

1 INTRODUCTION

1.1 CONTEXT OF THE ALTERNATIVES ANALYSIS

The Central Puget Sound Regional Transit Authority (Sound Transit) intends to expand regional transit service in the North Corridor, connecting the existing regional transit system from the planned interim terminus of Link light rail in the Northgate neighborhood of Seattle to the city of Lynnwood in southern Snohomish County. Approved by voters as part of the Sound Transit 2 (ST2) Plan in 2008 (Sound Transit 2007a), the North Corridor Transit Project would connect to and build on the Link light rail line that opened for service between downtown Seattle and Sea-Tac Airport in 2009, and would extend northward to serve north Seattle, Shoreline, Mountlake Terrace, and the city of Lynnwood in southern Snohomish County. Construction is currently underway on a light rail extension to the University of Washington scheduled to open in 2016, followed by service to Northgate targeted in 2021. Voter-approved additions over the next few years will bring 36 new miles of service to the north, south, and east, creating a 55-mile light rail system serving the region.

The North Corridor project connecting Northgate to Lynnwood is an incremental step in the implementation of the Puget Sound Regional Council's (PSRC's) VISION 2040 (PSRC 2009) and the Sound Transit 2005 *Regional Transit Long-Range Plan* (Sound Transit 2005a), both of which call for the eventual extension of high capacity transit (HCT) service north to Everett. Figure 1-1 shows the Regional Transit System plan map adopted by Sound Transit in 2008 as well as the North Corridor.

The North Corridor Transit Project relies on receiving federal assistance to complete the project. In accordance with federal regulations and guidelines for fixed guideway projects that seek New Starts grant funds from the Federal Transit Administration (FTA), Sound Transit has completed an Alternatives Analysis (AA) to evaluate a range of potential alternatives for addressing mobility needs in the North Corridor, including routes, stations, and operating features for the North Corridor Transit Project. This is the first step in the FTA's New Starts Project Planning and Development process.



1.2 PURPOSE AND OVERVIEW OF THE ALTERNATIVES ANALYSIS

The purpose of the AA is to define the transportation needs in the corridor, identify reasonable alternatives that would address the identified needs of the corridor, and provide information to help Sound Transit identify a preferred transit mode and route for implementation. While an AA is a local process, FTA provides general guidelines for how to conduct it. These include four major steps: study initiation; development and refinement of alternatives and technical methodologies; analysis and evaluation; and identification of the Locally Preferred Alternative (LPA) or proposed action.

During the AA study initiation phase, the roles and responsibilities of participating agencies are established, issues to be addressed in the study are defined, and the availability of data and models for addressing these issues is determined. The study initiation phase also develops a detailed work plan, a problem statement and purpose and need, evaluation measures to guide the subsequent analysis, and a conceptual definition of alternatives to be included in the study. For the North Corridor Transit Project, these steps are documented in the *Revised Draft Alternatives Analysis Initiation Report*, May 2010. Chapter 2: Purpose and Need documents the problem statement and purpose and need.

Once the AA study has been initiated, the next step is to further refine the alternatives and analysis methods. This step is designed to ensure that all participants in the process are in general agreement with the alternatives and analysis methods before the alternatives are further developed and evaluated in greater detail. This step often includes a preliminary analysis to screen out those alternatives that clearly cannot satisfy the purpose and need or show the least amount of promise. For the North Corridor Transit Project, these steps are summarized in Chapter 3: Development and Screening of Alternatives and documented in more detail in the *Final Level 1 Alternatives Analysis and Evaluation Report*, February 2011.

The third step includes the more detailed development of the most promising alternatives followed by the analysis and evaluation of these alternatives. This step constitutes the main work of the AA study. This step includes applying the methodologies developed for each of the study's evaluation measures to assess the transportation, environmental, and financial impacts of each alternative. The third step in the AA study is documented in Chapter 4: Detailed Definition of Alternatives, Chapter 5: Analysis of Alternatives, and Chapter 7: Comparative Evaluation of Alternatives.



Figure 1-1. Sound Transit 2 Regional Transit System Plan Map and North Corridor

Once the comparative analysis is completed and reviewed and a recommendation is reached, the next step is the preparation of a Draft Environmental Impact Statement (EIS). Two approaches are possible at this stage depending on the timing of the identification of a locally preferred transit mode and alignment. This action, known as the identification of a Locally Preferred Alternative (LPA), can occur prior to the start of the DEIS or following the public review and comment on the DEIS.

Following both federal and local review of the findings and conclusions of the AA, Sound Transit plans to decide on which alternatives to carry forward for further development and study in the NEPA and SEPA environmental process, including the possible identification of a Locally Preferred Alternative (LPA). Chapter 8: Conclusions and Next Steps summarizes the findings of the AA and provides an overview of the next steps in the New Starts project development process.

1.3 RELATIONSHIP TO THE ENVIRONMENTAL PROCESS

The North Corridor Transit Project AA was conducted with a public and agency outreach program supporting NEPA and Washington's State Environmental Policy Act (SEPA) requirements. Chapter 6: Public and Agency Involvement and Coordination documents those efforts undertaken as part of this AA study. Because the project has the potential for causing environmental impacts, the project will require an EIS. However, because the AA is establishing many key elements of the project, including its purpose and need and the range of EIS alternatives to be considered, Sound Transit and FTA decided to conduct early scoping at the start of the AA in 2010. This optional step in the state and federal environmental review processes allowed Sound Transit and FTA to receive comments from the public, agencies, and other stakeholders as they developed the project alternatives that would lead to more detailed engineering and environmental study.

The early scoping process for the North Corridor Transit Project occurred in September and October 2010, and included public and agency meetings. This information was used to refine the purpose and need and define conceptual alternatives including alignments and modes. Based on the recommendations of the AA, Sound Transit and FTA will initiate project-level environmental scoping, announcing the type of environmental document they will prepare and offer further opportunities for public and agency involvement.

1.4 ORGANIZATION OF THE REPORT

This report presents findings from three levels of screening, including initial concept screening, Level 1 evaluation, and Level 2 evaluation. After the Summary, the report is organized into eight chapters:

- Summary
- Chapter 1: Introduction
- Chapter 2: Purpose and Need
- Chapter 3: Development and Screening of Alternatives
- Chapter 4: Detailed Definition of Level 2 Alternatives
- Chapter 5: Analysis of Alternatives
- Chapter 6: Public and Agency Involvement and Coordination
- Chapter 7: Comparative Evaluation of Alternatives
- Chapter 8: Conclusions and Next Steps