners can begin to proactively plan to serve these in the near term. Recognizing that property values likely would increase in the subarea in the future, it may be advantageous to seek property for parks and open space use in the near term.

Priority habitat areas such as Ronald Bog are protected by local, state, and federal regulations. Areas of urban forest are more vulnerable to potential impacts associated with

redevelopment in the subarea. The City's adopted critical areas ordinance calls for preservation of groups of mature trees, planting of native landscaping, and other provisions. DOE regulations related to surface water management also recognize preservation of natural areas as a best practice. Redevelopment projects in the subarea will be required to comply with these regulations as applicable.

The Next Twenty Years (Up to 2035) for Any Action

Alternative

Under all action alternatives, the projected population of new residents would be 2,916 to 5,399 (in 1,140 to 2,190 households) by 2035, over the current level of 7,944 residents and 3,310 households in the subarea. There also would be an estimated 502 to 928 new employees by 2035. This level of population would equate to demand for approximately one new neighborhood park in place by the end of the twenty-year horizon of 2035, if not before.

Alternative 3 – Previous Most Growth

Alternative 3—Previous Most Growth Alternative would create a higher level of demand for parks, recreation and open space facilities than Alternative 2, but less than Alternative 4. 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, some of the demand potentially could be served by smaller-sized neighborhood parks and dispersed mini-parks, and urban plazas/public gathering spaces created as part of redevelopment sites.

Alternative 2—Some Growth

Under Alternative 2—Some Growth, the changes in zoning also would result in increased population and housing growth, but at a much lower level than under Alternative 4—Preferred Alternative or Alternative 3—Previous Most 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 50 years (or by 2045 to 2055) or beyond.

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 at least one 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 one to two acres to up to 15 acres or more. Given

the lack of available land and limited resources of the City to purchase land for development of new parks, dispersed mini-parks and urban plazas/social gathering spaces, which are smaller (one-half acre or less), could help to serve the demand if created as part of new redevelopment. Every new development should be required to provide some level of park and open space use for residents.

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. It is anticipated that the current level of parks, recreation, and open space in the subarea would be sufficient to support the projected growth under Alternative 1—No Action. 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 existing school facilities in the area.

Demand for Other Human Services/Community Support Facilities

Under any of the action alternatives, the growing population of the subarea also will generate demand for a wide range of other human services and community support facilities, such as senior center facilities, community meeting and classroom facilities,

recreation center facilities, etc. As discussed previously the Shoreline Center currently provides a wide range of these types of services and facilities to the community. The City of Shoreline and the Shoreline School District recognize how important the facilities at the Shoreline Center are to the community. As such, if the site were to redevelop in the future, one of the likely options would look at how to retain these facilities and services while also maximizing the use of the site for housing and mixed use. Refer to the previous Schools analysis in this section for more information.

**Table 3.4-3
Estimated Demand for Parks**

Time Frame	Alt. 4 Preferred Alternative	Alt. 3 Previous Most Growth	Alt. 2 Some Growth	Alt. 1 No Action
Twenty Years/ 2035	One New Neighborhood Park	One New Neighborhood Park	One New Neighborhood Park	No New Facilities
Build-Out	Nine New Neighborhood Parks or a Combination of Facilities to Meet the Demand	Six New Neighborhood Parks or a Combination of Facilities to Meet the Demand	Two New Neighborhood Parks or a Combination of Facilities to Meet the Demand	Not Analyzed

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. 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 three action alternatives: Alternative 4—Preferred Alternative, Alternative 3—Previous Most Growth, and Alternative 2—Some Growth.

- The proposed subarea plan policies related to parks, recreation, and open space should be adopted to support the development of needed facilities for future residents in the subarea. The policies call for:
 - Investigate potential funding and master planning efforts to reconfigure and consolidate existing City facilities at or adjacent to the Shoreline Center. Analyze potential sites and community needs, and opportunities to enhance existing partnerships, for a new aquatic and community center facility to combine the Shoreline Pool and Spartan Recreation Center services.
 - Consider potential acquisition of sites that are ill-suited for redevelopment due to high water table or other site specific challenges for new public open space or stormwater function.
 - Explore a park impact fee or fee in-lieu of dedication program for acquisition and maintenance of new parks or open space and additional improvements to existing parks. 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.
- Proposed development regulations for the light rail station area should be adopted to require and/or encourage the provision of public space and recreation facilities with redevelopment projects, as part of Development Agreements (Chapter 20.30.355) and site design (Chapter 20.50.240). As part of negotiating

Development Agreements, the City could ask developers to select from a list of needed facilities. (See list of needed facilities earlier in this section, on pages 3-180 and 3-184.

- The subarea plan recommends creation of a variety of public spaces and recreational opportunities to serve the multi-generational needs of the growing transit-oriented community and capable of connecting to other facilities the subarea and throughout the city.
- 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 would continue to monitor parks, recreation, and open space needs in the subarea and update the PROS plan in the future to address these needs.
- City policies and Code regulations related to natural areas and critical areas will be required of redevelopment projects in the subarea as applicable.

Significant Unavoidable Adverse Impacts

Under any of the alternatives, there would be an increased in demand for parks, recreation, and open space areas in the subarea. The demand would be substantially higher under Alternative 4—Preferred Alternative, than under Alternatives 3, 2, or 1. The demand for parks in the next twenty years would generally be the same under any alternative given that growth would be expected to stay at a similar pace of 1.5 percent to 2.5 percent annually.

As changes in population occur throughout the city, the PROS Plan and the Capital Improvement Program should be updated to adjust priorities and support accommodation of the needs in the station subarea. The City also will be exploring a potential park impact fee program and/or dedication program. New redevelopment projects will be required to provide public open space and recreation amenities.

Given that the anticipated increases in population would be expected to be 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 parks, open space, and recreation facilities to serve the population as needed. Of particular importance will be the need to continually monitor opportunities to create neighborhood parks in the subarea.

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 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 the highest priorities is 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 achieve 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 complementary 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 annually 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 4—Preferred Alternative

For the higher level of population growth projection expected under Alternative 4—Preferred Alternative, at full build-out there would be a much higher demand for police protection as well as fire and emergency service facilities. Both the police and fire departments would require additional staff, equipment, and facilities to serve the growing population.

The total population would be expected to rise to 56,529 people living in 23,554 households under Alternative 4—Preferred

Alternative. This is 48,585 more people and 20,244 more households than under today's levels.

Full build-out under Alternative 4 would not occur by 2035. 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 80 to 125 years (or by 2094 to 2139) or more.

There is the potential with increased population density that there could also be increases in crimes and offences in the subarea that would need to be addressed through added police protection and patrols.

The population growth of Alternative 4—Preferred Alternative would result in a demand for approximately 41 new commissioned police officers at full build-out (incrementally increasing over many decades up to that amount). With further evaluation and planning, the City could consider the potential for a satellite police station in the subarea over the long term future.

For fire and emergency services this population increase would result in an additional 4,859 to 6,089 calls annually at full build-out (again increasing incrementally over many decades up to that amount).

With the building heights and types proposed under Alternative 4 (as with Alternatives 2 and 3), there would be a need for emergency and fire service providers 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.

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. 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, it is anticipated that 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.

The Next Twenty Years (Up to 2035) for Any Action Alternative

Under any of the action alternatives, the projected 2035 population of new residents would be 2,916 to 5,399 (in 1,140 to 2,190 households), above the current number of residents and households in the subarea. This would create a demand for approximately 2.5 to 4.6 new commissioned police officers by 2035 (over today's levels) to address arising needs such as increased crimes and offences and to provide added patrol and protection services.

Fire and emergency service providers would need to increase staffing, equipment and facilities to handle approximately 292 to 675 new calls annually in the subarea by 2035.

Alternative 3—Previous Most Growth

For the level of population growth projection expected under Alternative 3—Previous 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 and under Alternative 2, but less than under Alternative 4. 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—Previous Most Growth would impact the Shoreline Police Department facilities and services by creating an increased demand for approximately 25 additional commissioned officers to maintain the level of service ratio of .85 commissioned officers per 1,000 residents at full build-out. This staffing increase would help to address arising needs such as increased crimes and offenses and to provide added patrol and protection services.

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. 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.

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 to address arising needs such as increased crimes and offenses and to provide added patrol and protection services.

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. Service providers would need to evaluate current equipment and vehicles to determine

when additional resources, such as increased ladder heights and/or rescue and evacuation training, should be added.

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 1—No-Action

Under the Alternative 1—No Action, population growth and construction of new housing and businesses in the study would be less than under the action alternatives, but there would still be some additional demands for 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 annually. 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.

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.

- Behavioral changes through education and increased use of outreach, as well as volunteer services such as neighborhood watch programs also could help to reduce demand for some services.
- 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.
- With further evaluation and planning, the City could consider the potential for a satellite police station in the subarea over the long term future.

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 Alternative 4—Preferred Alternative and Alternative 3—Previous Most Growth than under Alternative 2—Some Growth and Alternative 1—No Action. With increased population there would likely be an increase in crime, as well as in emergency incidents that require more service from police, fire, and emergency professionals.

Because the growth under any of the action alternatives would be expected to occur gradually, over many 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 particularly 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, Washington.

The King County Comprehensive Solid Waste Management Plan completed in 2013 provided an estimate of the amount of waste generated per customer (household or commercial address) and the recycling rate for communities in the county. For Shoreline, the average amount of garbage disposed per week was 23 pounds per customer. This was lower than many other communities in the county and lower than the countywide average of 25 pounds per week. Shoreline's recycling level was 57 percent, which was higher than many other communities and

higher than the countywide average of 55 percent. The Shoreline community is managing solid waste in an above average manner. Also, in Shoreline and countywide, average weekly disposal amounts are trending downward, while recycling levels are increasing.

Analysis of Potential Impacts

Under all the 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 4—Preferred Alternative, an additional 23,554 households, as well as various businesses and other land uses would develop over time and create increased demand for services in the subarea. Alternative 4 would create more demand than under the other two action alternatives.

Under Alternative 3—Previous Most Growth, an additional 12,238 households, as well as businesses and other land uses would develop over time.

Under Alternative 2—Some Growth, an additional 3,986 households, as well as various businesses and other land uses, also would develop over time and create increased demand for services in the subarea.

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 businesses in the subarea.

Table 3.4-4 on the following page displays estimated waste generation levels per alternative based on today's known calculations for Shoreline. It should be noted that these amounts are likely high given trends toward solid waste reduction and increased levels of recycling.

Table 3.4-4
Solid Waste Generation per Alternative

Time Frame	Alt. 4 Preferred Alternative	Alt. 3 Previous Most Growth	Alt. 2 Some Growth	Alt. 1 No Action
Twenty Years/ 2035	32,813 to 60,739 total pounds per week of solid waste generated	32,813 to 60,739 pounds per week of solid waste generated	32,813 to 60,739 pounds per week of solid waste generated	5,914 additional pounds per week of solid waste
Build-Out	599,779 total pounds per week of solid waste generated	537,341 total pounds per week of solid waste generated	171,533 total pounds per week of solid waste generated	Not Analyzed

More landfill space may be needed to support waste management at the levels listed, particularly for Alternatives 4 and 3. There would need to be intense management of solid waste levels including actions to divert waste to avoid this outcome.

Mitigation Measures

As discussed previously in this section, full build-out of the action alternatives 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.

- 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.
- The City or other entities involved in solid waste management could increase outreach to educate

residents and businesses about the importance of waste reduction and recycling. Programs to encourage more composting, conversion of waste to energy, reuse, recycle, barter/trade, etc. could be intensified over time. These efforts could lead to behavioral shifts in the subarea that might then help offset some of the increased demand for services.

- Solid waste services are paid through fees. Additional customers would increase the revenue base for solid waste management services. In addition, the City and its contractor could manage the fee structure and potentially increase fees in the future if needed to address the additional demand for services. It is anticipated that this would be a last resort if outreach and education do not result in reduced solid waste levels.
- The City would work with King County and regional waste management entities to monitor the ongoing potential need for additional landfill space.

Significant Unavoidable Adverse Impacts

Implementation of any of the action alternatives would increase demand for solid waste services due to increases in 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 Avenue N in the heart of Shoreline's Town Center. This new facility is a 67,000 square feet, LEED Gold certified building with an expected lifespan of 50-100 years. 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 in the near term. City Hall currently includes the Executive, City Clerk, Attorneys, Finance, Administrative Services, Human Resources, Parks and Cultural Services, Public Works, and Planning and Community 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 residents.

Historical Museum/Arts and Culture

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.

Various arts and cultural groups are active in the community and provide a variety of community services.

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 Avenue 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. The demand for postal services has been in general decline in the US for several years due to the reliance of the public on other communication methods such as email services and social media.

Human and Social 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. Other types of human services provided in Shoreline include services for seniors such as the senior center and social service programs and facilities. Social and

community services would include the need for community center uses, additional meeting space, and other facilities.

Analysis of Potential Impacts

City Services

Population growth under all of the alternatives would increase demand for City services, but more so with the action alternatives, and in particular with Alternative 4—Preferred Alternative or Alternative 3—Previous Most Growth. Redevelopment over time would necessitate ongoing needs for new regulations, planning and development review, and capital projects, as well as City Public Works, Parks and Recreation, maintenance personnel, and other staff and resources. Based on the additional population growth anticipated under the various action alternatives, the following increases in demand for other types of public and community services would be expected.

Alternative 4—Preferred Alternative would result in addition of 48,585 people. This level of new population would generate demand for:

- 122 additional full-time-equivalent (FTE) City employees at build-out (incrementally increasing over many decades up to that amount), applying the current ratio of 2.52 city employees per 1,000
- 88.7 percent increase in demand for other services such as library, museum, arts and culture, postal, and human/social services (a new library or satellite library may be needed at build-out)

The Next Twenty Years (Up to 2035) for Any Action Alternative would add 3,418 to 6,327 more people to the subarea. This level of new population would generate demand for:

- 7.35 to 13.61 additional FTE City employees
- 5.3 percent to 9.9 percent increase in demand for other services such as library, museum, arts and culture, postal, and human/social services

Alternative 3—Previous Most Growth would bring an additional 29,371 people to the subarea. This level of new population would generate demand for:

- 74 additional FTE City employees at build-out
- 53.6 percent increase in demand for library, museum, arts and culture, postal, and human/social services (a new satellite library may be needed)

Alternative 2—Some Growth would increase population by an additional 9,566 people, which would generate demand for:

- Additional 24 FTE City employees at build-out
- 17.5 percent increase in demand for library, museum, arts and culture, postal, and human/social services

Alternative 1—No Action would have an estimated population increase of 790 people by 2035 and would generate demand for:

- Two additional FTE City employees would be needed to serve this growth
- Minimal increased demand for library, museum, arts and culture, postal, and human/social services

Mitigation Measures

All alternatives would increase population in the subarea and require additional public services, including the need for a variety of 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.

- 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.
- The City and other human/community services providers should monitor the need for additional services and facilities as growth occurs over time, and properly plan for and allocate resources toward expanding and enhancing services to address increased demand.

Significant Unavoidable Adverse Impacts

Under all alternatives, the subarea would experience population growth. Under Alternative 4—Preferred Alternative, this growth would be more substantial than under Alternative 1—No Action or Alternative 2—Some Growth. Alternative 3—Previous Most Growth would also increase population to substantial levels (more than Alternatives 1 and 2 but less than Alternative 4). The relative incremental pace of growth would be expected to be similar under any of the action alternatives, occurring 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.

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**. Note all maps are provided 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 590 pressure zone, the largest zone within the city. In 2013, the North City Water District entered into a new agreement with the Seattle Public Utilities to supply 3,330 gallons per minute (gpm) of water to its customers. In conjunction with the new withdraw rate, 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 590, 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 (estimated growth without the inclusion of the 185th Street Station Subarea Rezoning Option), the District will have a surplus of 882 gpm under peak demands for the year 2030. 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.

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)
2013	7,745	1,836	250	2,086	3,330	1,244
2016	7,977	1,891	250	2,141	3,330	1,189
2030	9,275	2,198	250	2,448	3,330	882

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

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 million gallons per day (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 two reservoirs in the area. The reservoirs contain 5.7 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, commercial, 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		
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.

In addition to the reservoirs, the North City Water District contains four source withdrawals and two booster pump stations that work in conjunction to supply water to its customers. 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.

In 2013, the North City Water District installed a fourth supply station into their network. With the two booster pump stations,

the new supply station, and 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.

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" to 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 8" diameter to provide adequate fire suppression.

In order to ensure adequate fire flow within the system, prior to starting a new development, an applicant is required to apply for a Certificate of Water Availability. Once the application is

complete and the fees paid, the District will conduct a Fire Flow Analysis using a computer hydraulic model to determine the amount of flow and pressure available at the property in question. If the result of the analysis indicates there is sufficient fire flow, the Certificate of Water Availability will be issued to the property owner. If the result of the analysis indicates there is insufficient fire flow, improvements will be required.

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 approximately 100 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. The 30" steel transmission main was installed in 1955, and is approaching the end of its serviceable life.

Current Demand for Water

Residential water demand is based on a survey generated by Seattle Public Utilities regarding wholesale water customers. The study includes the 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**

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 Equivalent Residential Units (ERUs), with 171 gpd per ERU. For the purposes of this study, 1 ERU is equivalent to 2.4 employees.

Table 3.5-3—Water Consumption Analysis

	2008	2009	2010	2011	2012
North City Water District	169	171	171	140	139
Wholesale Average	179	193	164	165	172
Seattle	140	145	145	128	130

With these demand figures, the North City Water District supplies 358,288 gpd of water during peak season operations to their portion of the subarea, and Seattle Public Utilities supplies 310,892 gpd to their portion of the subarea. The total demand within the subarea under current conditions is estimated to be 669,180 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 feet of elevation 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. The Ronald Wastewater District is currently a municipal utility governed by elected officials. A joint merger between the City of Shoreline and the Ronald Wastewater District is currently being evaluated, which would make the wastewater system a City owned and operated utility.

The subarea is located within five sewer drainage basins, and is served by three lift stations owned and operated 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. 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.

Typically 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.

King County made reclaimed water available 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
Other	7
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.

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”, and 370 feet of mains larger than 12”.

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 also ultimately connects to the King County's West Point Treatment Plant.

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 w/ Standby generator	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 City of Shoreline Surface Water Master Plan (adopted in 2005 and updated in 2011) outlines the surface water management 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 1950s and 1960s. 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 portions of the subarea drain 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 flows 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 manmade 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 Analysis 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 managed and 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 of Shoreline 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)	Linear Foot (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 do not possess curb and gutter. Surface water is conveyed through a series of ditches, swales, and sheet flow on private lawns. If development is projected within the subarea, many of these streets will be improved to accommodate higher volumes of vehicles and pedestrians, and may be developed into a more urban street network. When this occurs, many of the ditches and sheet flow dispersion areas will be converted to curb gutter and sidewalk, requiring installation of an enclosed pipe network, with detention and treatment facilities. 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, or converted to bioswales or other Low Impact Development stormwater feature.

Current Demand

As part of this study, surface water runoff within the subarea was estimated using the Rational Method. The analysis provided an estimated volume and discharge through the City's surface water conveyance system within the subarea during a 25-year storm event, for each zoning option. Percent impervious surface area for the subarea under current conditions was compared to proposed improvements. In order to assess surface water 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. The SPU stormwater fee structure provides a

relative impervious surface area based on average lot size and type of development. The EIS study estimated the amount of stormwater reaching the municipal surface water collection system for each customer class. The analysis undertaken was for EIS planning purposes only. The purpose of the study was to receive a relative understanding of the increase in surface water discharge potential zoning increases will have on the current surface water collection system. The analysis performed has no bearing on the existing Surface Water Master Plan. Actual improvements and exact upsizing of sections of infrastructure will not be known until extensive hydraulic modeling is completed for the subarea.

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.)

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.

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

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% *
Nuclear.....	4.4%
Wind.....	3.9%
Coal.....	0.8%
Landfill Gases.....	0.5%
Other.....	0.6%

*50% from the Skagit and Pend Oreille Rivers

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 within the subarea 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 sources within 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" to 4" 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 vicinity of the subarea 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.

A specific policy of the 185th Street Subarea Plan calls for developing a strategy for undergrounding overhead utilities in the subarea. As more capital improvements occur within transportation rights-of-way to facilitate future growth, more of

the current overhead utilities could be relocated underground in coordination with the utility providers.

3.5.2 Analysis of Potential Impacts

3.5.2 a Impacts Common to All Alternatives

All four alternatives within the subarea would result in some population growth. Any growth within the city would ultimately require some improvements or upsizing of utilities to serve projected demands within the subarea. Recommended improvements within this study are based on a planning level of analysis of each utility in relation to the area of rezoning and projected growth. The following recommendations represent an estimate of improvements likely to be necessary within the subarea under any of the action alternatives.

Once the rezoning is adopted, each utility provider would be responsible for conducting more detailed hydraulic modeling reflecting projected changes in land use in the subarea. With the more detailed hydraulic modeling, upsizing and other facility improvement needs would be confirmed more definitively. The following improvements would need to be implemented regardless of which alternative is adopted.

Water

The North City Water District contains many 6" diameter water mains with dead end stub outs. 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.

Fire suppression is currently adequate within the Seattle Public Utilities service area. 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 in the future. 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 if additional demand is incurred on the system from future developments. 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. The Seattle Public Utilities also contains many water mains 6" or less in diameter, which end in dead-end stub outs, many of which do not currently contain fire hydrants. If new developments within the Seattle Public Utilities region of the subarea require a higher level of fire suppression, these pipes may need to be upsized and include additional fire hydrants.

Wastewater

All mainline 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 if the subarea is rezoned and demand is increased. Refer to Section 3.5.2b for an in-depth analysis of demand impacts for each rezoning alternative. According to a phone

conversation with a representative from Ronald Wastewater District, there are three sewer lift stations serving the subarea. These lift stations handle a significant portion of the sewer capacity within the subarea. New demand put on the system may require upsizing these lift stations.

Ronald Wastewater District pays for wastewater 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 to 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 requests 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, 3, or 4, 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

Future growth demand forecasting for each utility was performed by Otak, Inc. The analysis is based on an estimated utility demand multiplied by projected residential and commercial population forecasting for each zoning alternative. The demand forecasting is used specifically for this EIS analysis for the subarea based on a planning level of analysis. Detailed hydraulic modeling would need to be completed by utility providers in the future as part of updating comprehensive plans/master plans. Demand was forecast for build-out of each alternative. Recommended mitigation measures (including improvements) needed to serve build-out, as well as the next twenty years of growth through 2035, are presented later in this section.

Water

Estimated water demand rates were projected for the four alternatives for the projected population in 2035, based on per capita demand rates discussed in section S.5.1a of this analysis.

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.

The following recommendations for each alternative are based on a planning level of analysis of the system and review of supply and demand presented in the most current Comprehensive Plan for both the Seattle Public Utilities and North City Water District. Once the rezoning has been adopted for the subarea, both the North City Water District and Seattle Public Utilities would need to update their hydraulic model in congruence with their comprehensive master plans to determine exact upsizing and necessary improvements required to serve the forecasted population and land use.

Alternative 4—Preferred Alternative

Complete build-out of Alternative 4—Preferred Alternative would potentially increase water demand up to 670 percent of the current demand within the system. All zones with the exception of TAZ 66 are projected to increase in demand substantially over existing conditions. The North City Water District is projected to see a 640 percent increase in demand within the subarea. The Seattle Public Utilities is projected to see a 690 percent increase in demand within the subarea. All 6" diameter pipes within the subarea would most likely require upsizing to 8" to 12" pipes, and dead-end mains should be connected into a loop to provide adequate pressure and fire suppression throughout the subarea. Increasing demand by nearly seven times the current water demand projected within the subarea may have an affect beyond just the distribution system. Hydraulic modeling should occur on all source of supply, booster stations, and storage reservoirs to verify supply would be adequate for the projected population.

Alternative 3—Previous Most Growth

Complete build-out of Alternative 3—Previous Most Growth would potentially increase water demand up to 520 percent of the current demand within the system. The 30" steel transmission main located along N 185th Street would most likely be of sufficient diameter for water transport; however, the age of the pipe should be considered for future development along N 185th Street. Although there have been no analysis of problems with this transmission main, the main was installed in 1955. The distribution mains spanning off this 30" transmission are primarily 6" to 8" mains, within the Seattle Public Utilities service area. The majority of lateral mains stemming off the transmission main would most likely need to be upsized to provide adequate fire

suppression and peak daily demand to areas within the subarea. The majority of zones forecasted to produce higher demands are located within the North City Water System, with the exception of TAZ 38, which is served by the SPU water system. The zones within the North City Water District that are projected to see the greatest increase in water demand are TAZ 124 and TAZ 126 with over 2,000 percent increase over existing conditions respectively in each zone. TAZ 38 is projected to increase demand by approximately 8,500 percent over current demand projections. Upsizing would need to occur around TAZ 38 within the SPU water system and most likely TAZs 11, 124, and 126. The only zones that do not forecast high water demand increases are TAZs 66, 79, and 125.

Alternative 2—Some Growth

Complete build-out of Alternative 2—Some Growth would potentially increase water demand up to 200 percent of the current demand within the system. As under Alternative 3, the 30" steel transmission main and associated piping, located along N 185th Street, likely would have capacity to serve Alternative 2; however, the age of the pipe should be considered.

Very few pipes extend into TAZ 38, which is projected to increase demand by 2,275 percent over the current demand. TAZ 38 is located between the service areas of Seattle Public Utilities and North City Water District; however, it is currently served solely by the Seattle Public Utilities. Pipes within this zone would 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. Coordination between the two water systems may be necessary to meet the projected demands under this scenario.

The zones that 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 may need to be upsized under Alternative 2, 3, or 4. 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.

Within the North City Water District service area of the subarea, approximately 8,400 feet of water mains are 6" diameter dead end mains. In order to adequately provide fire suppression and adequate pressure as demand increases under Alternative 2, 3, or 4, the majority of these mains may need to be upsized or connected into a loop.

Table 3.5-9—Demand for Water Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1— NO ACTION		ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— PREVIOUS MOST GROWTH		ALTERNATIVE 4— PREFERRED ALTERNATIVE	
	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	Total Water Demand (gpd)	% Growth from Existing
Seattle Public Utilities:									
Totals	310,892	351,716	13%	1,171,165	277%	2,367,524	662%	2,461,848	692%
North City Water District:									
Totals	358,288	394,880	10%	771,281	115%	1,768,981	394%	2,658,790	642%
Total of Both Water Systems	669,180	746,595	12%	1,942,446	190%	4,136,504	518%	5,120,637	665%

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 43 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 new developments at this location require a higher level of fire suppression than is currently provided, the line will need to be upsized.

Wastewater

Estimated wastewater demand rates were projected for the four alternatives for the projected population in 2035, based on per capita demand rates discussed under 3.5-1b in this section. The following recommendations for each alternative are based on a visual analysis of the system and review of supply and demand presented in 2010 Comprehensive Sewer Plan for the Ronald Wastewater District. Once the rezoning alternative has been decided upon for the subarea, Ronald Wastewater District will need to update their hydraulic model in congruence with its comprehensive master plan to determine exact upsizing and necessary improvements required to serve the forecasted population. **Table 3.5-10** shows the demand for wastewater related to the alternatives.

Alternative 4—Preferred Alternative

Complete build-out of Alternative 4—Preferred Alternative would have the greatest effect on the wastewater collection system within the subarea, with a 661 percent increase in flow rates over the existing system. The only TAZs that would not be dramatically affected by the Alternative 4—Preferred Alternative would be TAZs 66 and 125. Wastewater demand would not just be concentrated along N/NE 185th Street, but would expand throughout the study area to NE 195th Street, and south to NE 175th Street. Demand increase would affect nearly all the side streets within the subarea, and may require upsizing multiple sections of pipes 8" in diameter and above, as well as upsizing the three lift stations serving the subarea.

Alternative 3—Previous Most Growth

Complete build-out of Alternative of Alternative 3—Previous Most Growth would have significant 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—Previous 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 above, as well as upsizing the three lift stations serving the subarea.

Alternative 2—Some Growth

Implementation to complete-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.

The majority of sewer mains within the subarea are 8" gravity mains. With the increase in projected demand under any of the alternatives (Alternative 2, 3, or 4), a large number of sewer mains may need to be upsized.

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.

Table 3.5-10—Demand for Wastewater Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1— NO ACTION		ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— PREVIOUS MOST GROWTH		ALTERNATIVE 4— PREFERRED ALTERNATIVE	
	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	TOTAL SEWER DEMAND (gpd)	% Growth from Existing
Totals	788,063	878,317	11%	1,516,803	92%	4,787,862	508%	6,000,172	661%

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. Because the subarea was developed before adoption of stormwater standards drainage problems currently exist.

New redevelopment projects would be subject to Department of Ecology regulations for flow control and water quality. (Refer to discussion under 3.5.3b later in this section.) Integration of low impact development (LID) and green infrastructure into redevelopment projects can help developed areas manage

stormwater like natural systems. Bioswales, rain gardens, and other features capture and retain water onsite, allowing time for it to soak into the soil, where it is naturally filtered. This process also captures pollution and improves water quality. LID treatments are encouraged by policies in the City's Comprehensive Plan, as well as in this Subarea Plan, and are required by Code.

Surface water management demand, based on precipitation rates for the 25-year peak storm event discussed in section 3.5.1c of this analysis, and percent impervious surface area for each zoning alternative is shown in **Table 3.5-11**.

Alternative 4—Preferred Alternative

Alternative 4—Preferred Alternative is projected to create an increase of surface water flow by 37 percent over existing conditions, for a total 25-year peak storm runoff rate of 303 cfs. This does not mean that additional flooding would occur; it means that new redevelopment projects would be required to control and manage the additional flow to levels regulated by the DOE and City of Shoreline. The TAZs projected to see the most increase in storm flow runoff would be TAZs 7 with an increased surface water generation of 6.5 cfs over existing conditions, 34 with an increase of 20 cfs, 36 with an increase of 8 cfs, 37 with an increase of 8 cfs, and 132 with an increase of 6.4 cfs.

Alternative 3—Previous Most Growth

Alternative 3—Previous 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 272 cfs. The TAZs projected to see the most increase in storm flow runoff would be TAZs 64, 124, 126, 131, and 132.

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.

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.

Under Alternative 1—No Action, there would be limited redevelopment requiring LID techniques or investment in stormwater capital projects, so existing drainage issues would continue.

Table 3.5-11—Demand for Surface Water Management, All Alternatives

	ALTERNATIVE 1— NO ACTION	ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— PREVIOUS MOST GROWTH		ALTERNATIVE 4— PREFERRED ALTERNATIVE	
	Flow (cfs)	Flow (cfs)	% Growth from Existing	Flow (cfs)	% Growth from Existing	Flow (cfs)	% Growth from Existing
TOTALS	224.70	250.58	12%	271.60	21%	303.10	37%

Electricity

Estimated demand rates for electricity were projected for the four alternatives for the projected population. **Table 3.5-12** shows the demand for electricity related to the alternatives.

Alternative 4—Preferred Alternative

Alternative 4—Preferred Alternative is projected to create an increase of energy demand by approximately 700 percent from existing. All the zones are forecasted to receive a substantial increase in demand, except for TAZs 10, 64, and 66. The entire subarea is projected to generate a demand of 7.383 billion BTUs per day.

Alternative 3—Previous Most Growth

Alternative 3—Previous 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, 37, 38, 40, 124, 126, 128, 131, and 132. The entire subarea is projected to generate a demand of 6.570 billion BTUs per day.

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, 124, and 126. The entire subarea is projected to generate a demand of 3.086 billion BTUs per day.

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.

Table 3.5-12—Demand for Electricity Service, All Alternatives

	EXISTING CONDITIONS	ALTERNATIVE 1— NO ACTION		ALTERNATIVE 2— SOME GROWTH		ALTERNATIVE 3— PREVIOUS MOST GROWTH		ALTERNATIVE 4— PREFERRED ALTERNATIVE	
	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	Energy (Thousand BTU/Day)	% Growth from Existing
	924,420	1,040,741	13%	3,086,199	234%	6,570,263	611%	7,383,030	699%

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. Additional improvements to the ones listed will be necessary to accommodate future development, depending on which land use plan is implemented. Refer to Section 3.5.3c for an approximate list of improvements necessary for each alternative in relation to the affected utility. Planned utility improvements in the subarea, along with additional recommended improvements to support implementation of the action alternatives (Alternatives 4, 3, or 2) 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. Replace 660 Booster Pump Station with a new North City Booster Pump Station. 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. This project is expected to start in the fall of 2014 and will take

approximately 15 months. 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, 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 Alternative 2, 3, or 4. 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 is currently under construction. The reservoir is located northeast of the intersection of NE 179th Street and 15th Avenue NE, near the eastern edge of the subarea. The 3.7-million gallon 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 benefits 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 through 4 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.

Under Alternative 2—Some Growth, the projected demand of 1.54-million gallons of water would be required for standby storage for prospective residences within the subarea. Under Alternative 3—Previous Most Growth, the projected demand of 3.54-million gallons of water would be required for standby storage for prospective residents within the subarea. For Alternative 4—Preferred Alternative, the projected demand of 5.32 million gallons of water would be required for standby storage. Under these 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. This work was completed in 2012; however, the proposed location of the 185th Street Light Rail Station may require this recently installed capital improvement project to be relocated elsewhere west of I5.

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—

Previous Most Growth, this area is projected to use 1,682,478 gpd, and under Alternative 4—Preferred Alternative, this area is projected to use 767,127 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 Alternatives 2 through 4.

4. 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 325,000 gpd. Under Alternative 3—Previous Most Growth, these zones would increase water demand by 936,000 gpd, and under Alternative 4—Preferred Alternative, these zones would increase water demand by 1,154,000 gpd. The pipe selection may need to be upsized to accommodate the projected demands, depending on which alternative is implemented.

5. 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 an ongoing project based on need and age of existing hydrants and pipes, with an overall completion date of 2026. As capital projects are constructed and new developments are built, the North City Water District will analyze each of the dead end fire hydrants to determine if a fire hydrant needs to be replaced or upgraded as part of another project. In these situations, hydrants will be improved before 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, 3, or 4.

Seattle Public Utilities

The SPU 2013 Water System Plan describes general funding allocation for different aspects of the water system. Due to the broad overview of the SPU 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 be affected by future demands generated by any of the alternatives.

Wastewater

The following is a list of capital improvement projects from the Ronald Wastewater District 2010 Comprehensive Sewer Plan:

1. NE 185th Street Sanitary Sewer Improvements – Replace approximately 749 feet of 8" gravity sewer main and side sewers with 10" to 15" sewer mains from 12th Avenue NE to 16th Avenue NE. The estimated project cost is \$417,000.

This CIP project would assist with projected demand flows for all alternatives. Alternative 3 or 4 potentially could 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.

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 or 4 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.

This CIP project is located within TAZ 126. Alternative 3 would create a 2,200 percent and Alternative 4 would create a 2,700 percent increase in demand within this TAZ. Based on a peaking factor of four times the average daily demand generation for peak hour demand, either alternative 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 Avenue 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 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.

These projects may be dramatically affected by the land use plan implemented by the City for the subarea, and many more sewer lines within the subarea likely would require upsizing. Additional hydraulic modeling would be required to confirm needs and determine priorities.

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. Future growth in the subarea may require the capacity of the proposed designs to be re-evaluated.

1. Ronald Bog – Ronald Bog receives surface water from the surrounding streets and developments, including from TAZs 7, 11, 64, 131, 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. Based on a simple Rational Analysis method of the zones within the subarea feeding to Ronald Bog, Alternative 2 would see approximately 9 cfs increase in storm generation from existing conditions, Alternative 3 would see approximately 13 cfs increase, and Alternative 4 would see 23 cfs increase. Revisions to the hydraulic modeling should be completed for the system once the zoning alternative has been selected, to verify the amount of upsizing infrastructure necessary to accommodate projected runoff to Ronald Bog.

2. 12th Avenue NE and 11th Avenue NE, from NE 175th Street to NE 170th Street – The existing drainage system within this corridor daylight 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.

This CIP project is located near the southeast corner of the subarea. The two TAZs that drain toward this surface water pond are TAZ 65 and 66. Alternative 4—Preferred Alternative will have the most affect on this CIP project. However, rezoning within these zones is projected to be minimal and should only increase surface water flows by a maximum of 4 cfs over existing conditions. Additional storage or flow control facilities may be required. Inclusion of LID and green infrastructure improvements would provide additional mitigation.

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.

The pump station would be potentially impacted by rezoning of TAZ 79, 127, and a portion of 126. If the majority of surface water from TAZ 79, 127, and 126 discharges to the pump station, Alternative 3 may increase flows by 5.4 cfs, and Alternative 4 may increase flows by 56.9 cfs for the 25 year storm event. Additional storage or flow control facilities may be required once the preferred alternative has been chosen. Additional LID and green infrastructure improvements would provide mitigation.

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 Avenue NE 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 or 4, 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.

The pump station would be potentially impacted by rezoning of TAZ 79. The subarea's boundary is located near the pump station. None of the alternatives project a large amount of growth within this zone. If the majority of surface water from TAZ 79 discharges to the pump station, Alternative 3 will increase flows by 0.5 cfs, and Alternative 4 will increase flows by 2 cfs for the 25 year storm event. Additional storage or flow control facilities may be required once the preferred alternative has been chosen. 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, but should not have any major effect on rezoning within 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 becomes 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 best management practices (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 of Shoreline'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, unless an agreement is made with adjacent property owners.

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.

The majority of the subarea is located within the North City Water District's 590 pressure zone. While the subarea is currently zoned primarily residential, redevelopment under any of the action alternatives (4, 3, or 2) would introduce more intensive residential uses as well as neighborhoods-supporting commercial/retail. This change in land use would create a substantial increase in demand within this pressure zone.

Table 3.5-12
North City Water District – Water System Upgrades

Alternative	8" Main (Feet)	12" Main (Feet)	Additional Water Storage
#1—No Action	0	0	No
#2—Some Growth	300	4,900	No
#3—Previous Most Growth	300	30,300	Yes
#4—Preferred Alternative	300	37,000	Yes
2035 Improvements	0	8,600	Yes

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.

According to this comparison, Alternatives 4, 3, and 2 each would generate more demand than the entire pressure zone generates. Major system improvements likely would be necessary to accommodate the influx of demand generation within the North City Water District's portion of the subarea. Improvements to the water system are determined based on projected development growth and land use type.

Table 3.5-13
North City Water District – Demand Comparison

		ADD (MGD) ¹
Pressure Zone 590 - Year 2030		0.41
Subarea	Existing Conditions	0.36
	Alternative 1—No Action	0.39
	Alternative 2—Some Growth	0.77
	Alternative 3—Previous Most Growth	1.77
	Alternative 4—Preferred Alternative	2.66
2035 Improvements		0.54

1. MGD = Million Gallons per Day

The potential improvements for each alternative are based on a planning level of analysis of the system. Utility providers would need to conduct detailed hydraulic modeling as part of future comprehensive planning/master planning updates to determine specific upsizing and facility improvement needs. The analysis shows the potential demand on the system assuming the subarea is completely built out to the adopted zoning code.

Recommendations are based a conceptual schematic of what improvements likely would be necessary once the subarea is constructed to the limits of the proposed zoning area. Twenty year improvement needs assume that some upsizing to levels that would serve full build-out may be needed. (It is not assumed that the utility providers would continually upgrade facilities multiple times, but rather would install facilities to serve the longest periods of growth possible.) As part of future planning and analysis, utility providers would complete their own analyses to determine the appropriate phasing of improvements in the most efficient manner to serve growth over the next twenty years and beyond.

Alternative 4—Preferred Alternative

Based on a comparison of the necessary effective storage within the 3.7 million gallon storage reservoir, to 2 times the average daily demand for the subarea, additional water storage may be necessary for the full build-out of Alternative 4. The Washington State Department of Health recommends water storage reservoirs to contain standby storage equivalent to two times the system's average daily demand. Two times the average daily demand for Alternative 4 for the North City Water District's portion of the subarea is 5.32 million gallons of recommended storage. The maximum storage currently available is 3.7 million gallons.

Additional water storage may be necessary at full build-out of the subarea under Alternative 4.

TAZs 124 and 126 are projected to increase demand by 2,600 percent. With the increase in demand, nearly all 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. Similar to Alternative 3, 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 or larger 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 37,000 feet of water mains may need to be upsized to 12" diameter or larger mains to serve the projected demands. In addition, the storage reservoirs servicing the applicable pressure zones within the subarea 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.

Twenty Year Improvements

Necessary water storage for the projected twenty year improvements for Alternative 4 is estimated at 1.09 million gallons of standby storage. An analysis of the projected water demand for the subarea combined with the surrounding community was not performed. The existing water storage reservoir may be sufficient to provide water storage to the subarea for the next twenty years; however, a hydraulic analysis will need to be performed.

The total length of pipe potentially necessary to accommodate the projected population in 2035 is approximately 8,600 feet of pipe improvements.

Recommended improvements are based on the assumption that the subarea will eventually be built-out with land uses allowed under the proposed zoning for the preferred alternative. For the purposes of this analysis, it is assumed that infrastructure upsizing to serve the twenty-year 2.5 percent growth rate may include a higher level of improvements. Upsizing may be done to accommodate the Alternative 4—Preferred Alternative at build-out conditions since the utility provider likely would not continuously upsize mains as the population continues to grow, but would upsize for the projected population. With further planning and analysis, the utility provider would determine the most cost effective and efficient method for making improvements to serve growth in the interim years up to the built-out condition.

Estimated improvements needed to serve the next twenty years of growth (but assuming full upsizing to serve build-out) include the following.

1. The following pipes may need to be upsized to 12" diameter pipes to accommodate the projected population in 2035. 12" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4.
 - a. 2,130 feet along 5th Avenue NE from N 185th Street to NE 195th Street
 - b. 1,330 feet along NE 193rd Street from 1st Avenue NE to 5th Avenue NE
 - c. 1,100 feet along NE 192nd Street from 3rd Avenue NE to 5th Avenue NE

- d. 670 feet along NE 189th Street from 8th Avenue NE to 10th Avenue NE
- e. 670 feet along NE 188^h Street from 8th Avenue NE to 10th Avenue NE
- f. 1,780 feet along NE 185th Street from 8th Avenue NE, and south along 5th Avenue NE, to NE 180th Street
- g. 920 feet along 7th Avenue NE from NE 183rd Street to NE 180th Street
- h. 210 NE along NE 183rd Street from 7th Avenue NE to 8th Avenue NE
- i. 1,700 feet along NE 180th Street, from 5th Avenue NE to 10th Avenue NE

Alternative 3—Previous Most Growth

Similar to Alternative 4, the projected demand generated from Alternative 3 in comparison to the necessary effective storage within the 3.7 million gallon storage reservoir, additional water storage may be necessary for the full build-out of the alternative. Two times the average daily demand for Alternative 3 for the North City Water District's portion of the subarea is 3.54 million gallons of recommended storage. The maximum storage currently available is 3.7 million gallons. Additional water storage may be necessary at full build-out of the subarea under Alternative 3.

Due to the projected high demands within TAZs 124 and 126, 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 30,300 feet of water mains may need to be upsized to 12" diameter to serve the projected demands. In addition, the storage reservoirs servicing the applicable pressure zones within the subarea 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.

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 4,900 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.

Alternative 1—No Action

Improvements necessary for Alternative 1 would coincide with the Capital Improvements Plan adopted by the District. No further improvements appear necessary under Alternative 1 – No Action.

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

Alternative	8" Main (Feet)	12" Main (Feet)
#1—No Action	2,700	0
#2—Some Growth	7,000	13,000
#3—Previous Most Growth	5,700	20,300
#4—Preferred Alternative	5,500	30,500
#4 – 2035 Improvements	1,500	3,000

Alternative 4—Preferred Alternative

Alternative 4—Preferred Alternative would generate more demand throughout the subarea. Concentration would no longer be just along NE 185th Street, but would affect nearly all side streets and expand past the limits of the subarea within TAZs 7, 123, and 34. Upsizing mains and connecting dead end mains should occur for nearly every dead end fire hydrant under this alternative. Approximately 5,500 feet of water mains may need to be upsized to 8" diameter, and 30,500 feet of mains may need to be upsized to 12" diameter to serve the projected demands.

Twenty Year Improvements

As with recommended improvements for the North City Water District, this analysis assumes upsizing would occur to accommodate the twenty-year estimated annual 2.5 percent growth rate. The distribution system and facilities could be potentially upsized as necessary to accommodate Alternative 4 – Preferred Alternative at build-out conditions. Because it is not likely that the utility provider would continuously upsize their mains as the population continues to grow, but would upsize at some point for the projected population. With further planning and analysis, each utility provider would further determine how improvements could be made more cost effectively in the interim years before build-out.

Water improvements in the Seattle Public Utilities system anticipated to serve the projected population in 2035 under any of the action alternatives (but typically inclusive of upsizing to serve full build-out) are described below.

The total length of pipe potentially necessary to accommodate the projected population in 2035 is approximately 4,500 feet of pipe improvements.

1. An analysis based solely on projected population growth and per capita demand projections, estimates the following pipe diameters may need to be upsized to 8" diameter pipes to accommodate the projected population in 2035. Under total build-out of Preferred Alternative #4, these pipe diameters may need to be upsized to 12" diameter pipes.
 - a. 890 feet along Sunnyside Avenue N from the north end to N 180th Street

- b. 240 feet along N 186th Street from east end to Corliss Avenue N
2. The following pipes may need to be upsized to 8" diameter pipes to accommodate the projected population in 2035. 8" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4.
 - a. 180 feet along N 185th Court to the intersection with Midvale Avenue N.
 - b. 170 feet along N 187th Street from west end to 1st Avenue NE
3. The following pipes likely would need to be upsized to 12" diameter pipes to accommodate the projected population in 2035 (12" diameter or larger pipes may be necessary to serve build-out of Preferred Alternative 4).
 - a. 1,160 feet along 3rd Avenue NE from N 185th Street to NE 180th Street to connect the pipe network into a loop
 - b. 650 feet along Ashworth Avenue N, from N 185th Street to N 183rd Street
 - c. 650 feet along 1st Avenue NE from N 187th Street to N 185th Street
 - d. 560 feet along NE 180th Street from 3rd Avenue NE to 1st Avenue NE
 - e. 170 feet along 3rd Avenue NE from north end to NE 185th Street

Alternative 3—Previous Most Growth

Similar to Alternative 2—Some Growth, demand generation under Alternative 3—Previous Most Growth would be concentrated along NE 185th Street, where rezoning would change the area

from an R-6 to an MUR-45 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 5,700 feet of water mains may need to be upsized to 8" diameter, and 20,300 feet of mains may need to be upsized to 12" diameter to serve the projected demands.

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 7,000 feet of water mains should be upsized to 8" diameter, and 13,000 feet of mains should be upsized to 12" diameter to serve the projected demands.

Alternative 1—No Action

Approximately 2,700 feet of water mains may need to be upsized to 8" mains or connected into a loop system to provide suitable fire suppression to two fire hydrants in TAZ 132.

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

Alternative	12" to 15" Main ¹	18" or Larger Main ²	Upsize Lift Station #
#1 — No Action	0	0	None
#2 — Some Growth	11,300 ft	0	15
#3 — Previous Most Growth	11,300 ft	20,800 ft	8, 14, 15
#4 — Preferred Alternative	26,600 ft	32,500 ft	8, 14, 15
2035 Improvements	648 ft	10,100 ft	15

Alternative 4—Preferred Alternative

Alternative 4—Preferred Alternative is projected to increase demand throughout the subarea. Approximately 26,600 feet of

12" diameter pipe and 32,500 feet of 18" diameter pipe may need to be installed in new runs or upsized from existing 8" diameter mains to accommodate projected flows from the estimated population under Alternative 4.

A trunk main collects wastewater from the majority of the subarea, from as far north as NE 190th Street, as far west as Ashworth Avenue N, and as far east as 15th Avenue N. This trunk main is the main sewer main for basin #23 within the Ronald Wastewater District. The sewer main begins at NE 185th Street and Meridian Avenue NE as a 24" main. Under peak hour conditions, it is estimated that this trunk main can collect as much as 13.6 cfs from the subarea under build-out conditions of Alternative 4. The 24" trunk main was assumed to be of adequate size to handle this capacity, though with additional flows from outside of the subarea, the pipe will need to be analyzed to verify it's flow capacity. At NE 161st Place and Corliss Avenue NE, the pipe reduces in diameter to an 18" pipe, to the intersection of NE 155th Street. Approximately 1,660 feet of pipe may need to be upsized to 24" or larger diameter pipe to accommodate the projected flows from the subarea and the surrounding community.

Sewer improvements are projected along most side streets, including upsizing 3,100 feet of 8" mains upsized to 18" mains along Corliss Avenue N and Meridian Avenue N, from N 194th Street to N 185th Street, and 10,400 feet of pipe upsized to 12" mains along all side streets and cul-de-sacs from Meridian Avenue N to 5th Avenue NE. Major pipe improvements are projected along N 185th Street to accommodate the increase in demand, including upsizing 2,800 feet of pipe from 8" pipe to 18" diameter pipe from Stone Avenue N to 1st Avenue NE, and 3,300 feet of 8"

pipe to 18" diameter pipe along Ashworth Avenue N, from N 185th Street to N 175th Street.

The increased demand in TAZ 126 and 127, may require upsizing approximately 2,000 feet of pipe along NE 180th Street to 18" pipe, including upsizing the sewer connection under I-5.

Sections of sewer along NE Serpentine Place may need to be upsized to 18" diameter pipe if the region will be rezoned to R-48.

Under Alternative 4 – Preferred Alternative TAZs 34, 36, and 38 are hydraulically connected and are projected to generate a flow rate of 9.07 cfs. The improvements will be the same as Alternative 3, approximately 5,100 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.

The zones draining to Lift Station #15 will generate a peak flow of approximately 9.9 cfs, or 4,447 gpm, which exceeds the pump's capacity. This may require upsizing Lift Station #15. Additionally to accommodate the forecasted flow, approximately 1,500 feet of 8" diameter pipe may need to be upsized to 18" or larger diameter pipe, and 650 feet of 8" diameter may need to be upsized to 12" to 15" diameter pipe. Similar to Alternative 3, upsizing Lift Station #15, may require upsizing of the force main and gravity lines downstream from the lift station, outside of the subarea. Hydraulic modeling will need to be completed for any proposed improvements based on the changed land use designations.

Lift Station #8 is located just north of the subarea, but is partially fed by lots within TAZ 37. Under Alternative 4, there is potential

that 5.0 cfs or 2,270 gpm of peak flow would be generated from TAZ 37. Lift Station #8 has a pump capacity of 100 gpm with 39 feet of head. This may require upsizing Lift Station #8 and the surrounding force mains to accommodate forecasted flow.

Lift Station #14 may see an increase in peak flow up to 374 gpm, which exceeds the pump capacity. The lift station may need to be upsized to accommodate the projected flows forecasted from Alternative 4.

Twenty Year Improvements

The total length of wastewater improvements potentially necessary to accommodate the projected population in 2035 is approximately 10,100 feet of pipe improvements. The improvements include the following:

1. An analysis based solely on projected population growth and per capita demand projections, estimates the following pipe diameters may need to be upsized to 12" diameter pipes to accommodate the projected population in 2035. Under total build-out of Preferred Alternative #4, these pipe diameters may need to be upsized to 18" diameter pipes:
 - a. 1,300 feet of pipe along N 185th Street, from Meridian Avenue N to 1st Avenue NE.
 - b. 1,900 feet of pipe along 1st Avenue NE, from N 18th Street to N 180th Street.
 - c. 2,000 feet of pipe along 3rd Avenue NE, from NE 185th Street to NE 180th Street, and NE 180th Street, from 3rd Avenue NE to 1st Avenue NE.
 - d. 1,500 feet of pipe along 8th Avenue NE from 188th St to NE 185th Street and along NE 185th Street

from 8th Avenue NE to Lift Station #15 on 12th Avenue NE

2. The following pipes may need to be upsized to 18" diameter pipes to accommodate the projected population in 2035. 18" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4:
 - a. 2,700 feet of pipe along 5th Avenue NE
3. The following pipes may need to be upsized to 12" diameter pipes to accommodate the projected population in 2035. 12" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4:
 - a. 650 feet of pipe along 8th Avenue NE, from NE 190th Street to NE 188th Street
4. Lift Station #15 may need to be upsized to accommodate estimated demand for the projected population in 2035. The 2035 population is projected to increase demand to this lift station to approximately 904 gpm. Under total build-out of Preferred Alternative #4, the projected demand flow would increase would be 4,450 gpm.

Alternative 3—Previous Most Growth

Alternative 3 is projected to increase demand throughout the subarea. Approximately 11,300 feet of 12" diameter pipe and 20,800 feet of 18" diameter pipe may need to be installed in new runs or upsized from existing 8" diameter mains to accommodate projected flows from the estimated population under Alternative 3.

The trunk main that collects wastewater from basin #23 is projected to collect as much as 11.70 cfs from the subarea under build-out conditions of Alternative 3. Similar to Alternative 4, the 24" trunk main was assumed to be of adequate size to handle this capacity under Alternative 3, though with additional flows from outside of the subarea, the pipe will need to be analyzed to verify it's flow capacity. The 1,660 feet of 18" diameter pipe along Corliss Avenue NE from NE 161st Street to NE 155th may need to be upsized to 24" or larger diameter pipe to accommodate the projected flows from the subarea and the surrounding community.

Similar to Alternative 2—Some Growth, TAZs 34, 36, and 38 under Alternative 3—Previous Most Growth are hydraulically connected to the same sewer drainage basin. Under Alternative 3, the peak sewer flow rate would be 9.69-cfs. Approximately 5,100 feet of 8" diameter sewer pipes may 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 may need to be upsized to 12" or 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 3,626 gpm. This may require upsizing Lift Station #15. Additionally to accommodate the forecasted flow, approximately 5,200 feet of 8" diameter pipe may need to be upsized to 18" or larger diameter pipe, and 6,500 feet of 8" diameter may need to be upsized to 12" to 15" diameter pipe. Similar to Alternative 2, upsizing Lift Station #15, may require upsizing of the force main and gravity lines downstream from the lift station, outside of the subarea. Hydraulic modeling will need to be completed for any proposed improvements based on the changed land use designations.

Lift Station #8 is located just north of the subarea, but is partially fed by lots within TAZ 37. Under Alternative 3, there is potential that 1.2 cfs or 546 gpm of peak flow would be generated from TAZ 37. Lift Station #8 has a pump capacity of 100 gpm with 39 feet of head. This may require upsizing Lift Station #8 and the surrounding force mains to accommodate forecasted flow.

Lift Station #14 primarily serves residents outside of the subarea; however, due to its proximity to a proposed rezoning area, the lift station may be affected by rezoning that could occur under Alternative 3. The majority of TAZ 79 and a quarter of TAZ 127 discharges to Lift Station #14. Currently, Lift Station #14 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 #14 should be analyzed with the level of growth forecasted under Alternative 3.

Other potential improvements include upsizing approximately 2,000 feet of pipe along NE 180th Street to 12" pipe, including upsizing the sewer connection under I-5; upsizing, approximately 2,300 feet of pipe along 15th Avenue NE, south of 177th Avenue NE; and upsizing approximately 2,500 feet of existing pipe along 7th Avenue NE and 9th Avenue NE, from NE 180th St to NE 185th Street.

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 7,800 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 undersized if Alternative 2 is implemented. Additionally, the lift station's overflow line terminates at the proposed site of the Link Light Rail Station. Modifications may be necessary to the lift station location and size under Alternative 2, 3, or 4. Additionally, 2,800 feet of 8" diameter pipe may need to be upsized to 12" diameter pipe to assist with the sewer flow from the lift station. Upsizing Lift Station #15 may require upsizing of the force main and gravity lines downstream from the lift station, outside of the subarea. Hydraulic modeling will need to be completed for any proposed improvements based on the changed land use designations.

Other potential improvements include upsizing approximately 2,300 feet of pipe along 15th Avenue NE, south of 177th Avenue NE, and 700 feet of pipe along 8th Avenue NE, from NE 180th St to NE Serpentine Place.

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. No costs are associated with the adoption of Alternative 1.

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

Alternative	12" Pipe ¹	18" Pipe ²	24" Pipe ³	Pump Station Upsizing
#1 — No Action	0	0	0	0
#2 — Some Growth	15,300	8,800	0	MC03
#3 — Previous Most Growth	22,100	17,300	0	MC03 & Serpentine Pump Station
#4 — Preferred Alternative	11,300	35,700	4,300	MC03 & Serpentine Pump Station
2035 Improvements	4,300	20,400	2,600	MC03

Alternative 4—Preferred Alternative

Many of the existing streets currently contain ditches and swales at the edges of the roadway. When new developments are constructed within the subarea, streets would be improved to

accommodate the added influx of users. When this occurs, some of the open ditches may be converted to a closed pipe network. There is also the possibility that low impact development (LID) treatments such as bioswales, stormwater planters, rain gardens and/or other features may reduce the need for pipe replacement and upsizing,

Approximately 51,300 feet of new or upsized pipe may be needed to handle projected surface water runoff from future development. Similar to Alternative 3, the two pump stations may receive additional flow from the surrounding developments.

Under Alternative 2, 3, or 4, 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.

Twenty Year Improvements

The total length of surface water pipe improvements potentially necessary to accommodate the projected population in 2035 is approximately 27,300 feet of pipe. The improvements include the following:

1. An analysis based solely on projected population growth and per capita demand projections, estimates the following pipe diameters may need to be upsized to 18" diameter pipes to accommodate the projected population in 2035. Under total build-out of Preferred Alternative #4, these pipe diameters may need to be upsized to 24" diameter pipes:
 - a. 570 feet along N 185th Street, from Stone Avenue to Ashworth Avenue
 - b. 1,080 feet along N 185th Street, from Densmore Avenue to Burke Avenue
 - c. 970 feet along Wallingford Avenue, from N 185th Street to N 188th Street
2. The following pipes may need to be upsized to 18" diameter pipes to accommodate the projected population in 2035. 18" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4:
 - a. 450 feet along N 185th Street, from Densmore Avenue to Wallingford Avenue
 - b. 600 feet along Densmore Avenue, from N 185th Street to N 188th Street
 - c. 930 feet along Burke Avenue, from N 185th Street to N 188th Street
 - d. 500 feet along N 185th Street, from Meridian Avenue to Corliss Avenue

- e. 240 feet along Corliss Avenue, from N 184th Street to N 185th Street
 - f. 920 feet along Bagley Place N, from N 187th Street to N 185th Street
 - g. 620 feet along N 180th Street, from 1st Avenue NE to Cromwell Park
 - h. 1,530 feet along 3rd Avenue NE, from the north end to NE 180th Street, continue along NE 180th Street to 1st Avenue NE
 - i. 820 feet along 2nd Avenue NE, from the north end to NE 180th Street
 - j. 890 feet along N 185th Street, from Sunnyside Avenue to 3rd Avenue NE
 - k. 350 feet along 2nd Avenue NE, from the south end to N 185th Street
 - l. 350 feet along 3rd Avenue NE, from the south end to N 185th Street
 - m. 3,900 feet along 5th Avenue NE, from N 185th Street to NE 195th Street
 - n. 570 feet along N 185th Street, from 3rd Avenue NE to 5th Avenue NE
 - o. 680 feet along NE 190th Street, from 8th Avenue NE to 10th Avenue NE
 - p. 1,320 feet along 10th Avenue NE, from NE 190th Street to NE 185th Street
 - q. 650 feet along NE 185th Street, from 10th Avenue NE to 8th Avenue NE, and south along 8th Avenue NE to NE 183rd Street
 - r. 250 feet along 9th Avenue NE, from the south end to NE 185th Street
 - s. 250 feet along 10th Avenue NE, from the south end to NE 185th Street
 - t. 1,480 feet along NE 180th Street, from 15th Avenue NE to 10th Avenue NE
 - u. 270 feet along 14th Avenue NE, from the north end to NE 180th Street
3. The following new 12" diameter pipe runs may need to be installed to accommodate the projected population in 2035. 12" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4:
 - a. 400 feet along N 184th Street, from the east end to Corliss Avenue
 - b. 1,310 feet along 8th Avenue NE, from NE 190th Street to NE 188th Street, and east along NE 188th street to 10th Avenue NE
 - c. 670 feet along NE 189th Street, from 8th Avenue NE to 10th Avenue NE
 - d. 310 feet along NE 182nd Street, from 10th Avenue NE to 11th Avenue NE
 - e. 1,200 feet along 7th Avenue NE, from the north end to NE 180th Street
 - f. 370 feet along 5th Avenue NE, from NE 185th Street to the connection with the existing pipe
 4. The following new 12" diameter pipe runs may need to be installed to accommodate the projected population in 2035. 18" diameter or larger pipes may be necessary under total build-out of Preferred Alternative #4:
 - a. 720 feet along 8th Avenue NE, from the south end to NE 185th Street
 - b. 800 feet along 9th Avenue NE, from the south end to NE 185th Street

- c. 800 feet along 10th Avenue NE, from the south end to NE 185th Street
 - d. 550 feet along 6th Avenue NE, from the north end to NE 180th Street
5. Pump Station MC03 likely would need to be upsized to accommodate estimated demand for the projected population in 2035. (Note: MC03 is also called Pump Plant 26 by some data sources. It is located on the south side of NE 185th Street, between 9th Avenue NE and 10th Avenue NE.)

Alternative 3—Previous Most Growth

Approximately 39,400 feet of new or upsized pipe may be needed 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.

Alternative 2—Some Growth

TAZ 38 currently contains a large infiltration field. If this zone is projected to be redeveloped as projected in either Alternative 2—Some Growth, Alternative 3—Previous Most Growth, or Alternative 4—Preferred Alternative, 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.

Under Alternative 2—Some Growth, approximately 15,000 feet of 12" or larger pipe may need to be installed. Improvements would not be limited to pipe installation, but would need to include catch basins, and detention/treatment facilities. Pump Station MC03 may need to be upsized in order to receive additional flows from TAZ 126.

In total, approximately 24,100 feet of new or upsized pipe may be needed to accommodate future growth within the subarea, to handle added surface water runoff from future development.

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.

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 4—Preferred Alternative Build-Out

The majority of the subarea would see a substantial increase in energy use under Alternative 4 at build-out, but this would occur

gradually over many decades. TAZs 40, 124, 126, and 127 would not need much upsizing of the distribution lines due to their proximity to the Seattle City Light transmission corridor. No issues are anticipated in acquiring the additional energy supply to serve these zones. Zones west of I-5 are located further from the Seattle City Light transmission corridor and may require upsized distribution lines and transformers to adequately serve these areas.

Alternative 3—Previous 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.

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 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.

Natural Gas

No data was provided to support analysis of demand for Puget Sound Energy natural gas. 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. Because natural gas is readily available to the area, it is not anticipated that there would be any issues in extending service to serve future growth.

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.), as well as more energy efficient design and fixtures. These approaches will maximize energy conservation and help the region and city achieve Climate Action Plan goals, in addition to reducing impacts on energy providers. The City intends to explore the potential implementation of district energy and encourage combined heat and power systems with redevelopment as called for in the Subarea Plan policies. The City also intends to pursue a solarization program, community solar, or other innovative ways to partner with local businesses and organizations to promote installation of photovoltaic systems.

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.

Considerations Related to Redevelopment in Both Station Subareas

The 145th Street EIS Report and 185th Street EIS Report were analyzed as standalone rezoning alternatives. Depending on which alternative is selected for each subarea, the resultant zoning would have a combined effect on the supporting infrastructure.

Water—North City Water District

The primary concern with the combined effect of both subareas on the existing system is the North City Water District's current approved rate of withdrawal from Seattle Public Utility's Tolt River Transmission Main. The current approved maximum withdrawal rate from the transmission main is 3,300 gallons per minute. **Table 3.5-17** provides a comparison of the two study areas to the maximum withdrawal rate.

This analysis does not include demand from the rest of the North City Water District, which relies on this withdrawal rate as well. Based only on the two subareas, if the highest population density zoning alternatives are selected for both subareas, the North City Water District will have a deficit in their water withdrawal rate. Prior to build-out of the selected alternative, the North City Water District will need to coordinate with Seattle Public Utilities to acquire additional water withdrawal from the Tolt River Transmission Main.

North City Water District - Source of Supply Analysis for Both Alternatives Table 3.5-17

North City Water District Maximum Withdrawal Rate (GPM)		3,300		
145th Street Subarea				
Existing Conditions (GPM)	Alt 1 (GPM)	Alt 2 (GPM)	Alt 3 (GPM)	
251	374	1,338	1,507	
185th Street Subarea				
Existing Conditions (GPM)	Alt 1 (GPM)	Alt 2 (GPM)	Alt 3 (GPM)	Alt 4 (GPM)
249	274	536	1,228	1,846

Currently, both the 145th Street Subarea and 185th Street Subarea are within the 590 Pressure Zone, and fed by the same supply stations, booster pumps, and storage reservoir. If the highest population density zoning alternatives are selected for both subareas, all connecting appurtenances will need to be analyzed in conjunction with the demand generated from the surrounding community. If the new pressure zone, 515 is constructed around the 145th Street Subarea, the two subareas will no longer be connected, and the only resource used by both communities would be the 3.7-million gallon storage reservoir located near the intersection of 15th Avenue NE and NE 177th Street.

This reservoir currently serves the 615 and 590 pressure zones, and would serve as backup storage for the proposed 515 Pressure Zone. The reservoir would still need to supply standby storage of two times the average daily demand for all three pressure zones. **Table 3.5-18** contains a comparison of maximum available storage within

the reservoir to two times the average daily demand for both subareas under each scenario. Based on this information, the storage reservoir may be undersized for full build-out of the highest population density zoning alternative selected for both subareas.

North City Water District - Standby Storage Analysis

Table 3.5-18

North City Water District Available Effective Storage (Millions of Gallons) ¹			3.7	
145th Street Subarea - Average Daily Demand x 2				
Existing Conditions - 2 x ADD (MGPD) ²	Alt 1 - 2 x ADD (MGPD)	Alt 2 - 2 x ADD (MGPD)	Alt 3 - 2 x ADD (MGPD)	
0.72	1.08	3.85	4.34	
185th Street Subarea - Average Daily Demand x 2				
Existing Conditions - 2 x ADD (MGPD)	Alt 1 - 2 x ADD (MGPD)	Alt 2 - 2 x ADD (MGPD)	Alt 3 - 2 x ADD (MGPD)	Alt 4 - 2 x ADD (MGPD)
0.72	0.79	1.54	3.54	5.32

- 1.) Effective Storage was taken as the entire volume of the 3.7 million gallon Reservoir, assuming nested standby and fire suppression storage, and not factoring in equalizing storage for the purposes of this report.
- 2.) Million Gallons Per Day (MGPD)

Water—Seattle Public Utilities

Similar to the North City Water District, the Seattle Public Utilities portion of both subareas are within its own 590 Pressure Zone, and

fed by the same supply stations, booster pumps, and storage reservoir. Due to the extensive nature of the Seattle Public Utilities water system, a proper analysis could not be performed between the two subareas and connecting appurtenances. Once the desired alternatives have been selected, the hydraulic model should be updated to properly evaluate all supply stations, booster pumps, and reservoirs connected to the system. **Table 3.5-19** provides a side by side analysis of the two study areas water demand rates.

Seattle Public Utilities - Combined Subarea Water Demand Analysis **Table 3.5-19**

145th Street Subarea					
	Existing Conditions	Alt 1	Alt 2	Alt 3	
Withdrawal Rate (GPM)	228	269	958	783	
Recommended Storage (MGPD)	0.66	0.78	2.76	2.26	
185th Street Subarea					
	Existing Conditions	Alt 1	Alt 2	Alt 3	Alt 4
Withdrawal Rate (GPM)	216	244	813	1,644	1,710
Recommended Storage (MGPD)	0.62	0.70	2.34	4.74	4.92

Wastewater

The primary concern with the combined effect of both subareas on the existing system is an analysis of the prime trunk main collecting wastewater from both subareas. The majority of both subareas

collect wastewater within basin #23. The main trunk main begins in the 185th Street subarea, as a 24" diameter pipe, collecting wastewater from as far north as NE 190th Street, as far west as Ashworth Avenue N, and as far east as 15th Avenue N. This trunk main continues along Meridian Avenue N, Corliss Avenue N, and along the I-5 Corridor, collecting wastewater from a large portion of the City of Shoreline as it heads south. The trunk main turns into a 30" main at the intersection of NE 155th Street and I-5, as it enters the 145th Street Subarea. **Table 3.5-20** provides a comparison of the estimated peak flow (four times the average daily demand) for the two subareas entering this trunk main.

Ronald Wastewater - Basin #23 Combined Subarea Peak Wastewater Estimated Flow Analysis Table 3.5-16

145th Street Subarea				
Existing Conditions (CFS)	Alt 1 (CFS)	Alt 2 (CFS)	Alt 3 (CFS)	
3.04	3.96	14.36	13.38	
185th Street Subarea				
Existing Conditions (CFS)	Alt 1 (CFS)	Alt 2 (CFS)	Alt 3 (CFS)	Alt 4 (CFS)
2.24	2.50	3.93	11.70	13.58

This analysis does not include demand from the rest of Basin #23, which drains into this trunk main. Based only on the two subareas, if the highest population density zoning alternatives are selected for both subareas, the Ronald Wastewater District may need to upsize a large portion of this pipe. Additionally, this pipe enters the Seattle Public Utilities District once it crosses NE 145th Street. SPU will need to evaluate the capacity of this pipe once it

enters their system, based on the projected demand from the selected alternatives.

3.5.4 Significant Unavoidable Adverse Impacts

Increased demand for utilities services and facilities within the subarea would occur under all four alternatives, with Alternative 4 generating the most demand at build-out, followed by Alternative 3, Alternative 2, and then Alternative 1. Existing deficiencies within the water, wastewater, surface water, electricity, and communications service areas would need to be addressed over time as the subarea grows in population, households, and businesses.

Growth and change would be expected to occur gradually over many decades under any of the four action alternatives. Implementation of full build-out of Alternative 4—Preferred Alternative would take 80 to 125 years. Alternative 3—Previous Most Growth would take 60 to 100 years to reach full build-out, and Alternative 2—Some Growth would take an estimated 30 to 50 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. Energy efficiency may be achieved through combined heat and power systems, possible district energy, the potential use of solar power and/or geothermal, and other applications. With application of the capital improvement projects discussed, along with regulatory requirements, no significant unavoidable adverse impacts would be anticipated.

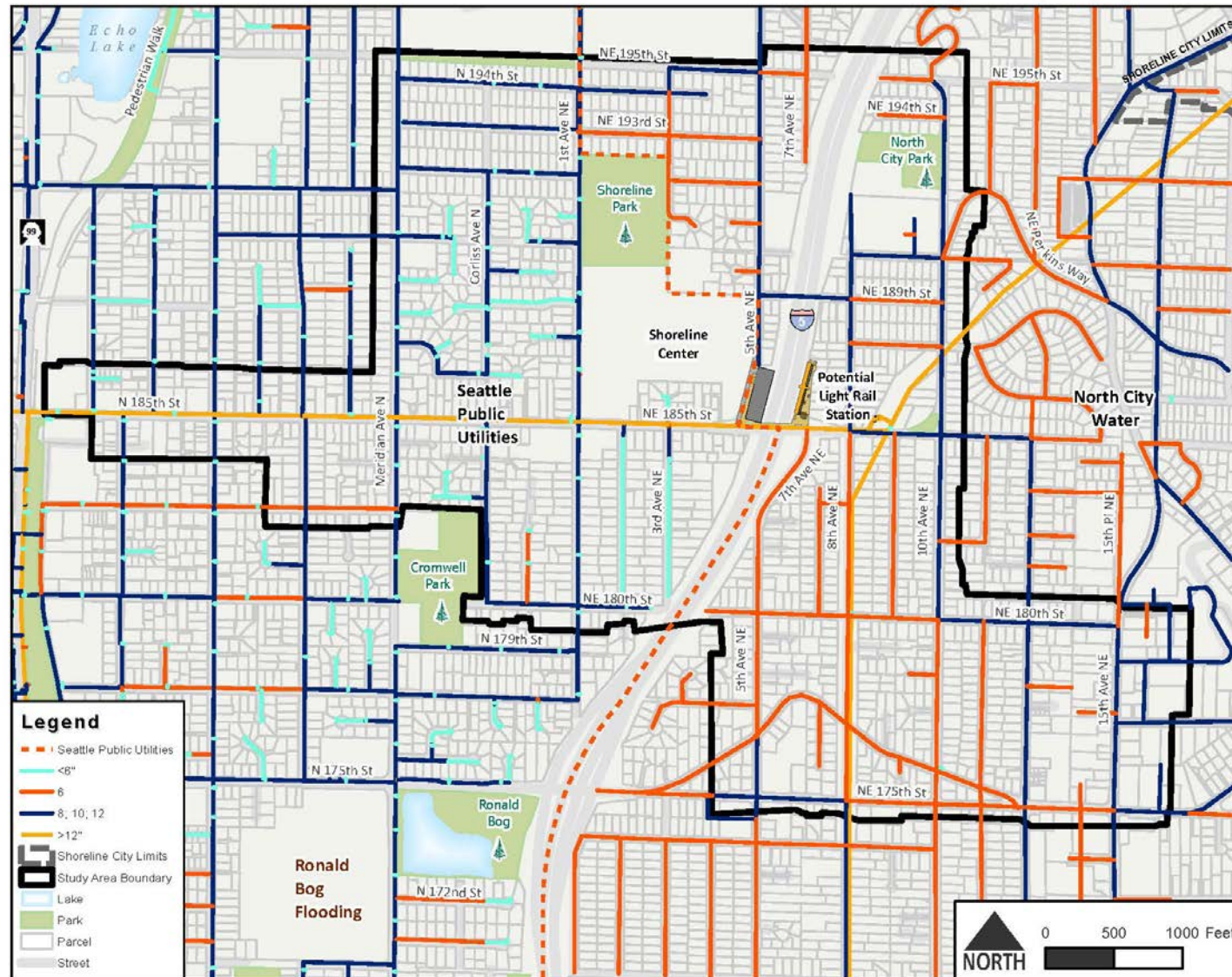


Figure 3.5-1 Existing Water Facilities in the Subarea

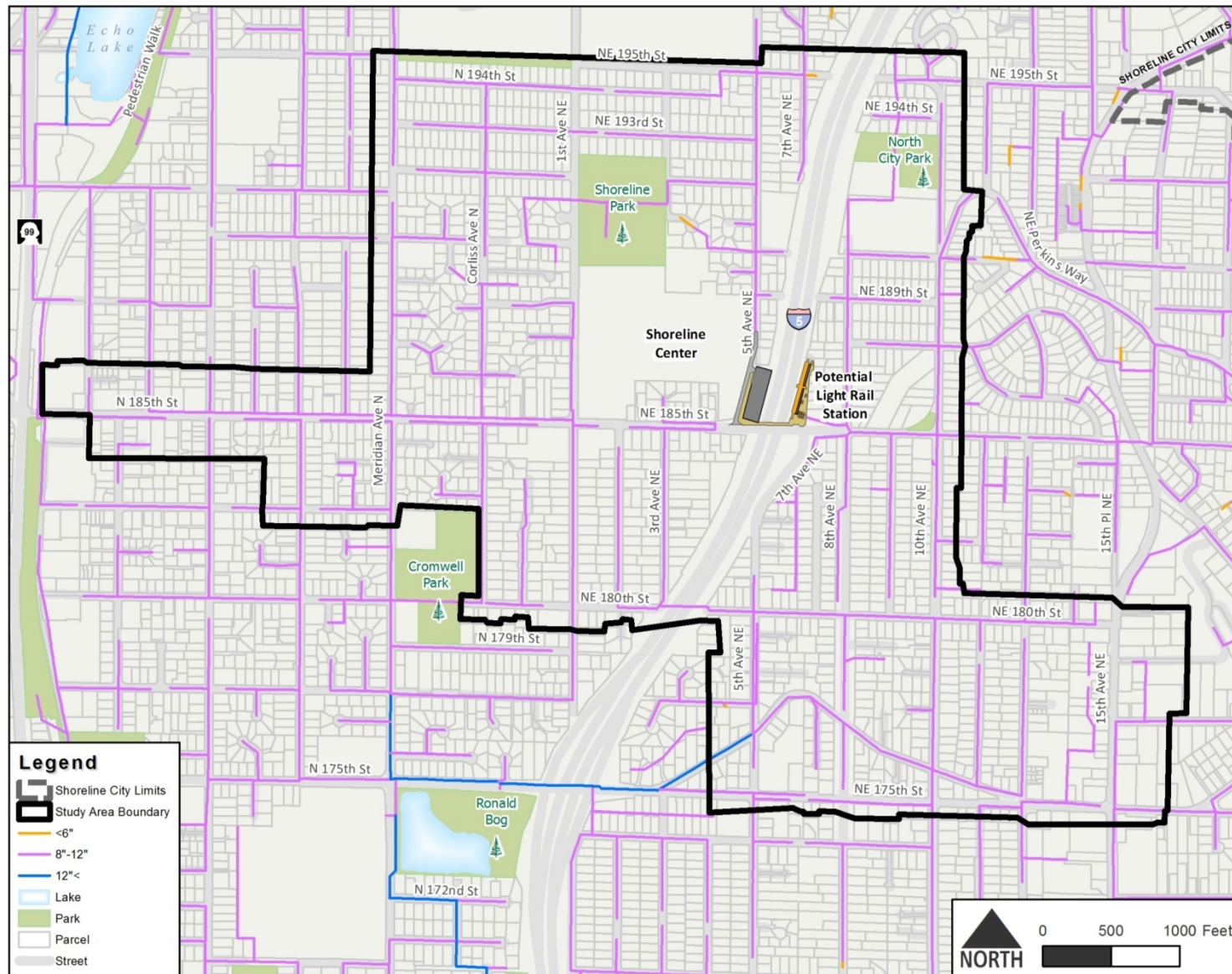


Figure 3.5-2 Existing Wastewater Facilities in the Subarea

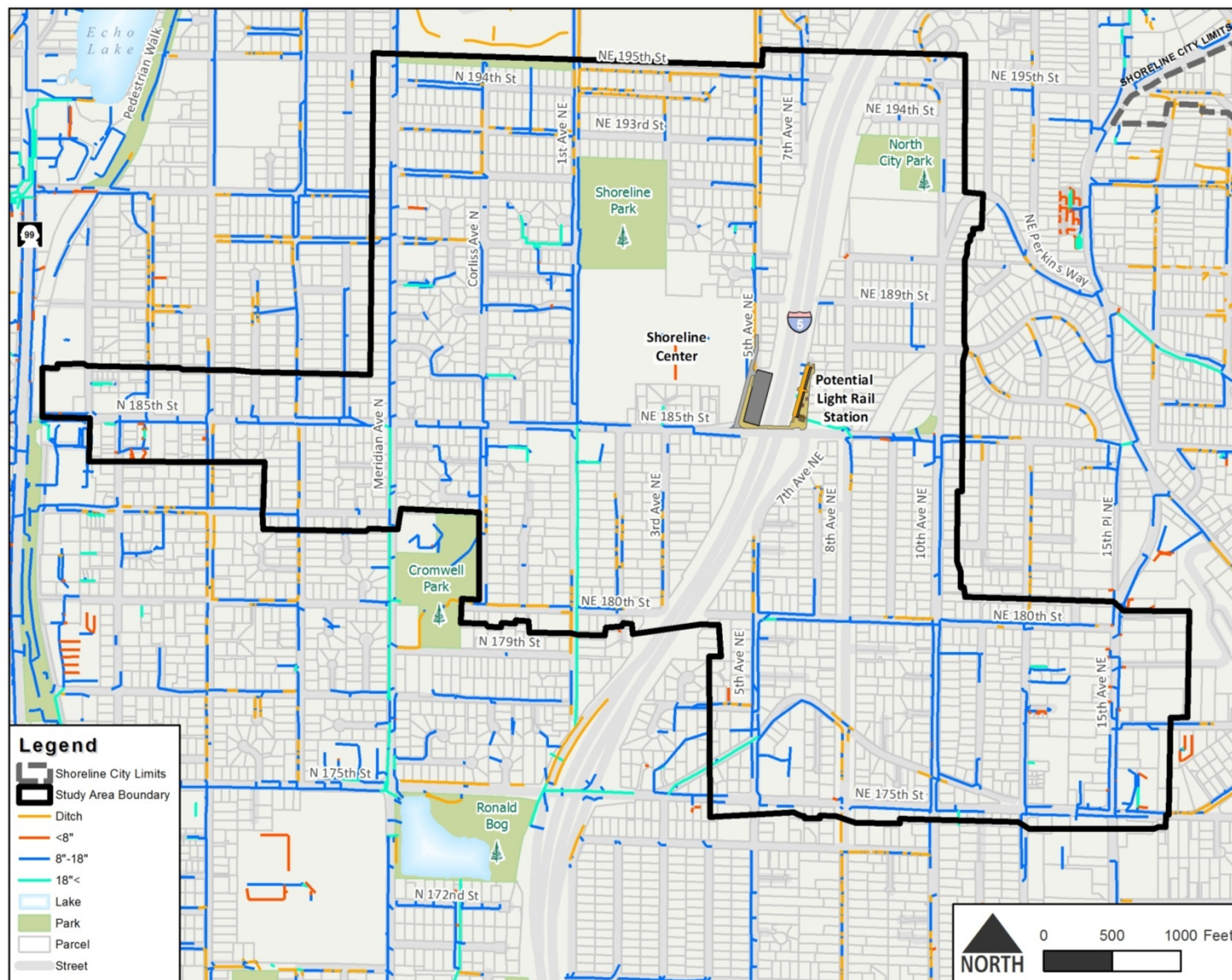


Figure 3.5-3 Existing Surface Water/Stormwater Facilities in the Subarea

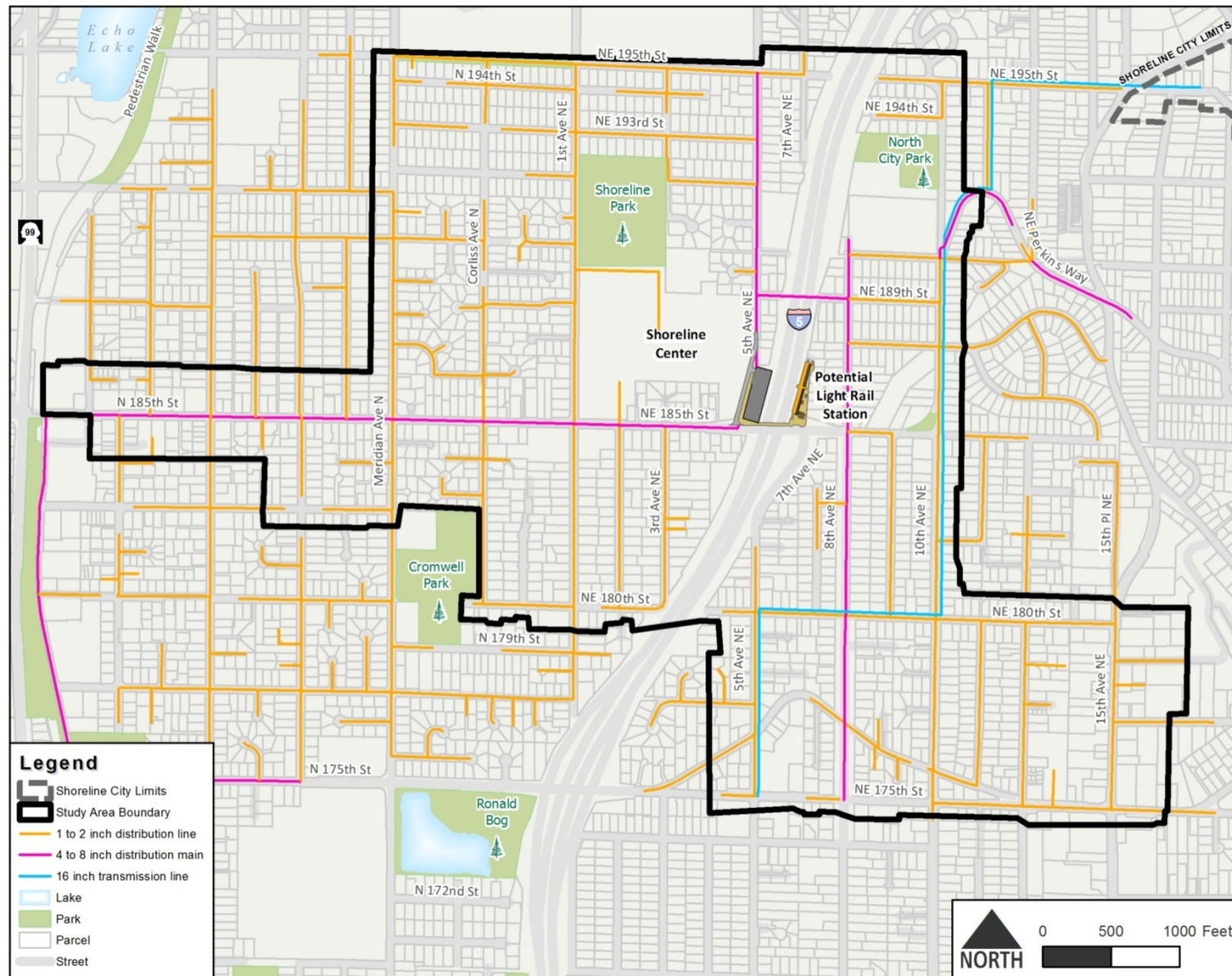


Figure 3.5-4 Existing Natural Gas Lines in the Subarea

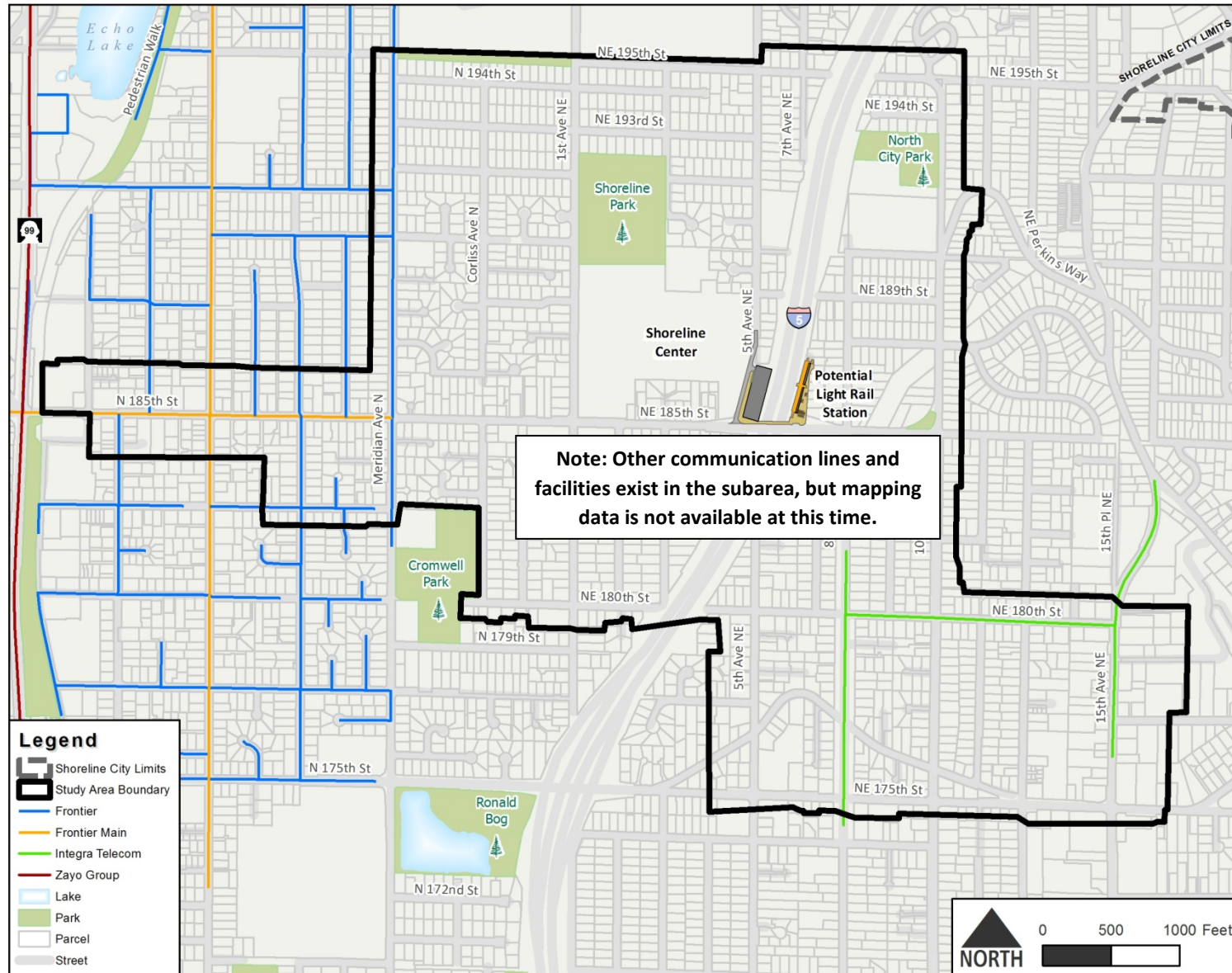


Figure 3.5-5 Communications Facilities (Partial) in the Subarea

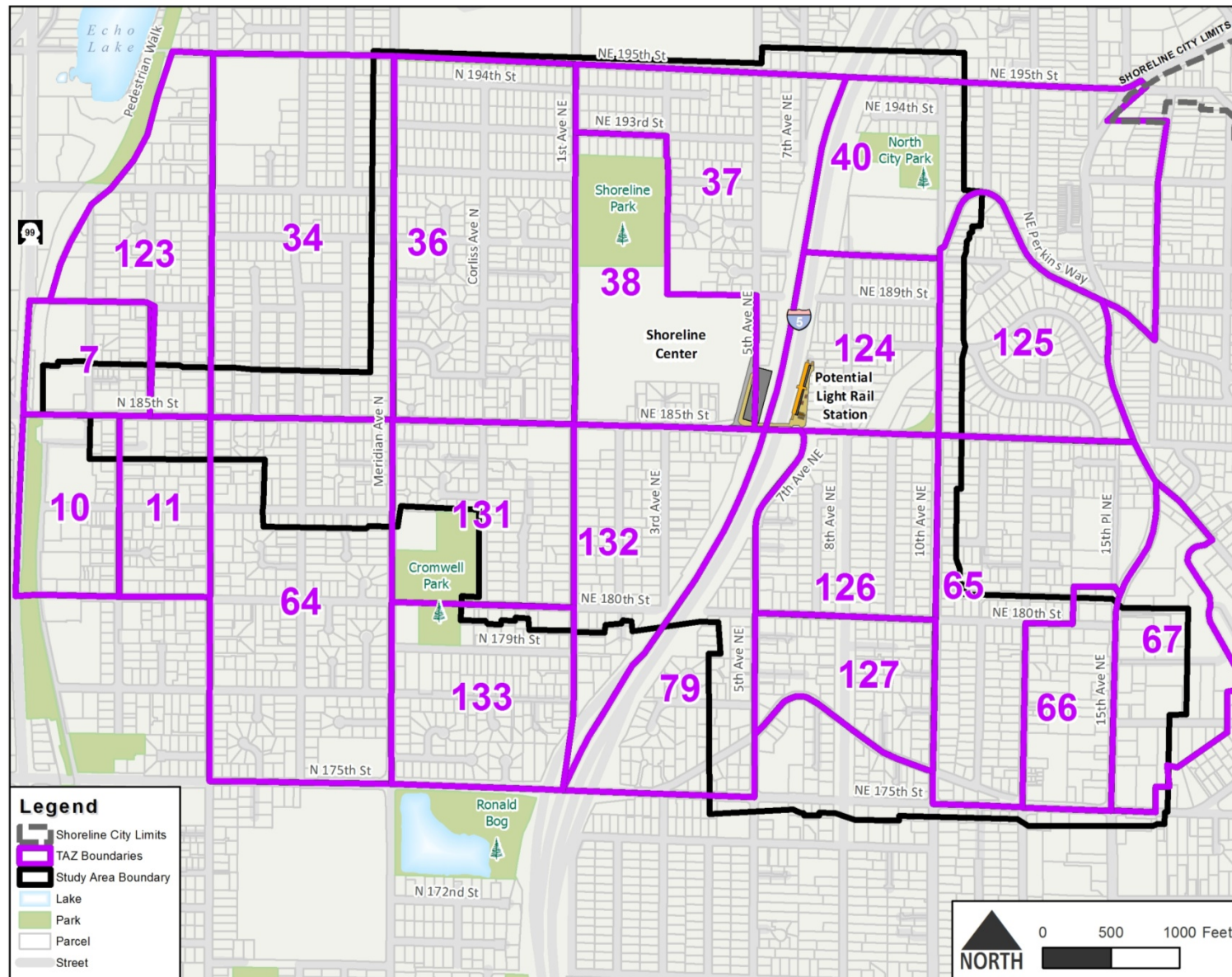


Figure 3.5-6 Traffic Analysis Zones (TAZs) in the Subarea







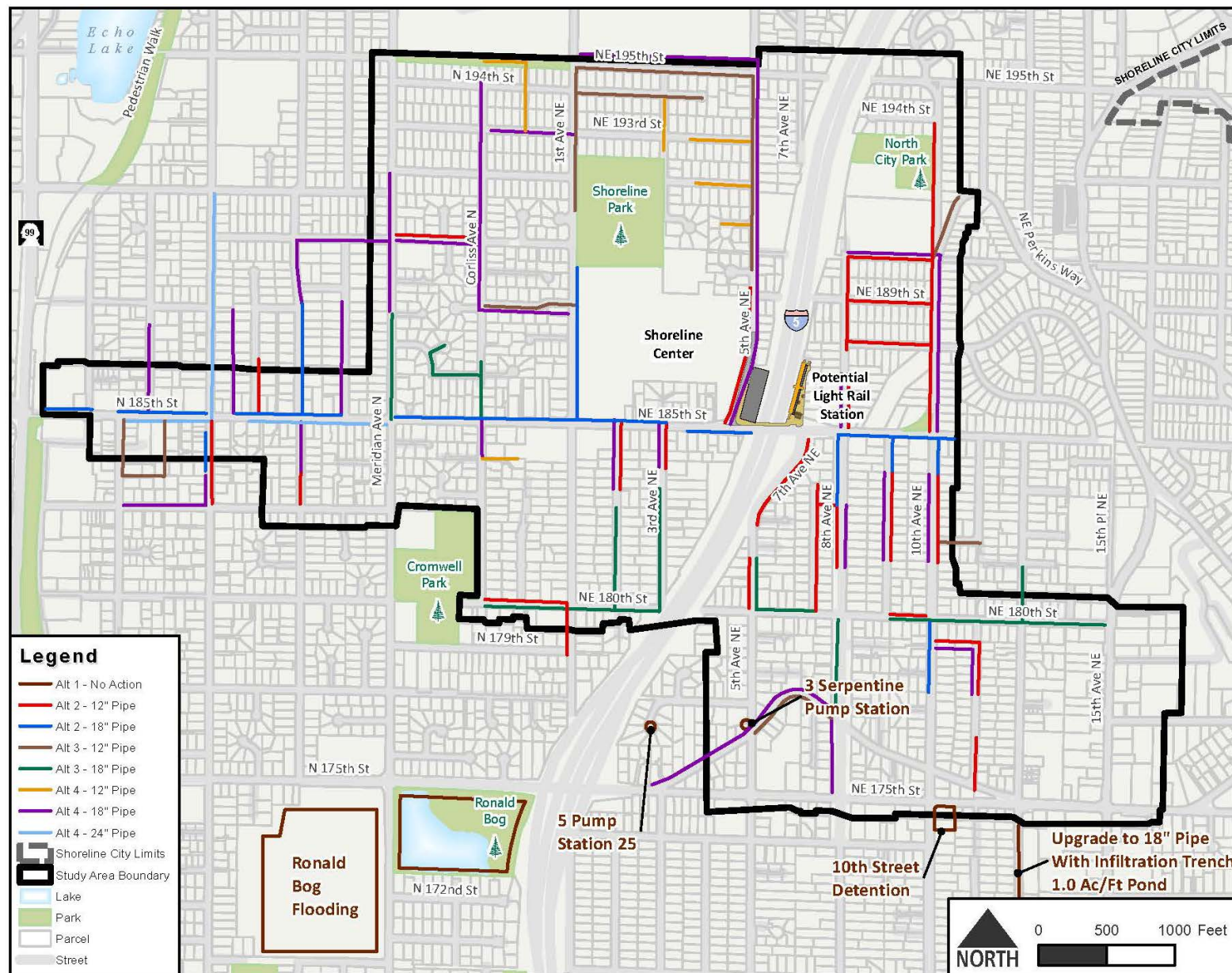


Figure 3.5-10 Planned and Recommended Surface Water/Storm Drainage Improvements in the Vicinity of the Subarea

Chapter 4

Responses to Comments on the Draft EIS FINAL ENVIRONMENTAL IMPACT STATEMENT



Sound Transit

Thank you for the opportunity to review the 185th Street Station Subarea Planned Action Draft EIS (June 2014). Sound Transit supports the 185th Station Area Planning process being undertaken by the City. Sound Transit submitted comments on preliminary draft chapters of the DEIS relating to transportation and land use prior to publication, and our comments were adequately addressed in the DEIS. We do not have additional comments on the DEIS.

Sound Transit anticipates publishing a Final EIS in 2015 on the Lynnwood Link Light Rail Extension project. As you are aware, the preferred alternative identified by the Sound Transit Board in November 2013 included a light rail station at 185th Street. A final decision by the ST Board on the project to be built will be made after the Final EIS is published.

We look forward to a continuing collaborative relationship with the City of Shoreline and working with you on the City's next steps for 185th Station Area planning process.

Regards,

Nytasha Sowers

Project Manager

Sound Transit, Office of Capital Development

401 South Jackson Street

Seattle, WA 98104

Cc: Matt Shelden

001

001 Thank you for your letter of response to the DEIS. The City of Shoreline appreciates Sound Transit's support on the 185th station area planning process, and we look forward to our continued collaborative relationship.

King County Metro

Below are King County Metro's scoping comments on the 185th Street Light Rail Station Subarea Plan/planned action EIS:

King County Metro Transit strongly supports the City of Shoreline's efforts to leverage development opportunities near future light rail stations through subarea planning around the NE 185th Street Link Station. We believe that high capacity transit should act as a catalyst for growth that enhances the value of high capacity transit and have consistently encouraged Sound Transit to work with local jurisdictions like Shoreline to facilitate Transit Oriented Development (TOD). Preparing a Subarea Plan and Planned Action EIS will lay the foundations for a well-planned, gradual transition of existing neighborhoods into the transit-supportive community appropriate for this corridor.

Because this is a Planned Action EIS, the following comments consist of suggestions for both the Subarea Plan and the environmental analysis, with a focus on the needs of public transportation.

Transit supportive land use: Within walking distance of the future Link station, land use should emphasize higher density housing, employment, mixed uses and community services to build transit ridership and support other non-single occupant vehicle travel. The subarea plans should contain special transit-oriented regulations and/or incentives to encourage less car-dependent lifestyles such as affordable housing with carshare and bikeshare; residential transit passes, un-bundling parking price from the price of rent, parking management, and market-based parking requirements.

002 Thank you for your comment and support for the City's station area planning efforts.

003 Alternative 4—Preferred Alternative emphasizes higher density housing, employment, and mixed uses and community services within walking distance of the potential light rail station. This transit-supportive land use would build transit ridership and encourage bicycling and walking in the neighborhood. The City is currently developing code provisions that would support implementation of the subarea plan, including potential incentives to encourage less car-dependent lifestyles in the subarea.

002

003

Non-motorized access: Walkability is especially important in the vicinity of light rail stations, therefore all future redevelopment opportunities within the subarea should enhance the pedestrian environment including provisions such as tight street grids, safe and continuous sidewalks, grade separation for pedestrians and cyclists, lighting, wayfinding, signage and traffic calming. Sidewalks along NE 185th Street between commuter parking on the west side of I-5 and the Link station on the east side of I-5 will be particularly important. Bicycle access should be enhanced through provision of bike paths or on-street bike lanes as well as sufficient secure and weather protected bike parking near the Link station.

004

Local bus service: The NE 185th Street corridor is currently served by Metro's Route 348. Metro is exploring ways to provide additional connecting service to the future Link station through the study area. The Subarea Plan should prioritize transit access on NE 185th Street and other bus route arterials by including in-lane transit stops and transit signal priority for better transit flow and bus and van access to the light rail station. It should also address in coordination with the transit agencies other transit supportive elements, such as opportunities for passenger facilities and layover. It is also important to coordinate with Community Transit on plans they may have for transit service in and around the station.

005

004 Over time, redevelopment and capital improvements programmed through the City's Transportation Master Plan (TMP) would enhance the pedestrian environment with new sidewalks, intersection improvements, street grid connectivity, bike paths and on-street bike lanes and other elements. Sidewalks along NE 185th and between commuter parking on the west side of I-5 and the Link station are in the City's TMP and are part of the improvements under analysis in the Lynnwood Link Extension project. Bicycle parking would be provided at the Link station and also would be a requirement of redevelopment projects.

005 Bus bulbs, signal priority, and queue jumps are among the solutions recommended in this FEIS for N/NE 185th Street specifically. Additionally signalization of the intersection at the light rail station would allow for efficient transit vehicle access to the station.

006 The transportation analysis in the DEIS and FEIS does encompass areas beyond the subarea boundary for motor vehicle traffic and bicycling.

Study area boundaries: The proposed subarea is a ½ mile radius around the light rail station. Due to practical walkability limitations, this distance may be appropriate for land use. However, the study area for transportation should be extended further, especially along important corridors such as 185th Street. For instance, bike access can extend to a three mile radius or greater. Some roads, particularly those east of the freeway could be subject to increased future traffic volumes generated by the station and by subarea and background growth. The plan should improve connectivity throughout the vicinity of the station between Shoreline Town Center to the west and the North City business district to the east.

006

Transportation analysis: The analysis should address traffic growth, increased levels of connecting bus service provided by Metro and Community Transit and improved bicycle and pedestrian travel pathways. Specifically, it should measure the impacts to peak period transit flow due to increased traffic to and around the Link station and parking facility. It also needs to identify appropriate mitigation measures to traffic growth such as ways to encourage general purpose traffic to use streets with little or no bus service in order to improve the speed and reliability of local and connecting transit service. The analysis should also address non-motorized access and safety issues including an inventory of sidewalks on arterials and local streets within at least one-half mile of the future Link station.

007

006 With regard to connectivity from outside the study area, the subarea plan recommends linking up existing and future trail improvements, including the Interurban and Burke-Gilman connector trail project. The plan also recommends separated bicycle facilities (cycle tracks) along the entirety of N-NE 185th Street. A potential shared use path within the right-of-way adjacent to the potential light rail alignment along Interstate 5 also is under consideration. As parcels redevelop over time, the City anticipates construction of new local streets, internal roadways, and alleyways (integrated with redevelopment), which would improve area circulation for all modes.

007 Peak period traffic operations and impacts to transit vehicles were analyzed in the DEIS and FEIS. Internal circulation routes as part of redevelopment and parcel consolidation are recommended to allow for vehicle access away from main corridors including N-NE 185th Street. The DEIS and FEIS analyzed existing sidewalks and recommended implementation of the City's Pedestrian System Plan.

We look forward to continuing coordination with the City of Shoreline and Sound Transit to help address the types of transit facilities and service that will be needed to make the sub area plan successful.

008

Mike Usen

Senior Environmental Planner
King County Metro

Housing Development Consortium

On behalf of the Housing Development Consortium of Seattle-King County (HDC), thank for the opportunity to comment on Shoreline's 185th Street Station Subarea Planned Action Draft Environmental Impact Statement (DEIS). **When drafting the final EIS, we urge you to thoroughly analyze the impact each alternative's proposed growth type will have on housing affordability to fully explore policies to effectively mitigate these impacts.**

HDC is a coalition of more than 100 nonprofit organizations, private companies, and public partners committed to the vision that all people should have the opportunity to live in safe, healthy, affordable homes in communities of opportunity. HDC is pleased that Shoreline's DEIS expresses a commitment to encourage and promote a variety of housing types and affordability levels. Low and moderate income families are frequent riders on transit; planning for affordable housing near light rail can provide increases in trips and ridership, in addition to meeting the needs of these families.

In setting forth the pattern of residential growth around the 185th light rail station, this planned action plays a tremendous role in determining whether Shoreline residents of all incomes can find affordable homes near their work, school, transit, and other services. Therefore it is vitally important that the City

009

008 Thank you for your comments.

009 Thank you for your comments and interest in Shoreline's 185th Street Station Subarea Planned Action. The City of Shoreline is fully committed to expanding equitable and affordable housing opportunities in the community's two station areas along the potential light rail transit alignment.

Chapter 3, Section 3.2 of the FEIS provides analysis of the alternatives and anticipated resulting opportunities for more affordable housing relative to each. The City of Shoreline's policies and regulations related to affordable housing, including those of Chapter 20.40.230 of the City's Development Code are summarized in Section 3.1.

Briefly summarizing the analysis, the City anticipates that Alternative 4—Preferred Alternative would provide the most opportunities for housing choice and affordability over time compared to all other alternatives, including Alternative 1—No Action, Alternative 2—Some Growth, and Alternative 3—Previous Most Growth.

analyze in detail the affect that each alternative would have on housing affordability and plan mitigation strategies to ensure shoreline meets the housing needs of low to moderate income levels.

Specifically, HDC urges you to analyze these different alternatives based on the type of construction that will result and the impact of different scenarios on land costs. We then ask you to consider an array of development incentives and other tools that could help mitigate upward pressure on the cost of housing for Shoreline's low and moderate income families as the City grows and welcomes light rail.

❖ Construction Type

The type of construction, which varies based on building size, can have a significant impact on the cost of new housing. For example, wood frame construction (4-6 stories tall) is often more affordable to produce than steel and concrete construction (6 or more stories tall). **When comparing the alternatives for growth, the City should consider these factors.**

❖ Land Costs & Transit Access

Aligning residential growth with transit access has tremendous environmental and social benefits. However, this form of growth can also place extreme upward pressure on housing costs. Across the country, and here in King County, light rail stations have led to exponential increases in land costs. While smart housing policies can, and should overcome this barrier to affordable housing, it is nevertheless worth close analysis. **When comparing and analyzing alternatives for growth, the City should consider how land prices will change in order to plan effective mitigation strategies for affordable housing.**

❖ Mitigating Impact

With the right level of incentives, Shoreline can attract residential development affordable to range of incomes, including those most in need. A variety of tools can help Shoreline meet the needs of low and moderate income households as the City plans for growth around light rail stations, including:

009 While it is not possible to predict exactly how land values would be affected by the proposed change in zoning, the analysis in Section 3.2 cites several case studies in transit-oriented development and resulting changes in land values.

010 Thank you for your comments and interest in Shoreline's 185th Street Station Subarea Planned Action. The City of Shoreline is fully committed to expanding equitable and affordable housing opportunities in the community's two station areas along the potential light rail transit alignment. Transit-oriented development (TOD) inherently reduces household costs by providing residents with a lower cost alternative to transportation. As such, there is great synergy in locating affordable housing within station areas as part of TOD projects.

In addition to current Code provisions, the City is exploring a variety of methods to encourage and incentivize affordable housing. Draft Development Code regulations for the 185th Street Station Subarea Plan

009

010

- Density Bonuses
- Incentive/Inclusionary Zoning
- Development Agreements
- Reductions in fees and other regulations
- Permitting priority, streamlining, or flexibility
- Reduced parking requirements
- Multifamily Tax Exemption (MFTE)
- Transfer of Development Rights for Affordable Housing (TDR)

Many of these incentives allow nonprofit housing providers, in addition to market-rate developers, to provide affordable housing for Shorelines low and modest-wage workers and families. Appropriately crafted incentives harness the power of the marketplace to produce affordable homes with very limited public investments. Development incentives are proven to stimulate affordable homes in a mixed-income setting, and, when implemented well, they allow communities to increase the supply of affordable homes, support workforce and economic development, and reduce sprawl, traffic congestion, and pollution. The resulting homes enable residents to benefit from urban reinvestment and connect to emerging job centers, transit stations, and opportunity networks.

A strong incentive zoning policy is one extremely important tool for addressing affordability near light rail stations and a recommendation of PSRC's Growing Transit Communities Strategy. As a signatory of the Growing Transit Communities Compact, Shoreline should consider incentive zoning in its high-capacity transit station areas. **When drafting your final EIS and other guiding documents pertaining to the 185th light rail station subarea, we urge you to emphasize the importance of applying a strong affordable housing incentive zoning program and other development incentives concurrently with any proposed zoning changes.** A lack of concurrency between growth and development incentives can lead to missed opportunities for public benefit.

Acknowledgement of affordability impacts and specific discussion of mitigation strategies will make your final EIS a strong document. It should be possible for working people in Shoreline to afford housing and still have enough money left

010

Include a variety of incentives and mandates for affordable housing. In addition the City would partner with other organizations to promote greater housing choice and affordability.

Other incentives include the transportation impact fee ordinance adopted by City Council in August 2014 that included an exemption for affordable housing. The City is also considering other incentives for developers to include affordable units in projects.

Alternative 4—Preferred Alternative proposes mixed use development throughout the station area, which creates economies through shared costs for parking, building operation, maintenance, and security.

011 Thank you for your input and support. The City is in agreement with HDC's perspectives.

011

over for the basics like groceries, transit, and child care. Planning for affordable housing near your 185th light rail station will help make this vision a reality.

We look forward to continuing to work with you as much as more clarity is developed for affordable housing strategies in the final EIS. HDC will continue to closely monitor this process and provide public comment as it progresses. If you have any questions about our comments, please feel free to contact me at Kayla@housingconsortium.org or call (206) 682-9541.

Kayla Schott-Bresler

Policy Manager

North City Water District

Thank you for allowing us an opportunity to comment on the Draft EIS for the above referenced project. Our major comment/concern is the large number of errors/incorrect assumptions about the North City Water District that are included in this draft EIS. This could be corrected/updated with a sit down meeting with our utility. This open dialogue, in person, will save considerable staff and consultant time as the City plans for development of the new transit stations.

Other than the public notice that recently went out by the City of Shoreline, our utility has not been contacted by the City to provide comments or suggestions about any draft plan. To date, District staff members have been doing utility locates for Sound Transit for many weeks. We are aware the agency is considering several alignments, width alternatives, and different facility size locations associated with light rail station projects. Depending on which options are selected, the project could impact the water services to our District. For example the District's new Supply Station 4 completed in 2012 appears to be at the entrance to the proposed parking garage in Sound Transit's preferred alternative route for the Lynnwood Link. Relocating that station and dealing with dead end lines on some existing water mains would be very expensive. The cost of these options will be provided to

011

012 Thank you for your comments and the additional information you have provided for the FEIS. We apologize that there was not an opportunity to coordinate more closely with the North City Water District during preparation of DEIS. Although attempts were made to gather information from the District, it appears that clear and updated information was not obtained. Your input at this time gives us the opportunity to correct the information in the DEIS and expand upon the analysis as part of the analysis of Alternative 4—Preferred Alternative and other alternatives in the FEIS.

012

013

The City of Shoreline selected Alternative 4—Preferred Alternative to be further studied in this FEIS and also is exploring phased zoning, described in more detail in Section 3.1 of this FEIS. Alternative 4 would place more demands on the public water system and water facilities than the other alternatives previously analyzed in the DEIS. Refer to Section 3.5 of the FEIS for more information.

Sound Transit as part of their design consideration for this station, but estimates should be considered now.

013

The following errors should be corrected in the final EIS and are listed by page:

Page 3-199:

- The text has several references to 509 pressure zone. It should be the 590 pressure zone. Obviously, there is an 89 feet pressure difference between a 509 and a 590 pressure zone.
- Reference is made to table 3.5-1 and a 2030 projected system deficit of 3 78 gpm. Attachment 1 is the upgraded contract North City Water District has with SPU as of March 2013. The contract supply limit is now 3330 gpm and all references to water supply need to be changed to reflect this new contract amount. We do not have a deficit with our contracted supply. The final paragraph on this page discusses a deficiency in source capacity which is no longer accurate and should be deleted.

014

015

Page 3-200:

- Table 3.5-1 needs to be changed to reflect the new source of supply and correct the deficit amounts.
- Improvements 1, 2 and 3 have all been completed since the Water System Plan Update was adopted by the District. CIP #14 was completed in 2012. Items 2 and 3 were completed in 2013 and are shown in Attachment 1.

015

016

Page 3-201:

- North City Water Districts owns two reservoirs in the area which contain 5.7 million gallons. We demolished our 0.4 mg reservoir in 2011.

017

013 Thank you for this information. The analysis in this FEIS is focused on utility requirements associated with potential future redevelopment and not specifically to the construction of the Sound Transit light rail station. However, it is acknowledged implementation of the light rail station would need to mitigate impacts to the water system, and such mitigation would therefore have implications on future services. The Lynnwood Link FEIS is scheduled to be published in 2015 and would include analysis related to their preferred option for the station.

014 All references to 509 have been changed to 590.

015 Table 3.5-1 has been updated to reflect the new withdrawal rate from SPU. Information on the source of supply also has been updated.

016 The descriptions of these source improvements have been revised to indicate their recent completion.

Page 3-202:

- The storage deficiency was corrected with the contract approval with the attachment 1. This allowed the District to have two different water sources, thus decreasing the required storage. This reference needs to be updated.
- The pressure zone is identified as 509 but should be 590 zone.
- The third paragraph, first sentence is incorrect. We did not install a 3rd booster pump station. We installed a 4th supply station. Second sentence should be changed to read "With the two booster pump stations and the new supply station,.... The reference in the last sentence to our contractual amount is incorrect. As shown in Attachment 1, we have 3330 gpm we can withdraw from SPU. How and where we do that is up to us to decide.
- 4th paragraph second column, last sentence is incorrect. It should read, in order to ensure adequate fire flow within the system, prior to starting a new development, the applicant is required to apply for a Certificate of Water Availability. Once the application is complete and the fees paid, the District will conduct a Fire Flow Analysis using a computer hydraulic model to determine the amount of flow and pressure available at the property in question. If the result of the analyses indicates there is sufficient fire flow, the Certificate of Water Availability will be issued to the property owner. If the result of the analyses indicates there is insufficient fire flow, improvements will be required.

018

014

019

020

- 017 Information related to water reservoirs has been updated to show 5.7 million gallons of storage and removal of the 0.4 mg reservoir.
- 018 The reference to storage deficiency has been updated based on the District's comments.
- 019 This paragraph has been corrected to reflect the additional supply station and not the 3rd booster pump, as well as the additional source of supply
- 020 The fourth paragraph has been corrected to reflect the description of fire flow analysis provided, based on the District's comments.
- 021 The number of customers has been corrected to: "over 100 customers west of I-5."

Page 3-203:

- In the first paragraph, the number of customers west of I-5 is indicated as small. The District has over 100 customers west of I-5. Need to remove the reference to "small."

021

- Table 3.5-3 identifies “Shoreline Water District.” It should be changed to “North City Water District.” Also, here is information for 2011 and 2012.

	2011	2012
North City Water District	140	139
Wholesale Average	165	172
Seattle	128	130

- The reference for commercial water use in a study completed by Pacific Institute is great, but we recommend you ask us for actual commercial customer information. As a member of the Seattle Operating Board, we are well aware of how the commercial water use patterns change, within the Seattle regional system. A local number would be more appropriate.
- In the second paragraph down, there is a reference to “North Creek Water District.” Our name is “North City Water District.”

Page 3-216:

- Paragraph 2. As shown in Attachment 1 and discussed earlier, our contractual requirements are 3,330 gpm for all our water sources from SPU.

Page 3-218:

- Alternative 2, second sentence. References is made to the 30” transmission main. This steel main was installed in 1955 and its age should be considered in light of future development. It may require replacement at some time. We do not have information about any problems with the line as it is owned by SPU; coordination should be made as to the timing of the replacement of this line.
- Table 3.509, last row heading should be “Total of Both Water Systems” not “Districts” as shown.

022

022 Table 3.5-3 has been updated for 2011 and 2012, and the District’s name has been corrected.

023

023 Commercial water rates were updated based on information obtained from North City Water District in a meeting held October 6, 2014.

024

024 This correction has been made.

025

025 Paragraph 2 has been updated to show 3,330 gpm for all the District’s water sources.

026

026 Reference to the 30” transmission main has been updated to describe the age of the pipe and the need for future evaluation with development along N 185th Street.

027

027 Table 3.5-9 has been updated to indicate a “Total of Both Water Systems.”

Page 3-219:

- First paragraph, reference TAZ 38. While this TAZ is between the SPU and North City Water District water systems, it is still within the SPU service area. Any and all improvements made to TAZ 38 should be made in coordination with SPU. 028
- Second paragraph, second sentence. In order to adequately provide fire suppression, these mains “may” need to be upsized, not “will” be upsized. The amount of upsizing of the mains will not be known until extensive hydraulic modeling is done of the area. 029
- Alternative 3—Most Growth. The same comments as mentioned previously regarding the age of the 30” transmission main should be discussed here. Depending on the maintenance information of this line, it may need to be replaced when all the laterals will also be replaced. All references to TAZ 38 should be made referencing SPU. 030

Page 3-222:

- Capital projects item 1a—the pump station project is expected to start in the fall of 2014 and will take 15 months. 031
- Capital projects item 1b—this project has been completed. 032

Page 3-223:

- Item 2, paragraph starts midway through the page and then continues to column 2. After the following paragraph, the discussion continues back at column 1. It is very confusing. 033
- Item 3 was completed in 2012. However, with the proposed design by Sound Transit, this recently-completed capital project will have to be relocated elsewhere wet of I5. 034

- 028 The statement about TAZ 38 has been updated to indicate that the zone is served by Seattle Public Utilities (SPU).
- 029 This paragraph has been updated to indicate that the mains “may” need to be upsized. Reference to the need for hydraulic modeling to confirm specific upsizing requirements has been added.
- 030 Reference to the 30” transmission main has been updated.
- 031 Capital improvement project (CIP) 1a has been updated to show 2014 as the start date and a projected 15 month duration.
- 032 Capital project 1b has been noted as completed.
- 033 The formatting for item 2 in the paragraph has been adjusted for better readability.
- 034 Item 3 has been corrected to indicate it was completed in 2012, and that it could be affected by potential light rail related implementation.

Page 3-224:

- Item 4 was completed in 2013 as part of a public private partnership with a developer.
- Item 6 is identified to be completed in 2026. However, as capital projects are constructed, the district will look at each of the dead end fire hydrants to determine if we can incorporate a hydrant replacement as part of another project. In that case, the projects will be built before 2026.

035

035 The FEIS now notes this item as being recently completed.

036

036 The Item 6 description has been modified to include this statement: as capital projects are construction and new developments are proposed, the North City Water District would analyze each of the dead end fire hydrants to determine if a fire hydrant needs to be replaced or upgraded as part of another project. In these situations, fire hydrants would be improved before 2026.

Page 3-230:

- Table 3.5-12 identifies 491 feet of 12 inch main to be replaced. This was completed in 2012 and therefore, the table should reflect 0.
- In the end of the following paragraph, this was project was completed and should state that.
- Last sentence in the following paragraph refers to “rezoning alternative.” Public water systems are not designed to meet zoning requirements . They are designed to meet the land use type. If we were to design to a particular zoning, the water system could be upgraded to first an 8” water main, then potentially something larger like the 12” water main when the zoning is changed a second time. It is not cost effective for the rate payers to pay to install then upgrade the water main twice imply because the zoning changes. The District will then consider the potential future project improvements when the land use is adopted and when our water system plan requires updating. If the City or a developer would like to have us do the hydraulic modeling sooner, we may be able to accommodate through a financial arrangement. However, any projects identified will have to be adopted as part of the planning process to be able to use public funds.

037

037 The FEIS indicates that the 491 feet of pipe upsizing was completed in 2012, and the table has been updated.

038

038 The FEIS indicates that the project was completed.

039

039 This paragraph was altered to state that: “improvements were based on a visual analysis, and the study only shows the potential demand on the system if the subarea is completely built out to the adopted zoning code.” Zoning is the regulatory instrument by which land use development is implemented. Land uses allowed by zoning are a good basis for planning of potential capital

Page 3-231:

- The first paragraph references the quantity of water mains that are expected to be upsized. This may not be required but until an extensive hydraulic modeling analysis is completed, we cannot be sure.

040

- Alternative 3: the first two references for the TAZ 24 and 26 should be TAZ 124 and 126.
- In the last sentence on the same paragraph, there is a reference to “storage reservoirs serving the community.” When there is a large demand change such as what the City is considering, the reservoirs servicing each “pressure zone,” not “community” needs to be evaluated. Reservoirs such as the Richmond Highland Tanks in the SPU area are the only reservoirs in the SPU system for the 590 zone which extend far beyond the proposed transit station.

In the District’s current water system plan, there are several projects that were identified in the 10 year CIP that are located in the subarea which we have been able to complete or are in the process of completing. This acceleration in our CIP can directly be attributed to our public private partnerships and the Drinking Water State Revolving Fund loans we recently obtained. With the exception of some dead end water mains that we will evaluate in the future, we will have no capital projects that will be required under Alternative 1—No Action, Existing Zoning Map.

We have not undertaken the extensive hydraulic modeling that would be required to determine the cost of the capital projects required to meet the land use for Alternative 2 and 3. If the new land use is adopted in the next several years, when the District updates its water system plan, we can calculate the cost at that time. The modeling effort not only identified which areas need what improvements but it also identifies a schedule in which the improvements should be made to have the least impact on the ratepayers and the developers. The district can’t upsize a main for future development too early, otherwise we could run into significant water quality concerns for existing customers.

To reiterate, I would suggest that some members of the City staff meet with both SPU and North City Water District to discuss these proposed changes to the City’s land use which could simply the draft EIS that we are currently reviewing. We can eliminate a substantial amount of information included in the final EIS that is unneeded, and more accurately look at the impacts of the alternatives. Thank you for considering our comments. **Diane Pottinger, PE**, District Manager

041

039 facility improvement needs, along with housing and employment projections based on growth forecasts (presented in Section 3.2). Hydraulic modeling performed by the District should consider the potential build-out over the next 20 years after zoning is adopted (or the District’s typical planning horizon) to determine specific capital improvement projects that would be needed to support the growth.

042

043

040 This paragraph has been modified to indicate that recommended improvements are based on a planning-level analysis. Specific hydraulic modeling by the District would be necessary to confirm specific improvement needs to serve growth.

041 The reference to TAZs 124 and 126 has been corrected.

042 The FEIS states that the storage reservoirs service the applicable pressure zone instead of the community.

043 Thank you for reviewing the DEIS and providing updated information, as well as for meeting with our team to coordinate on the FIES.

Ronald Wastewater District

Thank you for the opportunity to comment on the 185th Street Station Subarea Planned Action Draft Environmental Impact Statement.

Page 3-204; 3.5.1.b Wastewater; Service Provider, Par 1: Ronald Wastewater District is currently a municipal utility governed by elected officials. A more clear explanation might be, " ... which will make the wastewater system a City-owned and operated utility."

Page 3-206; Wastewater Collection Systems, Par 1: Where is the 3,200 feet of sewer main located that are of "undetermined diameter"? Please let us know.

Page 3-206; Wastewater Collection Systems, Par 2: The sanitary sewage collection system in 5th Avenue NE ultimately connects to the KC [King County] treatment system, not the Edmonds treatment system.

Page 3-206; Wastewater Collection Systems, Table 3.5.4: Lift Station 8 is not in the "185th Street Station Subarea Planned Action" map, page 1-16. Lift station 14 primarily serves homes outside of the "185th Street Station Subarea Planned Action" area. Lift station 15 has a stand by generator.

Page 3.220; Table 3.5-10: The table predicts a 508% increase in sewer demand. This increase will need to be verified by adjusting the District's hydraulic model after the City has finalized its land use designations for the subarea. The District's Capital Improvement Plan would then be updated to reflect any new projects required.

Page 3-225; Wastewater: Reference is made to North City Water District under "Wastewater." The reference should more accurately be to Ronald Wastewater District.

Page 3-232; Wastewater; Table 3.5-15: Lift Station #14. See Page 3-206; Wastewater Collection Systems, Table 3.5.4 above.

044 The FEIS includes the clarification that: "A joint merger between the City of Shoreline and the Ronald Wastewater District is currently under way, which would make the wastewater system a City-owned and operated utility."

045 The 3,200 feet of sewer main of undetermined diameter was identified based on City of Shoreline GIS data. This statement has been removed from the text (assuming this line does not exist if the District is unaware of its presence).

046 The 5th Avenue NE sewage collection system description has been corrected to indicate its connection to the King County treatment system.

047 Lift Station 8 is identified in the mapping in the FIES. Lift Station 14 appears to be within the subarea and as such is included in table. Lift Station 15 has been corrected.

048 The paragraph has been revised. Recommendations for alternatives in the FEIS are based on a planning-level analysis of the system and review of supply and demand presented in the most current Comprehensive Plan for the

Below are some general comments:

There are major Washington State drainage facilities along I-5 that drain to local water courses that possibly should be shown and/or commented on.

051

The table of contents should list tables and figures.

052

The District's lift station 15 is in the subarea.

It's overflow line terminates at the proposed site of the Link Light Rail Station where it would discharge into the I-5 drainage course.

053

Increasing the pumping capacity and size of Lift Station 15 will require upsizing of the forcemain and gravity lines downstream from the lift station which are outside of the subarea. Hydraulic modeling would need to be done based on changed land use designations.

There are sanitary sewer lines in the subarea that under the current land use designations, once built out, would be hydraulically overcapacity.

054

Michael U. Derrick
General Manager

048 Ronald Wastewater District. It is anticipated that the District would conduct updated hydraulic modeling as part of ongoing comprehensive planning and this would confirm the specific capital improvement projects needed to support the adopted zoning and corresponding land uses in the Subarea Plan.

49 The reference to Ronald Wastewater District has been corrected.

50 Table 3.5-15 has been updated; Lift Station 14 appears to be within the vicinity of the subarea and is included in the table. It appears TAZ 79 and part of TAZ 127 discharge to Lift Station 14.

51 The presence of these facilities is unknown based on available mapping, but the FEIS references their possible existence.

52 The FEIS table of contents includes lists of figures and tables.

53 The District's Lift Station 15 has been referenced to discharge into the proposed location of the 185th Street Station. A reference to upsizing force and gravity mains from Lift Station 15, outside of the subarea has been added in the FEIS

185th Station Citizens Committee (185SCC)

We urge the City to emphasize walkability and bike-friendly traffic corridors as a center stone to the design and planning of traffic flow and road design of the light rail station area. In addition, the City needs to be a strong advocate in leveraging bus service to the light rail station. The City needs to press Metro and leaders at the county, state and federal level for robust bus service connecting surrounding areas (Lake Forest Park, North City, Richmond Beach, Aurora Village, Aurora Avenue, Meridian Park) to the light rail station.

055

056

Shuttle buses should be considered as an option. The only way we can ensure that traffic (single occupancy automobiles) don't clog up our streets and decrease the quality of our neighborhoods, is by ensuring alternative modes of travel to the station are built into the design of the subarea plan.

057

Additionally we feel that overall there is a lack of consideration of the impacts of increased traffic from Lake Forest Park, Kenmore and Edmonds. The impact on Perkins needs to be studied further – both in the context of a bicycle connector to the Burke Gilman Trail and also as the main Arterial connection from LFP and 15th. Many of us also feel strongly about 188th as a cut through. As was stated it would be in the initial discussions about a Mobility Study (map/arrows), This cut-through needs to have mitigation, No turn lane from 15th, hairpin turn coming south on 15th, blind rise and corner, narrow. At present cars go too fast on this road and use it as a cut through. This needs to be looked at in terms of pedestrian safety with mitigation such as signage, stop sign, roundabout, snaking the road, speed bumps or other considerations.

058

54 The FEIS reflects this potential for this overcapacity condition with implementation of any of the action alternatives, and in particular with Alternative 4—Preferred Alternative, toward full build-out.

55 This vision is consistent with that of the 185th Street Station Subarea Plan and the plan includes recommendations and provisions that encourage and promote development of walkable, bike-friendly neighborhoods surrounding the light rail station.

56 The City would continue to coordinate with King County Metro and other agencies, as well as leaders in county, state, and federal jurisdictions to encourage robust local bus service connecting to/from the light rail station.

57 In 2016, the City will develop a Transit Service Integration Plan that will examine coordination of existing services, and potentially introduce new options.

58 The traffic forecasts prepared for the FEIS considered growth outside of Shoreline. These forecasts do not predict a major increase in vehicle traffic on Perkins Way in the vicinity of the study area as a result of

There are also many places where crosswalks could be put in soon, prior to any future development that would help with car pacing/speed, protect pedestrians and begin to set the tone of the even more walkable neighborhood that is in our future. 2 examples where this would help: Intersection of 10th and 180th (4 way stop that should have crosswalks on all 4 sections) and also 10th and 188th. Having a crosswalk at 10th and 188th would help to connect pedestrians to the green space under the power lines, the informal walking path there and perhaps more importantly would be a half-way visual reminder for vehicles that travel well above the speed limit on 10th between the stop signs at 10th Ave NE/NE 185th and 10th Ave NE/NE 190th. Those are also key intersections that will need to be looked at further, 5 way stop at 10th/190th and the much travelled intersection of 10th/185th. Currently most cars roll the stop sign, many don't Yield and travel far too quickly through this intersection.

059

Also, 5th Ave NE needs to be studied further. On the West side of the freeway as a connector from 205th, it will be the most logical path for many Edmonds and MLT commuters to the proposed parking garage. Straightaway, easy to speed, a place where many kids catch the bus, goes through the bike path connector at 195th. From turning on to this street, to speed, this road should really be studied further.

060

5th Ave NE on the East side of I-5 needs to become a complete street! Sidewalks, better lighting, crosswalks. 5th Ave NE is the main North – South connector for the 2 Light Rail stations, has current bus service (and should be a connector North/South for future bus service and for bus service to North City), will be a major connector to the station from cars connecting to/from I-5 at 175th, and connects to one of our best “3rd Places” that is the Shoreline Library.

061

Additionally, 5th Ave NE will connect to current and future development at 165th where the Crest Theater is and where future development will happen.

58 changes in land use/zoning. Much of the increase in traffic would be along N/NE 185th Street, Meridian Avenue N, portions of 5th Avenue NE, 1st Avenue NE, and N/NE 175th Street. Additionally, the parking garage demand from residents in cities east of the station is not large enough to have substantial impact on vehicle volumes along Perkins Way. Any specific impacts from light rail implementation would be addressed in the Lynnwood Link Extension FEIS. The land use impact analysis conducted as part of the 185th Street Station Subarea Planned Action FEIS did not conclude the Perkins Way would experience a substantial increase in traffic from changes in land use/zoning.

59 Regarding 188th Street, the FEIS recommends that the City utilize its traffic calming program to identify potential methods to prevent cut-through traffic. A specific traffic calming measure has been identified in the FEIS for mitigation. Although the NE 188th Street/10th Avenue NE and NE 190th Street/10th Avenue NE intersections are not identified for specific mitigation improvements, the City should monitor conditions to determine if treatments are needed to facilitate

General reaction/summary to Transportation section from one of the 185SCC members, Barbara Guthrie:

Before I got into the meat of the DEIS, I was skeptical that not widening 185th St to four lanes of thru traffic would work. However, after looking at all the stats, intersection improvements, etc. I am more optimistic that it could work. I also appreciate the City's desire to keep the street trees (they do provide a nice canopy). In addition, acknowledging the impact to the surrounding neighborhood if this two lane street were converted to four lanes, the DEIS indicates other mitigating measures would be tried to improve traffic flow before they add additional thru lanes (page 3-159). I think that is the best approach.

I have added comments from a bicyclist's point of view (being a former bike commuter) and the need for alternative east/west connections, for bicyclists especially. My husband and I do a lot of walking in the area, so I also have added some comments from a pedestrian's point of view.

Traffic flow (intersections/streets)

- At present, N. 175th, W. of I-5 and Meridian Ave N., N. of N. 175th St, are already near capacity. The intersections of N. 175th/Meridian and N. 185th/Meridian would soon fail the Level of Service (LOS) goal of "D" with the addition of traffic. Under the "no action" alternative, projections indicate these two areas would fall below LOS"D".
- Page 3-135 lists the traffic improvements to enhance traffic flow on N. 185th St, Meridian Ave N. and N. 175th St. What is not mentioned (except on page 3-160 under alternative 3-most growth) is the need on Meridian Ave N. for a right-turn lane (or pocket) on the Northbound approach to N. 185th street. Cars moving North on Meridian will need to turn right to go to the station. Without this lane, traffic would be backed up. This right turn pocket is mentioned on page 3-140 but it seemed to be a mitigation for increased traffic due to future rezoning and development and not for traffic

- 59 bicycle/pedestrian use. These intersections also may also be a target locations for enforcement given the observations mentioned. As the neighborhood grows, the City should monitor these intersections to determine if signalization might be needed in the future as a traffic control measure.
- 60 In the FEIS, 5th Avenue NE was recommended to be monitored for potential speed enforcement measures. The FEIS also recommends that 5th Avenue NE be upgraded according to the TMP, with full bicycle lanes and sidewalks.
- 61 The FEIS recommends full implementation of the bicycle and pedestrian system plan improvements from the TMP, including bike lanes and sidewalks along the entirety of 5th Avenue NE.
- 62 Thank you for your comments and insights.
- 63 The FEIS analysis anticipates that the LOS at the N 175th/Meridian and N 185th Meridian intersections would be would be at the D level. By 2035 under any of the alternatives, including Alternative 4—Preferred Alternative, the 185th/Meridian intersection would fall to the E level.

062

063

064

going to the light rail station. I just want to make sure it is included as something that needs to occur simultaneously with the building of the station.	064	63	Refer to Section 3.3 of the FEIS for recommended improvements for these intersections.
<ul style="list-style-type: none"> On page 3-159 it is noted that the City might look to revise its concurrency standards to allow for LOS E in certain situations. I don't agree with this. We should only allow LOS D. If an intersection falls below this, we will need to make the changes necessary to improve the traffic flow. We don't want to support traffic congestion with it's adjunct of increased emissions and noise. 	065	64	Potential impacts and needed mitigation related to the light rail station construction are addressed in the Lynnwood Link FEIS. For the analysis in this FEIS related to potential rezoning and future redevelopment, the projected right-turn volume for this particular northbound approach is 105 vehicles in 2035. The TMP already recommends a reconfiguration of the intersection to allow for a shared right-turn/through lane and a dedicated through-lane. This would provide the capacity needed to allow for vehicles attempting to access the station.
<ul style="list-style-type: none"> Page 3-161 notes that traffic calming measures will be put in place on local streets to prevent cut-thru traffic to the station and to new development. This is very important and those neighborhoods adjacent to the station (Echo Lake, Meridian, North City) should work with the City to gather new data, solicit input and update their respective Neighborhood Traffic Safety Action Plans once the station is "live". 	066		
<ul style="list-style-type: none"> N. 200th St is not mentioned in the DEIS since it is outside of the study area. However, no doubt this street will be impacted by traffic going to the station as it is a natural flow from Aurora to Meridian, and then South to N. 185th. How will this increased traffic be mitigated? 	067	65	Mitigation measures include transportation demand management and other strategies to reduce vehicle demand before capacity must be added. The recommendation for a potential standard of LOS E is to prevent added capacity from inducing auto demand which can increase emissions and noise. A change in the LOS standards is an element that would be addressed during the next TMP update.
<p>Bicycle and Pedestrian Facilities</p> <ul style="list-style-type: none"> The DEIS notes that there have been bicycle accidents at NE 175th and 5th NE, N. 175th and Meridian and N 185th and Meridian. The projected increased traffic flow would increase probability of more accidents along N. 175th and N. 185th. This suggests an alternate East-West bike route is needed that would remove bicyclists from the heavily congested arterials. 	068		

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> Below are listed possible as well as improbable E-W corridors: <ol style="list-style-type: none"> The N. 195th corridor is becoming part of the connector for the Interurban Trail and the Burke-Gilman Trail. East of the pedestrian/bike bridge (that will be rebuilt by Sound Transit), it will continue along Perkins Way to Lake Forest Park. Even though Perkins Way is outside of the DEIS study area, this is an important link to LFP and the light rail station. Is LFP conducting a traffic study regarding traffic flow to the light rail station? Will there be increased traffic on Perkins Way? If so, how does this bicycle connector link between two major regional bike trails also accommodate more car traffic along this narrow, windy road? | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">068</div> | <p>66 Comment acknowledged.</p> <p>67 This facility was not identified for analysis during the environmental scoping that was completed for this planned action EIS in 2013.</p> <p>68 Regarding the potential for increased traffic on Perkins Way, while travel models forecast limited growth in vehicle traffic along Perkins Way, the FEIS includes a recommendation to monitor Perkins Way to determine the need for facilities that can accommodate bicycles and improve bicycle safety beyond the recently installed bicycle signage.</p> |
| <ol style="list-style-type: none"> The DEIS depicts a separated bike lane on N/NE 185th (figure 3.3-17). Hopefully the street right of way will allow this separate lane, ensuring bikers are safe from vehicular traffic. This should be a safe and viable East/West connector as long as there is a barrier between bicyclists and automobile traffic. | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">069</div> | |
| <ol style="list-style-type: none"> I propose that N/NE 180th be explored as an alternate East/West connector for bicyclists and pedestrians alike. It would remove bikers and peds from congested streets. A new pedestrian/bike bridge would have to be built over I-5, and funding would inevitably be an issue, but it would help immensely to have this alternate E-W route. Going West, the route would take you through Cromwell Park and link with the Inter-urban trail. Going East, one could go N. or S. on 5th or 10th NE., linking to the light rail station or to North City. | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">070</div> | <p>69 A cycle track is recommended for N-NE 185th Street as is included in initial conceptual designs for the study area. At a conceptual level, it appears that the cycle track and improved pedestrian improvements on both sides of the street would require easements along 185th for construction. The City would further studying potential improvements and right-of-way needs in a future corridor plan.</p> |
| <ol style="list-style-type: none"> N/NE 175th should not be considered as either a bicycle or pedestrian route. In order to do so, the ramps onto I-5 would need to be restructured so that pedestrian safety would be ensured. My husband and I stopped walking on this street solely due to the dangerous traffic around the I-5 ramps. Why should we encourage | <div style="border: 1px solid black; padding: 2px; width: 40px; margin: 0 auto;">071</div> | <p>70 With Sound Transit already funding reconstruction of the 185th Street bridge and the 195th Street pedestrian bridge, there would be limited funding available for a third</p> |

5. pedestrian and bicycle traffic on an already congested road and one that will only become more dangerous and congested?	071	70	pedestrian/bicycle connection across I-5. That said, the City could continue to monitor the potential need for this additional crossing over the long term as the neighborhood redevelops and could consider exploring potential funding opportunities if needed.
6. Although outside of the DEIS study area, another safe East-West corridor for bicyclists and pedestrians should be explored south of N/NE 175th.	072		
<ul style="list-style-type: none"> Safe North-South corridors are also mandated for bicycle and pedestrian traffic. I have listed them below. <ol style="list-style-type: none"> The Interurban Trail The western most N-S connector in the study area 5th NE This should be re-engineered as a complete street, with sidewalks and bike lanes. Alternatively, as is suggested on page 3-162 that "increased traffic along 1st NE and 5th NE may necessitate a dedicated path along the I-5 right-of way near the proposed light rail alignment". If this is the case, and 5th NE is already being moved to accommodate the train, why not build this path now? It makes the most sense, and is the safest way to move bicyclists and pedestrians North and South along this corridor. 	073	71	N-NE 175th Street is included in the TMP as part of the bicycle and pedestrian system plan. During the TMP update process, this street should be re-evaluated as a suitable bicycle path.
<ul style="list-style-type: none"> <ol style="list-style-type: none"> 10th NE should become a complete street with sidewalks and separate bike lanes. This is a wide corridor and should be able to accommodate these facilities. In addition, 10th NE is part of the re-zone corridor proposed in alternatives 2 and 3. If we are adding the potential of more density along this stretch of roadway, we should put the infrastructure in place to protect foot and bike traffic. 	074	72	Thank you for your suggestion. The City would take this into advisement during the future TMP update process. The NE 145 th Street station area planning process is evaluating pedestrian and bicycle needs in the vicinity of that potential light rail station.
		73	Comments acknowledged. 5 th Avenue NE is viewed as an important N/S connection. The potential need for the dedicated path is mentioned in the FEIS and the City would continue to monitor this need once the station is implemented. Funding does not currently exist for building this path in the near term.

Buses

- We all know that lack of steady funding for Metro bus service is a perennial issue. However, East/West transit connections to the station will be essential in order to mitigate traffic congestion on N. 185th, Meridian, N. 175th, 15th NE and other area streets. We will all-city, county, citizens-have to put pressure on the legislature to address the issue of public transit funding.
- Consider the idea of shuttle buses to enhance/expand the bus/light rail station connections. I can envision shuttles running between the LFP Towne Center and the future PT Wells development. I can also envision a large loop between Aurora Transit-Center-N 175th-North City-light rail station-N 185th. Would shuttles make financial sense, offer more flexibility, be more efficient? I note that the Ridgecrest Neighborhood Assoc. also promotes the idea of shuttle buses to bring commuters to the N. 145th light rail station -. I quote, "Implement a robust shuttle system from park and ride lots and area business hubs."

075

Parking

The 500 capacity parking garage in the Sound Transit proposal for the N. 185th station should also be able to serve the Shoreline Stadium for parking for sports events. We'd also like to encourage the City to work with Sound Transit to make the parking garage as cosmetically beautiful as possible. Exterior plantings, greenery on the walls/outside facing the freeway. As people wait for Light Rail this is what you will see looking across the Freeway. Making it look as pleasing as possible and fitting as compactly into the hillside as possible is best for Shoreline. Anything that can be done materials-wise to make it less reflective of the sound of the freeway would benefit the overall experience of Light Rail travelers as well as the residents in the Station Area.

076

- 74 The alternatives sections of the DEIS addressed the need for a potential bike lane on 10th Avenue NE. Additionally, the mitigation measures section of the FEIS now includes 10th Avenue NE specifically.
- 75 The Transit Service Integration Plan will incorporate all forms of transit access to the station.
- 76 This should be addressed in the Sound Transit Lynwood Link Extension FEIS. This comment would be made available to Sound Transit for review.
- 77 Implementation of neighborhood parking management practices incrementally as the station subarea redevelops is recommended as mitigation in the FEIS. This would include consideration of implementing a parking management zone/residential parking zone. The City is currently evaluating parking requirements for redevelopment in the subarea. While reduced parking ratios are being considered given that people likely would drive less and use transit more, the City is taking concerns about neighborhood spillover parking into consideration as part of the parking requirements.

Other Parking thoughts:

Much will need to be studied further about the possibility of zoned surface parking for the neighborhood. As we have seen with Development in the North City area and on 12th between 175th and 180th: Though buildings have a small ratio of parking spaces to units, people still and for the foreseeable future will have cars! Not being able to park in their building and instead needing to spill over into the neighborhood is something many current residents are disappointed in and concerned about with future development.

077

Also, please work with Seattle City Light to get a commitment that the green space under the power lines will stay a green space/pathway and not become future surface parking for new development or businesses. We must protect all of the green space we have now that will be so hard to obtain years from now.

078

Other:

Undergrounding the power lines along N. 185th would help with accommodation of the sidewalks and bike lanes (not to mention the trees wouldn't have to be pruned!).

079

Recap:

All three alternatives mention that increased traffic on N. 185th might impact bike stress along this street and require separated bike facilities. The no action alternative also mentions necessity for separate bike lanes on NE 180th and 10th NE. Alternatives 2 and 3 mention Meridian's increased traffic might need a separate bike lane. We strongly suggest that we figure out the bike routes now and build the facilities, to take us into the future.

080

Specific comments from Susana Guzman and Paul Whitehill (Part of the Comments Submitted by 185SCC):

I feel very strongly that the character of Perkins Way needs to be protected. I feel that Perkins Way gaining park status would afford protection for the road to be for

081

78 The City is coordinating with Seattle City Light during the station subarea planning process and is exploring options for redevelopment under and adjacent to the power lines, including use of the corridor for green space. A previous option in Sound Transit's Lynnwood Link Extension DEIS identified the power line corridor for surface parking; however, this option was not selected by the Sound Transit board as the preferred option for station development.

79 City and Subarea Plan policies encourage undergrounding of utilities as feasible, working with the utility agencies. Undergrounding brings aesthetic and safety benefits, but may not be feasible given the size of the transmission lines in the subarea. The City will continue to coordinate with Seattle City Light to explore potential options for the power line corridor as the station subarea redevelops.

80 Comment acknowledged. The City will be exploring opportunities to fund capital projects to support neighborhood redevelopment and enhance pedestrian and bicycle access and safety. A key opportunity will result from transportation impact fees collected from redevelopment

local residents only and provide a link to the Burke/Gilman trail for continued bike access but adding room for joggers and walkers which at this time do not feel comfortable using the narrow side of the road. This in turn would add value to the surrounding area given that the density is going to increase. It would also provide a connection between Shoreline and LFP.

081

80 projects, as well as improvements that would be required of future projects.

Secondly I felt that while the transportation section covered the car and bus aspects very thoroughly, I felt that it really did not explore possible pedestrian routes (other than considering adding sidewalks). I feel that 175 street is so inhospitable.

082

81 There are no current plans to convert Perkins Way into a park. This right-of-way crosses multiple jurisdictions, including the City of Shoreline and Lake Forest Park, so it is not under sole control of Shoreline. While traffic forecasts prepared for the FEIS do not predict a major increase in vehicle traffic on Perkins Way in the vicinity of the study area as a result of changes in land use/zoning, the FEIS recommends ongoing monitoring of traffic levels on Perkins Way. The FEIS also includes a recommendation to monitor Perkins Way to determine the need for potential bicycle facilities to improve safety beyond the recently installed bicycle signage.

As a resident closer to 175 than to 185, I would love to be able to walk to the other side of the freeway (to get to the Shoreline Children's Center and to get to Ronald Bog without having to go under the freeway with all the cars. Unfortunately the thought of having to walk on 175th is untenable.

Consideration of alternative walking paths (i.e.: non- motorized pathways to get across the freeway without having to take 175th and or walking all the way up to 185th would be appreciated. Knowing neighbors that attend Cascade K8 I also know that they would love to have the ability to walk to Meridian Park Elementary. I also know several running groups use the pedestrian bridge at 195th. It is considered a destination. I would think adding a pedestrian crossing at 179th or 180th would provide a loop for people to take and get around the area without having to walk next to busy roads.

083

82 The FEIS includes additional discussion of pedestrian and bicycle impacts and potential improvement needs throughout the subarea.

Lastly, given that the parks are intended to be located within the ½ mile radius the area where I live (178th and 3rd Ave) there isn't a park for a mile. Given that one mile really is not all that far the 1 mile walk is on a non-paved side shoulder with cars zooming by at great speeds- not conducive to pedestrian traffic – (but it is far better than trying to cross the underpass at 175th).

084

83 Sound Transit is anticipating funding the retrofit of the 185th Street bridge and rebuilding of the 195th Street pedestrian/bicycle bridge to enhance connectivity to the light rail station. There is no current funding

In this instance providing a pedestrian bridge across 180th would provide a connection for Cromwell Park to the east side of the freeway and provide all the people on the eastside a park within a ½ mile. In all I support the full up-zoning to the area. But as stated, I have concerns about the losing the wonderful quality of Perkins Way by giving in to car traffic. While many would say that it is inevitable to have the traffic come through Perkins Way, I would argue that having a walk able trail will dramatically increase the value of the area and will preserve the meandering creek that can best be appreciated by non-motorized means. In summary, I support the full up zoning for the light rail.

But would like to have:

1. Perkins Way made into a park (thus restricting car traffic).
2. Have a pedestrian connection over the freeway to provide an alternative to crossing under the freeway at 175. Preferably at 180th to connect Cromwell Park to the east side of the freeway.

Comments from Merissa Reed (Part of the Comments Submitted by 185SCC):

History: Motorcycle Hill history is inaccurate in the report. Per my June 2014 interview of longtime 185th st (Motorcycle Hill) resident (since 1957) Dorothy Hyde (age 96), the name was coined from the fact that dirt motorcycle paths used to go through this forested area and men would ride up and down that hill (on dirt trails) for recreation. Later, in 1954, the area was developed into the Firview Terrace subdivision and the motorcycling days were over.

Land Use:

Preserve/Enhance the North City Park and all other greenspace. Keep the Seattle City Light open green space or use to connect the Burke Gilman to the light rail. Zoning should reflect the moderate growth predicted by the market study. Mixed

83 identified for another crossing of I-5 or for improving 175th (although intersection improvements along 175th are recommended in the FEIS.) The City will take this comment under advisement as it continues to plan for future improvements in the subarea and with the next update of the TMP.

84 The standard to have neighborhood parks located within one-half mile walking distance is a general rule of thumb and not always feasible given limited land resources and constrained budgets. However, the City would explore options for additional neighborhood parks in the subarea as it redevelops. These could occur as part of project redevelopment, including potentially at the Shoreline Center site. While the FEIS does not project significant traffic increases on Perkins Way, the City would continue to monitor conditions there. The FEIS recommends that the City continue to monitor Perkins Way to determine the need for potential separated bicycle lanes to improve safety beyond the recently installed bicycle signage.

85 See response to comment 84.

use should be concentrated around the station, on 10th and up to 15th- connecting the area to 99 seems too ambitious given the current data than the potentially sprawling design of the max growth plan. The City should aim for a "Urban Village" in this area to make it more walkable and give it a better sense of place.

089

86 See response to comment 83.

87 Thank you for clarifying the historical reference to Motorcycle Hill. The discussion in the FEIS has been corrected and expanded to reflect this information.

Traffic:

We need a mobility study done for Perkins and 188th and preventative measures taken on 188th to ensure that traffic moves safely and to minimize its use as a cut through (snaking the road, putting a stop sign in at 12th/188th, or some other alternative that would slow traffic).

090

88 The FEIS recommends preserving and enhancing North City Park as well as using the Seattle City Light right-of-way as open space to the extent allowed by the utility.

Jason Cetina

I went to the light rail workshop this evening, and I wanted to voice a concern about a couple of the alternatives for my neighborhood.

Alternatives 2 & 3 (particularly alternative 3) sort of put the area to the north of 190th St on the east side of I-5 (the area north of North City Elementary) in an isolated situation. In alternative 3, there will be more dense zoning up to 195th on the west side of I-5, and up to 190th street on my side of I-5, but then that's it. The transition from the dense housing near the light rail station will be sort of abrupt as it goes from dense housing to the school to the woods and then single family homes. As such, I believe it will be potentially difficult to either re-sell or re-invest in this isolated little pocket. I'd urge you to reconsider the island that could be created here as a result.

091

89 Alternative 4—Preferred Alternative proposes the highest level of growth and change over the long term of all the alternatives. However, the pace of growth would be expected to be the same under any of the alternatives. The preferred alternative and subarea plan focus mixed use around the potential light rail station area, but also along key corridors such as N/NE 185th Street, seen as an important connector between Aurora and North City. Creating a more walkable, urban village in the subarea is a primary objective of the plan.

If possible, I would consider rezoning all of the property north of 190th, and west of 10th (including houses on the east and west side of 10th). I would also include Sky Acres in any rezoning. This is going to be the most opportune time to reconnect this neighborhood somehow to the rest of North City, from which we are somewhat isolated.

092

90 Traffic calming is recommended for the area, as are various pedestrian and bicycle improvements, which can act to calm traffic. Limited traffic is forecast to utilize Perkins Way as a

I'd be happy to discuss this further if you are interested. Thank you for your attention to our city, and your diligence in ensuring all points of view are heard during the re-zoning process.

093

90 result of changes in land use as the primary access points would be via 5th Avenue, 1st Avenue, 185th Street, Meridian Avenue, and 175th Street.

Daniel Dale

As the DEIS comment period wraps up and you work towards making a decision about what to study in the FEIS, please work to have a balanced thought approach, about the plan that best/most realistically looks to the future, but gels with the existing neighborhoods, the topography, considers all of the other growth that will (and should happen throughout Shoreline), and focus on connecting all residents of Shoreline to the station.

094

91 The Planning Commission considered this option at the July 10 public hearing, and did include the changes you proposed in their recommendation to Council. However, during their discussions on August 11 and 25, Council decided not to include this area for potential rezone. If you would like more details about any of these deliberations, all materials and minutes or summaries are available by date on the Planning Commission and Council pages of the City's website at www.shorelinewa.gov

I have spoken to many people in the neighborhoods surrounding the station that are concerned that instead of a Moderate or Hybrid (though still quite aggressive) zoning plan that makes sense; "Density with Grace", The City Council will be transfixed by the big population gain numbers of the Most Growth plan that (though yes, over a long timeframe), doesn't do enough to protect the single family home neighborhoods, is too great of an impact on our utilities, services, future Cap. projects, and doesn't reflect spreading the impact of future development throughout Shoreline: on the Aurora corridor, 15th corridor bookends of North City and 145th, Up-zoning and growth at 145th station area, Shoreline Ballinger neighborhood opportunities for growth that will have access to existing development and amenities (and the future MLT station), as well as all of the development that will happen centered around 145th/Aurora/Westminster in addition to the future further development at 165th/Ridgecrest and 185th/Richmond Beach/Hillwood (QFC area). Please continue to consider the 185th Station area as one piece to this master plan of growth for the city. Even over a long time frame putting on the order of 30,000 more people in this small of an area may not be the best thing for Shoreline, not even over the long haul.

095

92 See response to Comment 91.

93 Thank you for your comments.

94 Comment acknowledged.

95 Under any of the three action alternatives (2, 3, or 4), the pace of growth would be expected to be the same – occurring over many decades and resulting in incremental changes. Under Alternative 4—Preferred Alternative, build-out would result in the most growth and change over the long term. Although build-out would

Much like we talked about with working to support the Garage at 185th to be on the Westside of I-5, taking this same 'spread the impact' approach for development, both around the 185th station as well as the other opportunity areas, makes the most sense in my mind and many others for Shoreline. There will still be grant opportunities, station area and neighborhood improvement opportunities, and big development opportunities in the Subarea.

096

95 take a very long time, the end result would dramatically change the subarea, and the predominantly single family neighborhood would transform over time into an urban village with mixed uses and a range of multifamily housing options.

Many developers may not want to build so close to the freeway and they will see better investment opportunities at some of the other sites around the city that will be within walking distance of existing grocery stores, shopping, Rapid Ride, Interurban trail etc. BUT still be within striking distance of the Light Rail stations. ex: Star Apts. at 152nd off Aurora as well as the proposed project just north of City hall on Midvale among many others to come.

097

96 Alternative 4—Preferred Alternative provides the most opportunity to spread the impact around the station as well as other opportunity areas.

One specific note I'd like to make about zoning along 10th Avenue. With the proposed R18 on the East side of 10th (This is the transition zoning that is used throughout the Sub Area in transitioning to R6), I'd like to suggest that we strongly consider making the first row of development on the West side of 10th to be lower, R48 or R24 all the way up 10th from 180th to 190th. This would lessen the 'canyon effect,' would provide a better height compliment to the East side that is for the most part raised up on a hill, and would then provide a better transition to all of the proposed MUR to the West.

098

97 Alternative 4—Preferred Alternative maximizes redevelopment opportunities in locations along I-5, as well as away from I-5 but still within walking distance of the station.

98 The first row of potential development on the east side of 10th Avenue NE between 180th and 190th continues to be proposed as MUR-35' (based on R-18 zoning), and the western edge of 10th continues to include MUR-85' in Alternative 4—Preferred Alternative. However, concerns about compatibility of land uses across the street can be addressed through design standards that require "wedding cake" setbacks in buildings on the MUR-85' side, orientation of buildings to side

Jay Davis

I attended the meeting on June 3rd, and received a copy of the DEIS in my email.

We have lived in Shoreline for 28 years. We are not in the affected area, but a few blocks north of it. We are actually excited about the light rail station, and hope it gets here sooner. I understand that under the State's growth plan all towns, cities, and counties must plan for the expected new residents over the coming decades.

099

The idea of concentrating the growth near the new light rail station makes very good sense.

But what doesn't make sense to me is to change the zoning in the area now, so many years before the real demand will start. I see no current demand for big apartment blocks as envisioned in either alternatives 2 or 3 until the light rail station is completed. What I see happening is a few builders buying up individual lots here and there as soon as the zoning change goes into effect, tearing down the existing house, and putting up 4 small houses on each lot. Such a piecemeal approach seems contrary to the vision in the City's plans. And will be very unpleasant for the other residents who would like to stay in their homes another 5-10 years.

And I am appalled at the plan to change the zoning of the Shoreline Center. This is a community resource that will be needed even more as the population increases.

There was some nice dancing around this at the meeting. But the comments about how long all the developing would take while builders try to acquire adjoining lots, plus a remark that the Center is "key opportunity site" makes it seem that it will be the first to go. (I told some friends who lived here in the 70's and 80's about the meeting, and they cynically said it was clear to them that the sale of the Shoreline Center must be a done deal already and everything else is window dressing. And to expect bulldozers in January. Otherwise why the rush? I hope they are wrong.)

After the meeting I was fogged nicely by one of the officials there, as he explained it belonged to the School District, and maybe they wouldn't want to sell it? Right. Turn down \$22 million for a surplus group of buildings they don't use.

I am sure the site could be re-designed to be more productive. But there is something very neighborly about a single-story sprawl of buildings with all the open space and fields around it, and all the community uses it gets.

98 streets rather than frontage along 10th, as well as other design provisions.

99 Thank you for your comments. Implementing the zoning changes in the near term would help to encourage redevelopment that concentrates growth near the new light rail station compared to the current pattern mentioned of single family homes being demolished and replaced with other single family use. The proposed zoning provisions align with the vision and policies of the City's Comprehensive Plan and the Subarea Plan.

The timeframe related to when changes would occur in the subarea is difficult to predict. Build-out of Alternative 4—Preferred Alternative is not projected for many decades, from around 80 to 125 years, assuming estimated growth rates of 1.5 to 2.5 percent per year. The FEIS also analyzes changes more likely to occur in the next 20 years to help clarify the expected level of transformation that may occur and

099

100

Patrick Ducey

I reviewed the Draft EIS of the 185th street station, and all of the maps in the document show that 195th street is open from 15th NE to the I-5 pedestrian bridge. Actually, the road right-of-way between 14th and 15th is overgrown with blackberries, and is fenced off. The road right-of-way between 10th and 11th is a steep path that is essentially a muddy goat trail. Both of these locations are not slated for improvements, but map 3-3-7 on page 3-17 shows them as part of the pedestrian routes. Please ask the contractor to correct the maps, or add the cost of improvements to the budget.

101

Tony Gale

I am in favor of increasing the hook area of NE Perkins Way to the highest density housing possible, with the buffer step down density along 15th Avenue. Also, I believe that most residents from Ballinger and Lake Forest Park will use NE Perkins Way as a main route to the 185th Street Station. So, I think it would be deemed necessary to fix this dangerous section of roadway by making it wider and including bike lanes on both sides of the road. Additionally, I want to make the Shoreline City Counsel aware of bicycle groups that use NE Perkins Way as an amateur bicycle competition route. I found a cycling web site that compares riding times. The route starts at Lake City Way and ends at the NE Perkins Way hook...at my mailbox at 1121/1123!

102

The following website shows details: <http://www.mapmyride.com/us/shoreline-wa/perkins-way-and-brookside-blvd-hill-shorcourse-1363021>.

103

99 to determine needed capital improvements so that the City and other agencies can pursue funding and budget for projects to support the anticipated growth. The level of change is expected to occur gradually over many decades.

Another reason the City would be adopting new zoning in the station area in the near term is to support transit through growth in population and ridership in the station subarea. This also would help the City, Sound Transit, and other agencies be more competitive in securing federal and state funding to make improvements and to advocate for additional bus service.

100 The School District currently has no plans or intentions for redevelopment or sale of the Shoreline Center site. Future redevelopment could include retaining the existing community functions including the play fields there while also providing new housing opportunities and mixed use within walking distance of the potential light rail station. The City of Shoreline has heard repeatedly from the community that they value the uses at the Shoreline Center, including the fields and the pool.

I lived at 1019 NE Perkins Way for five years and witnessed how busy, and dangerous, this hook area can be. While I currently live in Edmonds, I do own four properties on the hook area of NE Perkins Way that total .9 acres.

Following is a list of my properties and also a map highlighting the locations:

Parcel# 3972300194

1019 NE Perkins Way

1121 & 1123 NE Perkins Way

1024 190th Street



I believe that if the former North City school continues to be used as a school it would be ideal to have more family housing across the street, hence the high density housing designation. If it were not used as a school, townhomes or other high-density higher end solutions would support a large tax base for the city, as this complex would include view properties.

101 Many of the maps in the DEIS and FEIS show public rights-of-way and parcel boundaries. In some cases, there are no improved facilities within these existing rights-of-way. Potential improvements to these areas to expand the pedestrian network are included in the City's Transportation Master Plan (TMP), which is why the map in Section 3.3 indicates this potential.

102 While the Planning Commission and City Council considered the potential for upzoning this area as part of defining Alternative 4—Preferred Alternative, ultimately it was determined that this area was outside the original subarea and it would be a dramatic change to increase the zoning within the entire “hook” to a more intensive use. However it should be noted that in Alternative 4, a portion of the area would be rezoned from single family to MUR-35’, which would allow for multifamily use along the Perkins Way frontage and up to the intersection.

103 The FEIS includes a recommendation
to monitor Perkins Way for the need
for potential separated bicycle lanes
to enhance bicycle safety beyond

Sarah Jaynes

I think any zoning changes should occur only within a half mile of the station. Based on the studies that is the limit where most people will stop walking to the station. Right now it is all hypothetical that anyone would want to develop and that the area could support commercial (your market assessment didn't believe it could support any large commercial interests). If there is a lot of interest and the area gets fully development and it is an asset to the community zoning further out could be addressed at that later time. I used to live on Greenwood Ave. It is ugly and not functional to have lines and lines of hastily built and ugly construction. Development needs to be well thought of and a boon to the community.

I also don't like the largest growth plan. I don't believe the area could support such large scale growth and that it would hurt the character of the neighborhood.

105

the recently installed bicycle signage along the route.

104 The MUR-35' zoning proposed under Alternative 4-Preferred Alternative to the east of the North City School site would allow development of townhomes or other higher density solutions. The MUR-85' zoning proposed to the south of the school site would allow for the development of mixed use/residential buildings up to seven stories in height.

105 The level of change proposed under the action alternatives analyzed in the FEIS is generally focused within a half-mile distance of the station, including the most intensive zoning proposed of MUR-85'. However, some rezoning is proposed beyond the half-mile distance to provide good transition between multifamily land uses and single family areas. The City also is developing provisions to be added to the code to guide redevelopment so that it is aesthetically compatible and an enhancement to the neighborhoods surrounding the light rail station.

Robin McClelland, FAICP

Thank you so much for a beautifully written DEIS. It is clear, to the point, full of information, and, most of all reinforces an important truth: the redevelopment of the study area will take years, even decades to unfold and become part of greater Shoreline.

The DEIS provides the basis for a transition that will benefit our entire region. I would like to point out two areas of concern that may require further study, analysis, and mitigation.

1. Please do not assume that the Shoreline Library will automatically respond to the population growth anticipated by the residential

106**107**

106 Thank you for your comments.

zoning intensity. KCLS has its own long-range plan and, in fact, is nearing the end of capital investments throughout the system. Please consult KCLS facilities staff for detailed information on what is planned for Shoreline.

The library is an essential part of our community and is often the first stop for new residents.

Recall that the library is situated between the 145th and the 185th station areas and will be impacted by the land use changes in both areas. As a "non-city managed" public service, the library deserves to be included in the discussion of future needs.

107

107 The FEIS includes discussion about the importance of the library as a public service and resource in the growing subarea. The City would coordinate with public service providers, including the King County Library System to build awareness of the rezoning and potential growth and change, and to coordinate planning for this future.

2. Please give specific consideration to the needs of those with mobility limitations. The trek from parking on the west side of I-5 to the station may be daunting to those traveling by wheelchair, in need of a walker, cane, or service dog. It is imperative that those who cannot drive vehicles have ready, safe, and predictable access to the station and all public transportation modes.

Will services such as Access, the Hyde Shuttle or other on-demand transports have access to the station itself? If so, make it perfectly clear.

108

108 The FEIS recommends a variety of street and intersection improvements to support growth in the subarea over time. These improvements would be required to include treatments that meet Americans with Disabilities Act (ADA) accessibility standards, which would make it easier for those traveling by wheelchair, with walkers, canes, and other aides to get to and from the station and around the neighborhood. Specific access between the station and park-and-ride garage would be addressed in the Sound Transit Lynnwood Link Extension FEIS. In the 185th Street Station FEIS provisions for direct access for on-demand transport programs (such as Access and others) are recommended at the station.

Judy Parsons

I talked to you about my concern with the multi-housing zoning surrounding my house in the design that has the highest impact. I would like to know statically what would happen to the small group of homes on 10th & 11th between 175th & 180th. It would seem to me that those homes would end up being an area of less desirable location. My address is 17535 11th Ave NE, and I do have this concern.

109

109 Alternative 4—Preferred Alternative,

Anyway, I guess I want to know if there is any thought in just having all that property from 175th to 180th on 10th & 11th considered at least multi family zoned instead of in a dead zone.

109

presented in the FEIS, proposes that this area be rezoned to MUR-35', a multifamily designation that would be more compatible to the uses in the North City area to the east and the proposed MUR-45' zoning along 8th Avenue NE.

Donna Pipkin

In reviewing the area to be rezoned in the DEIS I am seeing that the Lago Vista plot (the hook) is not included. The hook is located at the west end of Perkins Way and already gets a lot of traffic. This road can be a very dangerous stretch of road and will only become more so with the impact from Light Rail. I believe that rezoning the "Hook" to high density will give us a greater chance of future redesigning of Perkins Way to create a much safe road. I hope that this will be taken into consideration in adding the "Hook" to your rezoning plan.

110

110 See response to comment 102.

111 In this FEIS, Alternative 4—Preferred Alternative analyzes a greater level of change in zoning than previously proposed under Alternative 3—Most Growth in the DEIS (now Previous Most Growth in the FEIS). This zoning would allow redevelopment of more housing and mixed use in the subarea over time, although it would be expected to happen at the same relative pace as the other alternatives studied (1.5 to 2.5 percent annual growth).

Andrew Reay-Ellers

The other night we were discussing the way that the City of Shoreline is approaching the examination of potential zoning changes in regards to the Light Rail Station Area at NE 185th. You said that it would be best if I could submit my comments in writing, so here you go:

111

The city has created what is being called “bookends” for the re-zoning discussion – two end points to define the spectrum and/or range of what is being discussed and considered. One end of this range is said to be the “no change” option; and the other end is the maximum of what is being examined and considered. Because the materials from the meetings on Feb 19 + 20 are not yet posted online I do not have access to detailed specifics of this “maximum” which is being discussed; but I think that we can speak to the general gist of what that proposed.

112 The market assessment completed for the subarea suggested that there likely would be a demand for at least 700 new housing units in the station subarea after light rail is operating (so within the next 10 to 20 years). It is anticipated that this demand would grow given the population growth of the region and adjacent Seattle, and limited capacity for growth in some of these areas as your comments have noted.

As you mentioned, there has already been some feedback that this limit of the “maximum to be considered” does not go far enough, and that a broader scope of options should be examined. I am definitely one of those who feel that a greater allowance for growth and development should be analyzed, but to do so will require that the city increase the upper end of what is considered – to “move the bookend” further out.

111

On Monday you explained that a business and real estate analysis was done on the area, and the current “bookend” represents the maximum development which can be expected in this station area for the foreseeable future. You said that the results were not as large as many people expected, because this analysis took into account the fact that in the coming decade there will be some 74 (I think you used that number) different 'Transit Hubs' developing in the Puget Sound Region, so commercial and residential growth and development can be expected to be spread amongst these many areas.

112

I feel that framing the analysis in this way leads to calculating results, which misjudge and under-value the uniqueness of the NE185th Street Station Area. The two principle factors that should be better appreciated is the higher level of stability and permanence of a rail station; and the scarce quantity of residential properties adjacent to the stations of the Light Rail System north of Seattle.

For the first part, the probable and potential amount of development near the station of fixed-guideway transit is almost not comparable to that of a bus stop, bus station, or even a transit center. The frequency and even the very presence of buses and their routes are constantly in flux, and are subject to change or even cancellation. This impermanence creates uncertainty, and that lack of certainty leaves developers and residents unsure as to the wisdom of locating in these areas. Compare that to a Rail Station with the permanence inherent to the built and installed infrastructure. Developers, residents, and businesses can all locate within a rail station sub-area with confidence in not only the enduring presence of the station, but the predictability and regularity of the service.

113

112 As you mention, the influence of the light rail station location should continue to encourage redevelopment in the subarea beyond this 20-year forecast. For this reason, Alternative 4—Preferred Alternative offers the most capacity and flexibility to support growth over the long term in the station subarea.

113 Comments acknowledged. The increase in proposed rezoning and related density under Alternative 4—Preferred Alternative provides the most capacity for change in the station subarea over time.

So any discussion of development within transit areas throughout the region needs to expect much heavier favorability of rail station areas. By the time Lynnwood Link is complete there will be some 22 rail stations in the Sound Transit Light Rail System, so rather than considering the potential development at 74 'transit hubs', any development analysis should focus much more on this lower number. This is especially true because although the bus system will be serving to bring riders to connect to the light rail, the strong preference of users is to locate in an area where making a connection is unnecessary. So again, the rail station areas are certain to be the much more popular sites for development, residents, and businesses.

113

And looking at that lower number of about 22 (not an exact number as several proposed stations are not yet certain) brings me to the second point which I feel the analysis did not properly consider – the existing condition and location of the various station area sites.

The development and build-out of the Light Rail System is principally moving north at this time. This is especially important because after downtown it will soon to be serving the second-largest contributor of riders to the system, the University of Washington. So with commuters needing to come and go from downtown, and from the university, they will look outwards at the station areas for potential places to live. Coming North out of Seattle, neither of the University District Stations have significant residential areas adjacent to the stations which exist, or have not already seen substantial development, so there is limited density growth potential there. The next station north, Roosevelt, has significantly up-zoned (multiple blocks to 85' and 65'), and is already seeing major construction of multiple developments all while the station is still years from opening. (in fact, the growth and development seen in Roosevelt –even in a down economy-- should serve as a lesson of what can be expected.) But growth and development even in this station area is somewhat constrained – by the high school grounds next door, to the already existent high rises and business district.

Continuing to work north, the next station will be at Northgate. With the already existing huge commercial space(s) and extensive planned parking garages, there is potential for only a small amount of additional growth within its station area. With the possibility of a station at NE 130th still an unknown, the next two stations north are those which will be within the City of Shoreline – at NE 145th, and NE185th – and neither of these station areas currently have any significant development. The city needs to realize, and the analysis of potential growth needs to recognize, this reality: **the most significant transit system in the region is going to stretch north from the two biggest drivers of ridership (workers downtown, and students & workers at UW), and the closest station areas with the greatest amount of potential growth are both within Shoreline.**

113

An examination of the two Shoreline station areas reveals a further truth: the 185th Street station has much more room and potential for growth. The 145th Street Station site is limited, just like 185th, by having Interstate 5 occupy all of the land immediately adjacent to the west – but unlike 185th, the land adjacent to the 145th Street site is further encumbered by the ramps necessary for the freeway interchange, and by the land devoted to a golf course.

114

With review of the facts above: the preference of development at rail stations; and the availability of develop-able land near the stations which are closest to serving the highest frequency destinations, it is no exaggeration to say that the NE 185th Street Station Area could very well see the greatest growth of any transit area in the region during the next decade. The City of Shoreline should plan accordingly, and would be wise to consider making the most of this once-in-a-lifetime opportunity. Done well, the station and the surrounding area has the ability to become a dynamic and vibrant area, with many new residents and services; with the station supporting the community and the community supporting the station.

115

114 Comment acknowledged.

115 See responses to comments 111, 112, and 113.

Step number one has to be to allow for the consideration of a greater amount of up-zoning which would allow for greater potential growth. Hopefully people will also remember that if Shoreline up-zones “to big”, the market will simply dictate that some buildings will be built that simply are a bit smaller than they could have been – but do too little of an up-zone and there will be pressure in the near future to re-zone again, resulting in relatively new buildings to be torn down – forcing the neighborhood to endure near-endless turmoil....

Please encourage the Planners to “move the bookend” which defines the upper end of the “maximum up-zone” option.

115

Robert Shook

I am 46 years old and have been a lifelong resident of Shoreline. I am a home owner of 15 years and live with my wife and five year old son on N. 188th street, off of 1st ave.

I was in attendance at the council meeting earlier this evening but did not feel comfortable commenting.

I am extremely displeased that the council has chosen to go with option 3 for rezoning as part of the 185th light rail station project, especially without making available the specific reasons as to why the other options were not chosen.

My impression is that the city council's goal is simply to generate as much tax revenue as possible and in the process sacrifice much of why I, and many other Shoreline residents, choose to live here. Option 3's rezoning will eventually cause Shoreline to resemble places like Ballard with its numerous condominiums, apartments, overcrowding, congestion and excess of concrete.

116

116 The FEIS studies potential rezoning alternatives, including Alternative 4—Preferred Alternative, which was not analyzed in the DEIS. Revised zoning has not yet been adopted, but is expected to be in February 2015. The proposed intensification of density around the light rail station is consistent with the City's adopted Comprehensive Plan (2012), as well as policies of the City, region, state, and federal government that call for creating equitable communities around high-capacity transit that offer a variety of housing choices and transportation options for residents.

Concentrating density around high-capacity transit also brings the benefit of shifting more travel trips to light rail and away from roadways, to help reduce congestion and other related environmental effects (air pollution, greenhouse gas emissions, noise, etc.) as a result of population growth in the region.

If I wanted my neighborhood to be filled with businesses, strip malls, apartments and overcrowded spaces, not to mention the increased crime and congestion that comes with it, I wouldn't have chosen to live in Shoreline in the first place.

I question why the city council members themselves have chosen to even live in Shoreline if their desire is to completely change the very essence and much of the community landscape. My guess is that none of the council members actually live in any of the areas that are planned to be rezoned.

The haste at which this decision has been made, and without the transparency and discussion as to why the other options fell short, is appalling.

I look forward to communicating the council's decision to my neighbors and to voting in the next council member elections.

116

117 Thank you for your comments. Please note that a new alternative is analyzed in this FEIS, Alternative 4—Preferred Alternative, which proposes a greater level of change to the subarea than Alternative 3—Most Growth, which was analyzed in the DEIS (now labeled as the Previous Most Growth Alternative in this FEIS). Alternative 4—Preferred Alternative would provide capacity for redevelopment that includes more diverse housing choices for varying income levels over time than the other action alternatives.

Jeanne Small

I like option 3 - most growth - best, followed by option 2.

Thank you for your commitment to diverse housing for varying income levels.

I am very excited about having light rail nearby.

I'm still worried about traffic on 185th - and I wish there would be another traffic light put in between Meridian and 1st.

117

118

118 The FEIS includes a number of recommendations to monitor, assess, and mitigate against potential increases in vehicle traffic along N-NE 185th Street. Requirements for access management and redevelopment along the corridor may reduce the number of curb cuts (by orienting access to new development from side and rear streets), which would help to enhance overall traffic flow in the corridor.

Amy Walgamott

I would like to officially submit my comments on the 185th SA DEIS.

1. Alternative 2 is the best option. It allows planable growth and density around the station but doesn't completely alter the existing neighborhood. Buildings up to 145 feet tall, such as proposed in Alternative 3, would not fit at all into this residential neighborhood that has nothing now around it at that scale. I would propose a height limit of 65 feet in Alternative 2 (this is similar to the Roosevelt SA) and is a more livable scale). (This height limit only if residents in the immediate area agree with Alternative 2 rather than 1).
2. Any public services to be removed for development should be moved or rebuilt PRIOR to being removed. In other words, if the Shoreline Center will be redeveloped, the city needs to make sure they can offer the services people receive at the location (pool, recreation center, playing fields, senior center, auditorium, park) at another place before they lose the services.
3. The city should NOT use existing green spaces within the SA to relocate services or allow any existing green spaces for redevelopment. As density grows, the city must provide MORE green spaces.
4. The city should have specific provisions for retaining large existing trees (more than the city currently has, which allows owners to cut all trees within 4 years). Retaining large trees should be a top priority (not replacement).
5. Mitigation for impacts of the light rail and rezoning need to be addressed BEFORE construction and rezoning. In other words, traffic issues should be dealt with now, as well as environmental damages foreseen. I would like

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119 Thank you for your comments. This FEIS analyzes Alternative 4— Preferred Alternative, which includes a number of changes from the previous action alternatives studied in the DEIS. The new alternative assumes that the 140-foot height could be implemented through development agreements as a bonus incentive in any area zoned MUR-85' and assumes that approximately 25 percent of the areas zoned MUR-85' may be built to this height (at full build-out) based on market constraints and the estimated demand for housing and mixed use in the subarea.

The MUR-85' allows a maximum building height of 85 feet (except when development agreements are implemented allowing up to 140 feet buildings). The proposed MUR-85' zoning designation was proposed after consultation with local developers and architects who indicated that this height may be realistic redevelopment given potential future market and financial considerations (but not likely in the near term). The 85-foot height allows a building type known as "5 over 2" (five levels of wood-frame construction over a two-level concrete podium base).

the city to spell out to people how they can hold the city accountable if the city fails to properly mitigate.

123

6. How will the city make sure developers build in a style the current residents prefer? OTAK has shown photos of potential structures and asked for feedback on them. But how can the city guarantee or even strongly encourage that developers build these preferred types of structures rather than boxes such as along Lake City Way? I would like to see a code that clearly describes these guidelines available to the public.

124

Jesse Walters

Here are some of my thoughts on the North LR system.

Now that the US is experiencing more affordable gas and more available alternative fuel (electric) vehicles, our tendency here to prefer independence in travel and time management has more of a supporting framework.

125

It is my hope that the Pacific Northwest continues to prosper and improve without the need for growth for its own sake. Population growth is projected to level off.

When there are large scale projects it is my hope that the impact be kept to a minimum to sustain traditional neighborhoods and a connection to family and neighbor ties. If forced to choose, I go for sprawl over concentration or congestion.

126

Specific to this project I would like to see plans that include state of the art dedicated secure covered (perhaps stacking or elevator shelf parking pods for bicycles, mopeds and scooters, to provide an incentive for low impact transportation. A rail system generally takes up a lot of space in relation to the number of travelers per square foot on it at a given time. For more appropriate modal comparison, this statistic could be further charted by average traveler speed.

127

120 There are no current plans to remove or relocate the current community services at the Shoreline Center. The subarea plan suggests that in the future, there could be an opportunity to retain these uses at the site while also redeveloping portions of the site into more intensive housing and mixed use development that would be more supportive to the high-capacity transit station. The pool could be retained or redeveloped into a new more energy-efficient recreation center at the site. The play fields could be retained while other portions of the site could be redeveloped with multi-story buildings. The School District has no current plans for redevelopment or sale of the site. They intend to complete a master plan to analyze long term potential for the site. The City of Shoreline has heard repeatedly through this process that the community values the current services at the Shoreline Center site.

121 Existing parks in the City are important for serving the potential future growth envisioned. The FEIS recommends that new parks and green spaces be created as part of redevelopment in the future to continue to serve the growing

I found this picture and website in a quick Google search of anything stack parking related, the mechanical forklift style looks economical.

<http://www.alibaba.com/car-stack-parking-system-promotion.html>

The rotary ones would probably be more demanding of proprietary maintenance and parts.

Access: N of 177th 8th NE avenue is wider and less populated than most adjacent N/S streets, more conducive to development/travel. I would really rather see a station at Ballinger (1/2 block off on SE side) than near traditional residential neighborhoods. A park-like setting at the station with benches, picnic tables, swings and gardens would be nice.

127

neighborhood in the future.

122 The City is considering potential provisions that would be required as part of redevelopment in the subarea. These would be adopted as part of the 185th Street Station Subarea Plan in the coming months. Residentially-zoned projects in the MUR-35' and MUR-45' zones would be subject to tree preservation and replacement standards.

128

123 The purpose behind completing the DEIS and FEIS analyses, along with developing the subarea plan is to ensure that growth and change are adequately planned for and supported in the subarea. This includes identifying improvement needs to support the next 20 years of growth and then regularly re-evaluating these needs as part of the City's Comprehensive Plan update process in the coming years. The FEIS identifies recommended mitigation measures to be provided by various entities, through capital improvements completed by the City and other agencies, as well as through requirements of redevelopment. Mitigation associated with the light rail system would be provided in the Lynnwood Link Light Rail Extension FEIS.

- 124 The City is currently working on updated Code provisions that would help to guide the design of urban form and building character in the subarea over time. These include standards for building dimensions, design, and transitions between sites and uses. Code provisions use illustrations to help convey what is intended and are available in the Planned Action Ordinance for the 185th Street Station Subarea Plan.
- 125 Thank you for your comments. It is important to note that Seattle was one of the fastest growing cities of its size in 2013 (with a 2.8 percent increase in population in one year). Population of the region is expected to continue to increase in the coming years. Planning at the local and regional levels is addressing this anticipated growth through plans and policies, such as this plan which calls for implementing higher density around high-capacity transit stations.
- 126 If growth is not managed smartly through well-planned changes in density served by transit systems, there is the potential that sprawl would impact the character, values, and quality of life in the Pacific Northwest.

- One of the key objectives of the subarea plan is to guide growth of neighborhoods in a way that creates family-friendly housing choices for a variety of income levels and with neighborhood services, parks, and infrastructure that would support this growth.
- 127 Bicycle parking is planned for the potential light rail station location and also would be required as part of new redevelopment projects in the subarea. Parking for other types of vehicles would be accommodated within the park-and-ride garage planned by Sound Transit to serve the station. The details of design for parking at the station (for vehicles and bicycles) are in development. A bike share program is recommended as a transportation demand management tool.
- 128 The Sound Transit Board identified the preferred locations of the 185th Street Station and other light rail station locations in November 2013. This was after publication of the Lynnwood Link Extension DEIS, which studied multiple options and gathered public and agency input through a formal public review process.

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Chapter 5

References

FINAL ENVIRONMENTAL IMPACT STATEMENT



Chapter 5—References

The following references were cited and consulted in the development of the Draft Environmental Impact Statement (DEIS) and carry forward for the Final Environmental Impact Statement (FEIS) for the 185th Street Station Subarea Planned Action. References include printed documents and Internet sources as well as personal communications. Personal communications occurred through phone calls, emails, or in-person meetings documented by notes.

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5.2 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.

Derrick, Michael. General Manager. Ronald Wastewater District. October 6, 2014 – interview regarding Draft EIS Report comments at Ronald Wastewater District Office.

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.

Pottinger, PE, Dianne. District Manager. North City Water District. October 6, 2014 – interview regarding Draft EIS Report comments at North City Water District Office.

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.

Chapter 6

Distribution List

FINAL ENVIRONMENTAL IMPACT STATEMENT



Chapter 6—Distribution List

A notice of availability, compact disk, or copy of the Final Environmental Impact Statement (FEIS) 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 FEIS for how to access this FEIS online, obtain a compact disk, or copy of the FEIS.

6.1 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

6.2 Tribes

Muckleshoot Indian Tribe, Fisheries Division

Tulalip Tribes

Tribal Council

Natural Resources Division

6.3 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

6.4 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

6.5 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

City of Edmonds, Development Services, SEPA Responsible Official

Hillwood Community Network

City of Kenmore, Department of Community Development, SEPA Responsible Official

Innis Arden Club, Inc.

City of Lake Forest Park, Planning and Building Department, SEPA Responsible Official

Meridian Park Neighborhood Association*

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 Seattle, Department of Planning and Development

Ridgecrest Neighborhood Association*

Town of Woodway, City Clerk

Westminster Triangle Network

** Denotes neighborhoods that are partially located within or are bordering the 185th Street Station Subarea.*

Thornton Creek Alliance

City Council

Thornton Creek Legal Defense Fund (c/o Attorneys Paul A Kampmeier Smith & Lowney, PLLC)

City Hall

6.6 Adjacent and Neighboring Jurisdictions

City of Bothell, Department of Community Development SEPA Responsible Official

City Leadership Team/Department Directors

Shoreline Library and Library Board

Parks, Recreation and Cultural Services Board

Planning Commission

Tree Board

6.7 City Officials, Commissions, and Departments

6.8 Parties on Record

In addition to organizations listed above, the following 'Parties on Record' have submitted comments to the City regarding the DEIS and have been added to our notification list as a 'Parties on Record':

Robert Shook
Jesse Walters
Jay Davis
Jeanne Small
Merissa Reed
Daniel Dale
Jason Cetina
Mike Usen
Kayla Schott-Breslet
Patrick Ducey
Tony Gale
Donna Pipkin
Sarah Jaynes
Judy Parson
Tom & Liz Poitras
Andrew Reay-Ellers
Amy Walgamott

Appendix

APPENDIX CONTENTS:

- Acronyms
- Glossary
- Public and Stakeholder Involvement Information
- Scoping Notice for the DEIS

185th Street Station Subarea Planned Action FINAL ENVIRONMENTAL IMPACT STATEMENT

Appendix

185th Street Station Subarea Planned Action Final Environmental Impact Statement

Appendix Contents:

- Acronyms
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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)		
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 Environmental Impact Statement. If definitions are not from the Comprehensive Plan, the source is listed. These definitions are for reference purposes to assist the review of the FEIS. 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 multifamily 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.

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 proposed new zoning designation under consideration that would apply to the action alternatives of the FEIS. 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. MUR-85', MUR-45', and MUR-35' designations are identified for the alternatives studied in this FEIS. Refer to Section 3.1 of the FEIS for descriptions of these zoning classifications and more information. *Source: Otak, Inc.*

Modes of Travel/Multimodal Transportation

Modes of travel include various types of transportation including single-occupant vehicles, transit, carpooling, bicycling, walking, and other modes. Multimodal 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

Multifamily

A building containing two or more complete dwelling units, including units that are located one over the other. Multifamily buildings include duplexes, townhomes, garden apartments, and mid- and high-rise apartments. Accessory Dwelling Units are not considered multifamily housing.

Multimodal Transportation Planning

Multimodal 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 Action Ordinance

The regulatory instrument for implementing the Planned Action, adopted by the City that identifies the Planned Action area and related growth thresholds, as well as mitigation measures as analyzed in the EIS.

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. Refer to Chapters 1 and 2 for an explanation of the planning process and identification of the Preferred Alternative studied in this FEIS.

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 the DEIS and FEIS 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 FEIS 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 multifamily 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 multifamily 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.

Scoping Notice

The scoping notice for the 185th Street Station Subarea Planned Action Draft Environmental Impact Statement is provided on the following pages.

**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.

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 the DEIS and FEIS. These efforts are summarized in Chapter 1 of this FEIS.

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>

