

2. Description of Airport Link

Airport Link is the combined light rail and related airport internal circulation modifications for Sound Transit's proposed southern extension of light rail from Tukwila, Washington to Sea-Tac Airport and the city of SeaTac. The Airport Link extension would start at the Tukwila International Boulevard Station (previously called the S. 154th Station) in Tukwila, which is being developed as part of the Initial Segment. The Initial Segment is the 14-mile light rail line currently under construction between downtown Seattle and the Tukwila International Boulevard Station. The Airport Link would extend from Tukwila International Boulevard Station south to the Airport/SeaTac Station and then to a terminus at the S. 200th Station and park-and-ride. Figure 2-1 shows Airport Link as part of the Central Link light rail system, and Figure 2-2 shows Airport Link's route and station with more detail in the airport area, including the roadway modifications required to accommodate light rail. In the 1999 Central Link Final EIS, the area where Airport Link is located was labeled Segment F.

Together with the Port of Seattle, Sound Transit has developed the modified route to the airport to accommodate airport needs and support the SeaTac urban center. Construction of Airport Link to the Airport/SeaTac Station is planned to start in 2006, with operations beginning as early as December 2009. A timetable for the additional plan to extend the line from the airport to S. 200th Street has not been determined. The Initial Segment anticipates service beginning in 2009, approximately six months prior to Airport Link. Appendix C contains conceptual design plans for Airport Link.

2.1 AIRPORT LINK

2.1.1 Light Rail from Tukwila International Boulevard Station to Airport/SeaTac Station

The proposed Airport Link extension would begin from the elevated Tukwila International Boulevard Station at S. 154th Street in Tukwila, crossing over State Route (SR) 99/International Boulevard and SR 518, to an alignment between the northbound and southbound North Airport Expressway. Light rail would be at-grade here before transitioning to a retained fill structure approaching and crossing over S. 170th Street. Then the elevated light rail would curve toward International Boulevard to reach an elevated Airport/SeaTac Station near the intersection with S. 176th Street. Several buildings currently along the proposed alignment would be demolished. Cross-over tracks and a traction power substation would be to the north of the station. The light rail alignment length between Tukwila International Boulevard Station and the Airport/SeaTac Station is approximately 1.7 miles.

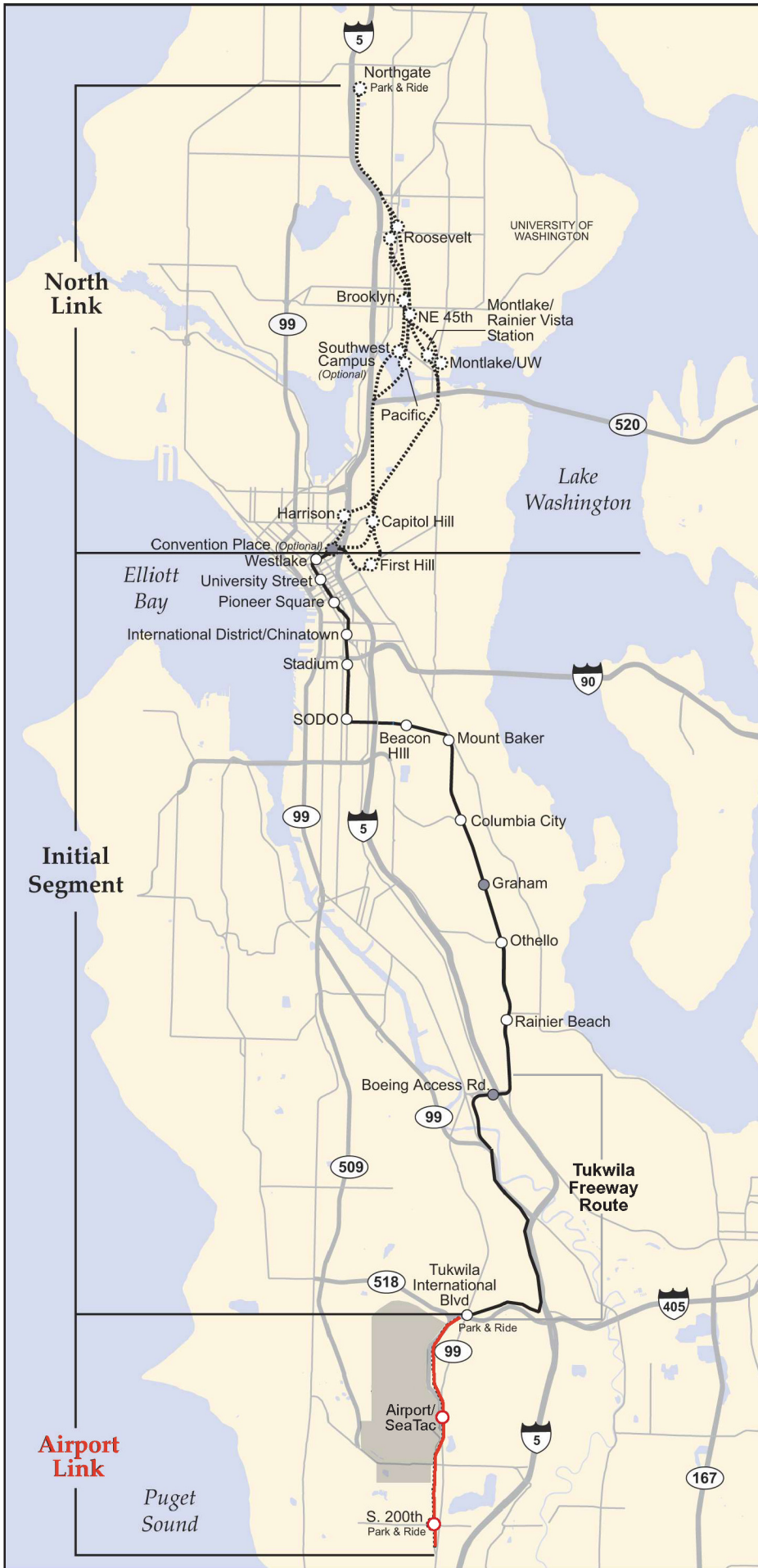
By comparison, the original project (see Figure 2-2) included a similar route from the Tukwila International Boulevard Station, but had an alignment further to the east of the existing airport expressways, more elevated sections, and two different station locations for serving the airport. One station would have been located north of S. 170th Street and the other at S. 184th Street. From the section of S. 172nd Street to S. 200th Street, the original project and Airport Link are the same and reflect the results of additional design undertaken to date.

Airport Link would be served by the Central Link maintenance facility, currently under construction at S. Lander Street in Seattle. With the light rail fleet required for the Central Link system, including Airport Link, one additional storage track would be added to the facility; construction of this track was deferred in the Initial Segment, but was part of the maintenance base previously evaluated in the 1999 Central Link Final EIS. Sound Transit would also acquire four additional light rail vehicles to the fleet already planned for the Initial Segment operations. In 2015, trains will operate every 6 minutes during peak weekday travel periods, and from 7.5 to 15-minute intervals at other times. In 2030, frequencies will increase to 5 minutes in



SOUNDTRANSIT

Figure 2-1
Central Link Light Rail Project
with Airport Link, Initial
Segment, and North Link



Initial Segment Stations

- Westlake
- University Street
- Pioneer Square
- International District³
- Royal Brougham⁴
- Lander
- Beacon Hill

- McClellan
- Edmunds
- Graham⁴
- Othello
- Henderson

- Boeing Access Road^{1,3,4}
- Tukwila International Blvd.¹

Airport Link Stations

- Airport/SeaTac
- S. 200th¹

¹ Includes Park-and-Ride

² Optional station

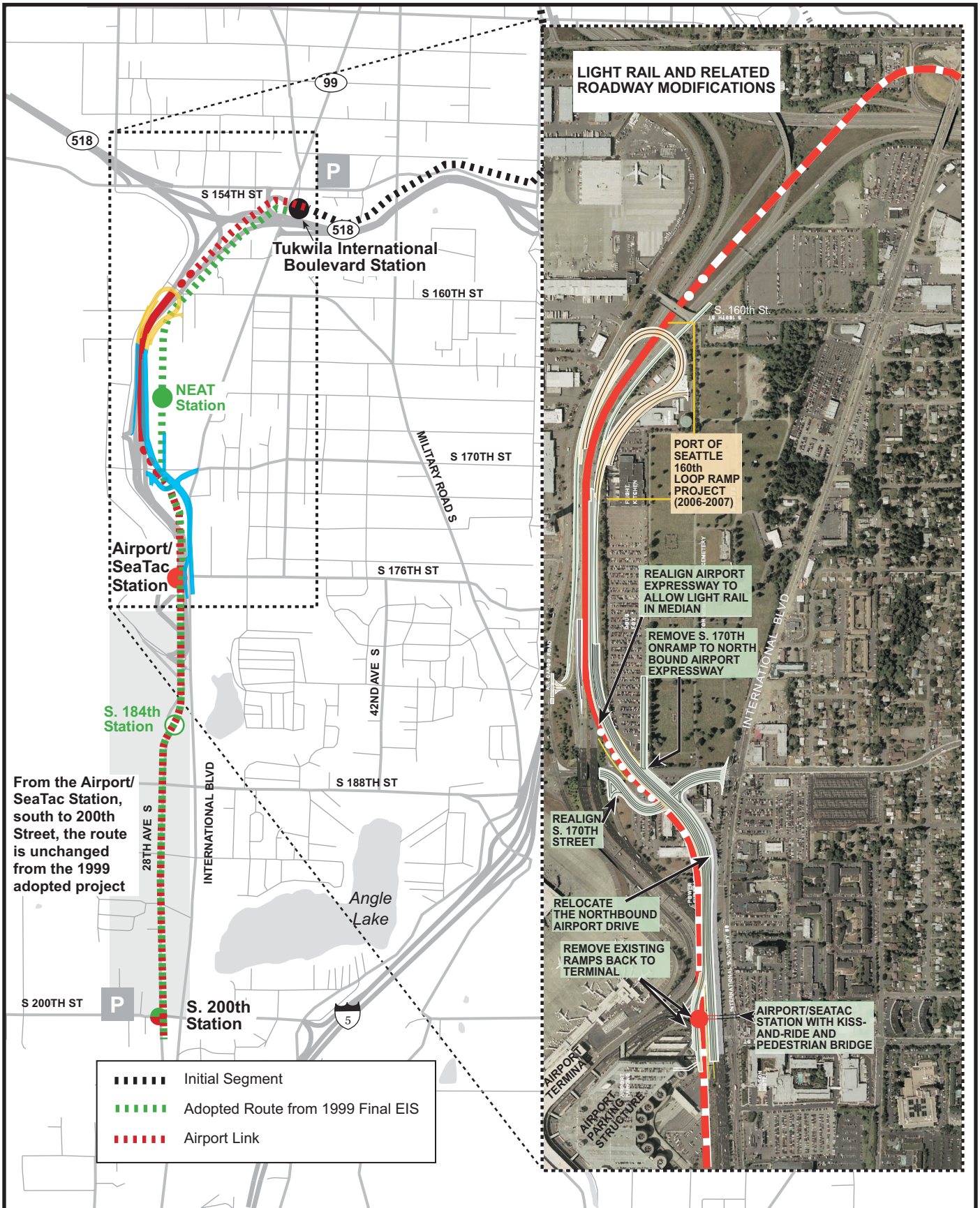
³ Light Rail/Commuter rail transfer

⁴ Deferred station

- Airport Link
- Initial Link light rail route and stations
- Deferred or optional stations
- Future Phase 1 route and station options



Light Rail & Related Roadway Modification 554-3164-016/19(1901P) 4/05 (B)



■■■■■ Initial Segment
 ■■■■■ Adopted Route from 1999 Final EIS
 ■■■■■ Airport Link

SOUNDTRANSIT

0 1,250 2,500
FEET

- Elevated
- At Grade
- Retained Cut-Fill
- Potential Station
- P Park and Ride
- Station
- Port of Seattle Project
- Airport Link Project Element
- S. 160th Street Loop Ramp Project
- Related Roadway Improvements

Figure 2-2
Airport Link

weekday peak periods and from 7.5 to 15 minute intervals at other times. Service hours would be from 5:00 AM to 1:00 AM weekdays and Saturdays, and 6:00 AM to 1:00 AM Sundays. More details on fleet operations are provided in Appendix H.

2.1.2 Airport/SeaTac Station

The Airport/SeaTac Station would be located adjacent to the northeast end of the existing main terminal parking structure, with the station mezzanine at the same elevation as the fourth level of the main terminal parking structure (see Appendix C, Figure SE2-AM01). A dedicated pedestrian passageway at the mezzanine level of the station would connect the elevated Airport/SeaTac Station through the parking garage to the main terminal. This passageway could be redeveloped if future airport plans change the garage layout. The Airport/SeaTac Station would also have an elevated pedestrian bridge at the mezzanine level of the station crossing to the east side of International Boulevard, where an entrance building would include stairs and elevators. Stairs and escalators would also link the mezzanine level to the center platform, which would be 400 feet long, with tracks on either side. The station also has a kiss-and-ride drop-off area for patrons on the east side of International Boulevard. A kiss-and-ride drop-off area is essentially a driveway where cars can pull over and stop temporarily to allow patrons to exit the vehicle; no parking is planned. Sound Transit, the City of SeaTac, and others (such as King County Metro) are also coordinating station area planning and related developments and improvements. The station plan assumes a minor relocation of the existing bus zones on International Boulevard, but otherwise, bus facilities are assumed to be similar to existing conditions. Other related improvements include potential sidewalk and landscaping treatments in the station area.

To make room for construction of the light rail station, the existing north airport parking garage entrance and exit must be relocated. The station area would also be located in the area currently occupied by three return-to-terminal ramps, which would also be closed and demolished. Circulation would be maintained by the S. 160th Street Loop Ramp project, a separate Port of Seattle effort, as described in the No-Build alternative. If the Port of Seattle elects not to undertake the S. 160th Street Loop Ramp project, Sound Transit would work with the Port to devise an alternate means of constructing the Airport/SeaTac Station or replacing the function of the existing return-to-terminal ramps and conduct any required environmental review pursuant to NEPA and SEPA as appropriate. Construction of Airport Link would not occur until appropriate environmental review and approvals of the mitigation are conducted, including approvals from the FAA. However, in either case, the relocated northbound expressway will include construction of a five-lane section to maintain effective access to the S. 160th Street loop ramp, and to avoid traffic queues extending onto the northbound expressway from eastbound SR 518. This would be needed if WSDOT does not improve conditions on SR 518 prior to the development of Airport Link and the S. 160th Street Loop Ramp project. Additional discussion is provided in Section 2.1.5, and related operational conditions are discussed in Section 3.1.

2.1.3 Airport/SeaTac Station to S. 200th Station

Between the Airport/SeaTac Station and S. 200th Street, the 2.0 mile section of the Airport Link route is similar to the original project route selected by Sound Transit in 1999, although some minor design revisions have occurred, and area roadways have been improved since 1999, including the completion of 26th/28th Avenues S. From the Airport/SeaTac Station, the route would continue elevated along the west side of International Boulevard, turn southwest to cross S. 188th Street, and continue elevated along the east side of 28th Avenue S. to S. 200th Street.

2.1.4 S. 200th Station

The southern terminus of Airport Link and the Central Link light rail project would be a station at S. 200th Street in south SeaTac (see Appendix C). The station would straddle S. 200th Street and include provisions for leasing or providing 630 park-and-ride spaces on the adjacent property involving a two to four

story structure, consistent with the City's parking requirements for high-capacity transit facilities. Bus transfer areas are to be located to the north of S. 200th Street, with entrance driveways accessible from International Boulevard and S. 200th Street. A signalized driveway intersection at 27th Avenue S. would provide the primary access to the S. 200th Park-and-Ride. Pedestrian and bicycle improvements may also occur in the station area. A traction power substation would be sited near the station. Pedestrians would also be able to cross at-grade or via the elevated platform, which provides a pedestrian overpass over S. 200th Street. Other crosswalks are provided at the future 27th Avenue S. intersection with S. 200th Street.

The Airport Link station plan is similar to options considered for the original project, but the layout of the station and its circulation plan has been refined through additional design. Both surface and structured parking alternatives were previously considered for the station's park-and-ride.

2.1.5 Terminal Roadway System Modifications Required for Airport Link

To provide the space needed for light rail guideways and the station, the project would need to revise portions of the terminal roadway system. The existing northbound North Airport Expressway would be realigned to the east (see Figure 2-2). In addition, a short segment of the southbound North Airport Expressway north of S. 170th Street would be realigned. This realignment would provide space needed to construct the light rail alignment while also conserving areas that could support future development of the airport. The relocation of the North Airport Expressway includes two bridges, embankment, retaining walls, new and relocated utilities, relocation of S. 170th Street, and construction of an airfield access tunnel.

The northern parking garage entrance and exit must be relocated. Relocation of these access roads would be staged to maintain active traffic throughout construction.

S. 170th Street would also be realigned to accommodate light rail and the revised northbound North Airport Expressway. Realigning S. 170th Street would require a new off-ramp from the northbound expressway onto S. 170th Street, replacing the existing off-ramp. The existing on-ramp from S. 170th Street to the northbound expressway would be removed. The S. 170th Street driveways to Washington Memorial Park Cemetery and an airport parking facility would be relocated. Several buildings would be demolished to accommodate these roadway modifications.

The Sound Transit project includes the demolition of three return-to-terminal ramp bridges on airport property to provide room for the Airport/SeaTac Station. These include Bridge 5 (ramp from garage parking to the lower drive), Bridge 6 (return-to-terminal ramp to the upper drive), and Bridge 7 (return-to-terminal ramp to the lower drive) and any associated auxiliary structures required. The demolition of the bridges would not allow the Port to use these ramps to manage heavy traffic flows within the airport. During peak traffic periods, management efforts may be needed to prevent conflicts that could occur between recirculating airport traffic and vehicle queues extending onto the northbound expressway from eastbound SR 518. SR 518 may not be improved before Airport Link and the S. 160th Street Loop Ramp project are built. To address these conditions, Airport Link includes a fifth lane on the northbound North Airport Expressway to provide access to the airport terminal without conflicts from queued vehicles from SR 518. The fifth lane would begin at the exit ramp from the airport parking garage. Two of the lanes will be drop-lanes for the exit to the S. 160th Street loop ramp. The other three lanes will continue north to SR 518.

2.1.6 Terminus Options

Sound Transit plans to build Airport Link in segments. The Airport/SeaTac Station is being designed to operate as an interim southern terminus until construction of the line continues to S. 200th Street, which is anticipated when funding becomes available. The complete Central Link light rail project continues to assume a southern terminus at the S. 200th Station. Therefore, the Airport/SeaTac Station and the S. 200th Station are both being analyzed as terminus options in this EA. However, the Airport/SeaTac Station involves the same footprint, facilities, and operational features whether it is a terminus or a line station.

2.1.7 Construction

Sound Transit plans to begin construction of Airport Link from Tukwila International Boulevard Station to the Airport/SeaTac Station in 2006 with operations starting as early as 2009. Construction from the Airport/SeaTac Station to the S. 200th Station is dependent on funding availability, and a schedule to complete this segment has not been determined. The duration of construction for Airport Link would be approximately 3 years, although construction at individual sites would range from a few months to 3 years.

Typical construction for surface and elevated guideways and stations, as well as for the roadway elements, would likely occur on a 6-days-per-week work schedule. In some locations (such as where substantial detours or lane closures are involved, or where construction periods need to be abbreviated to reduce other impacts), Sound Transit and the Port could use all-week or 24-hour construction. In addition, alternate shifts may be required for work within the airport to accommodate higher traffic volumes related to peak airline operations.

The overall construction duration includes a period of civil construction during which site preparation, primary construction, and finish construction take place. For the light rail elements, civil construction is followed by a typically shorter period of systems installation, integration, and testing of the light rail line. The roadway elements of the project would be staged to complete the work in segments to allow traffic to be maintained.

The civil construction work would normally begin with site preparation, including property acquisition, demolition and clearing, and utilities rerouting. Demolition involves implementing stormwater and erosion control measures, tearing down buildings and structures, relocating utilities, removing debris, and containing and disposing of hazardous materials. Construction and demolition work creates noise and dust, and there would be truck traffic for debris removal. Staging areas are also needed before, during, and for a short time after construction work occurs. A more detailed discussion of construction activities is provided in Section 3.18.

2.2 NO-BUILD ALTERNATIVE

The No-Build alternative provides a baseline condition for comparing the impacts of Airport Link. The No-Build alternative establishes transportation conditions in two future forecast years, 2015 and 2030. The 2015 No-Build alternative refers to the existing transportation system, plus funded projects in the Puget Sound Regional Council's (PSRC) adopted Transportation Improvement Program. By the 2030 horizon year, the No-Build alternative is assumed to include all the transportation projects and programs included in PSRC's adopted Metropolitan Transportation Plan, Destination 2030. The Metropolitan Transportation Plan includes extensive transportation network improvements such as completing an interconnected system of freeway and arterial high-occupancy vehicle (HOV) lanes, constructing missing links for network continuity, expanding transportation capacity to and between activity centers, widening some major roadways, upgrading highway safety and efficiency, providing better arterial access control, and increasing auto ferry capacity across Puget Sound (PSRC 1999).

The No-Build alternative also incorporates planned changes in existing land use and related increases in population and employment consistent with PSRC forecasts and local adopted plans.

The No-Build alternative assumes operation of the Initial Segment for the Central Link light rail, with the North Link extension to Northgate. From the southern terminus of the Initial Segment at Tukwila International Boulevard Station, a shuttle bus would operate between the station and the airport. This provides full build-out conditions for evaluating ridership and operational impacts of Airport Link.

Two Port of Seattle projects in the vicinity are also included in the No-Build alternative definition: the Port of Seattle S. 160th Street Loop Ramp project, and the Remote Consolidated Rental Car Facility. These projects are independent of Airport Link and would be implemented with or without Airport Link.

Port of Seattle's S. 160th Street Loop Ramp Project

The S. 160th Street Loop Ramp project would develop a multi-lane return-to-terminal ramp on the North Airport Expressway, in the vicinity of the S. 160th Street overcrossing. The purpose of the S. 160th Street Loop Ramp project is to reduce traffic congestion throughout the terminal roadway system during both normal operations and higher security levels, reduce the number of vehicles recirculating through the terminal roadway system and curbside, and provide signage to support customer way-finding needs.

The construction of the S. 160th loop ramp would include retaining wall structures, utility relocations, roadway signage modifications, roadway lighting modifications, storm drainage modifications, landscaping, and possible art components. The project would also widen the entrance ramp to the lower drive from one to two lanes.

The Port has conducted SEPA analysis on this project and has been coordinating with the FAA for NEPA compliance.

In the event that the Port of Seattle elects not to undertake this project, Sound Transit would work with the Port to devise an alternative means of constructing the Airport/SeaTac Station or replacing the function of the return-to-terminal ramps that would be displaced by the station, and conduct any required environmental review pursuant to NEPA and SEPA as appropriate. Construction of Airport Link would not occur until appropriate environmental review of the mitigation was conducted, including an affirmative finding by FAA on changes to the Airport Layout Plan.

Remote Consolidated Rental Car Facility

The Port of Seattle is currently evaluating the construction of a new remote consolidated rental car facility (RCF) for Sea-Tac Airport on a 21-acre parcel of land near S. 160th Street and International Boulevard. The project would provide a single location for delivery of rental cars at the airport and a common facility that would be used by all rental car companies. Consolidation of rental car activities at the RCF would relocate the five companies currently operating in the Main Garage, as well as provide relocation opportunities for the off-site rental car companies currently serving the airport. When complete, the facility could house between 10 and 12 rental car companies with associated office and support facilities. This would allow for additional public parking space in the Main Garage and would eliminate rental car trips on the airport roadway system. A consolidated busing operation will be required to move rental car customers between the RCF and the main terminal. A fleet of approximately thirty-five 40-foot-long, low-floor configuration buses, including seven spare buses, would move rental car customers between the proposed RCF and the passenger terminal. The project also includes a ramp from S. 160th Street to the northbound North Airport Expressway, a new southbound lane on SR 99, and access improvements to SR 518, including a new ramp from S. 160th Street to eastbound SR 518.

The Port has completed SEPA analysis on this project and is working with the FAA to identify any required NEPA analysis.

2.3 COMPARISON OF AIRPORT LINK TO THE ORIGINAL PROJECT

Light rail service to the airport and south was previously examined in the 1999 Central Link Final EIS, which evaluated alternatives for the 24-mile light rail project connecting Northgate, the University District, First Hill, downtown Seattle, south central Seattle and the Rainier Valley, and on to Tukwila and SeaTac to S. 200th Street.

The original project was based on the preferred alternative identified in the 1999 Central Link Final EIS (Alternative F2.3 – Washington Memorial Park, Elevated East of 28th). The original project and Airport Link alignments differ slightly between S. 154th Street and the Airport/SeaTac Station, but are the same south of the Airport/SeaTac Station to S. 200th Street except that the original project also included a potential station at S. 184th Street. The original project in this area included the Tukwila International Boulevard Station, which was selected as part of the Initial Segment. The original project was entirely

elevated. The original light rail alignment briefly followed the east side of the North Airport Expressway south of S. 154th Street before traveling along the west side of Washington Memorial Park Cemetery and reaching the 1997 Master Plan Update's North End Airport Terminal (NEAT) Station, an airport facility expansion that would have involved revised roadways and access. Since selection of the original project by Sound Transit, the Port began reevaluating the long-term terminal development options for the airport. The Port is currently evaluating a new comprehensive development strategy for accommodating projected growth up to 45 million passengers by the year 2021. As part of this evaluation, the Port identified the Link light rail alignment and station location that will connect to the main terminal at Sea-Tac Airport.

After leaving the NEAT Station, the original project then continued along the west side of Washington Memorial Park Cemetery until just south of S. 170th Street, where the alignment curved to follow the west side of International Boulevard past the airport. At S. 184th Street and International Boulevard, the original project included a potential station. This station is not proposed as part of Airport Link. From this point, the original project alignment and Airport Link as evaluated in this EA are the same. This EA incorporates the results of additional engineering and design work performed following the publication of the 1999 Central Link Final EIS, for the section of the original project from the Sea-Tac Airport to S. 200th Street.

In addition to the original project (preferred alternative F2.3), the 1999 Central Link Final EIS evaluated seven build alternatives in Segment F that are no longer being considered. Chapter 2 of the Central Link Final EIS provides a detailed description and map of all the previous Segment F alternatives. One alternative (F1) was entirely at-grade, while the rest of the alternative profiles were a combination of at-grade and elevated. Two of the previous alternatives, in addition to the original preferred alternative F2.3, followed the west side of Washington Memorial Park Cemetery to the airport. Five of the previously evaluated alternatives followed International Boulevard to the airport. One alternative (F3.2) veered west and one alternative (F2.2) veered east of International Boulevard for a short distance near the airport's Main Terminal before curving back towards International Boulevard. From the airport, one alternative (F1) then continued down International Boulevard to S. 200th Street. All of the other Segment F alternatives followed 28th Avenue S. to S. 200th Street.

2.4 ENVIRONMENTAL PROCESS

FTA, the Port of Seattle, and Sound Transit are developing this environmental document for the Airport Link project. This is a NEPA EA that also serves as a SEPA Addendum to the Central Link Final EIS (1999) and the Tukwila Freeway Route Final Supplemental EIS (2001). This Airport Link EA also references information contained in Sound Transit's Initial Segment EA (2002), which included updated environmental information for the Tukwila International Boulevard Station and the light rail project sections adjacent to the start of the proposed Airport Link extension. As a SEPA Addendum, this document provides updated environmental information to address changes in the project occurring since the previous SEPA documents.

Following the release of the Airport Link EA, the FTA and Sound Transit will accept public comments for 30 days (May 26, 2005 to June 27, 2005) and a public hearing will be held on June 15, 2005 (see Section 1.5). The Sound Transit Board is then expected to adopt the Airport Link project following the close of the public comment period, which is a key step to allow final design efforts to begin. Sound Transit will develop responses to public comments on the Airport Link EA in coordination with Port of Seattle and FTA. FTA anticipates issuing a Record of Decision in Summer 2005. Other agencies may also rely on the documentation in the EA and Addendum to support their decisions or actions related to the Airport Link project.

For purposes of SEPA, Sound Transit concludes, based on the analyses summarized in this Addendum, that the proposed project changes and refinements do not substantially change the analysis of significant impacts and alternatives in the existing environmental documents.

2.5 AIRPORT LINK PROJECT SCHEDULE

The overall schedule for the development of Airport Link is as follows:

Publish EA	May 2005
EA comment period	May–June 2005
Sound Transit Board selects project	July/August 2005
Port of Seattle Commission approvals	Summer 2005
Federal Record of Decision by FTA	September 2005
Final design	2005–2006
Start construction	2006
Start service operation	2009

2.6 FINANCIAL ANALYSIS

Preliminary capital cost estimates for construction of Airport Link from the Tukwila International Boulevard Station to the Airport/SeaTac Station are between \$305 million to \$325 million in year of expenditure (YOE) dollars for both the associated roadway work and the light rail guideway and station. The light rail portion is estimated to cost approximately \$245 million (YOE), and the road projects are estimated to cost \$60 million to \$80 million (YOE). Cost estimates are based on preliminary engineering. Cost estimates for the segment from the Airport/SeaTac Station to the S. 200th Station have not been developed, as there is no timetable to complete that portion of the alignment.

Sound Transit and the Port of Seattle would jointly fund and construct the project. The Port of Seattle would issue revenue bonds for its share of project costs associated with the roadway projects. Sound Transit has developed a proposed finance plan for construction of Airport Link from S. 154th Street to the Airport/SeaTac Station. This finance plan would fund construction and initiate revenue service by January 1, 2010. The primary sources of funds under this plan are Sound Transit's resources within the South King County subarea at existing voter-approved tax levels. The proposed Airport Link finance plan includes a change in the agency's financial policies to lower its net debt service coverage levels from 1.3 times current levels to 1.15 times. This change has not yet been approved by the Sound Transit Board. In addition, the plan calls for receipt of approximately \$40 million in competitive (non-New Starts) federal grants and other adjustments to the current South King County subarea budget. As part of this plan, in 2004 Airport Link received \$14.25 million in FTA competitive 5307 formula funds for Airport Link.

Annual operating and maintenance costs for Central Link from Northgate to the Tukwila International Boulevard Station are estimated to be \$55 million and \$63 million for 2015 and 2030, respectively (2004 dollars). The extension of light rail to Airport/SeaTac Station would increase operating costs by \$3 million and \$3.5 million in 2015 and 2030, respectively. Extension to the S. 200th Station would increase operating and maintenance costs by an additional \$3 million and \$1.8 million, respectively.

