

Appendix D

Transportation Analysis Tables and Exhibits

Transportation Analysis Tables and Exhibits

The data results and tables in this appendix are organized by the following transportation sections as they are discussed in the Supplemental Draft Environmental Impact Statement (SDEIS):

- Transit
- Arterial and local street operations, including intersection level of service (LOS) operations, safety, parking, and construction
- Nonmotorized facilities

The study area for this SDEIS transportation analysis focuses on only the new alternatives in South Bellevue (Segment B), Downtown Bellevue (Segment C), the Bel-Red/Overlake area (Segment D), and Downtown Redmond (Segment E). No information in Segment A is provided in this appendix because no Segment A alternatives were evaluated in the SDEIS. Refer to the 2008 Draft EIS for further information if not provided in this Appendix.

Since the 2008 Draft EIS was published, projects schedules and agency commitments have affected several regional projects' status of being considered reasonably foreseeable. These projects mainly include local roadway projects, but some include changes to state highways and enhancements to Sound Transit and Metro Transit service. In addition, several infrastructure projects that affect the regional traffic flow will be constructed earlier than originally scheduled. The complete list of future projects assumed and incorporated into the transportation analysis are located in Table D-1.

D.1 Project-wide Light Rail Ridership

Tables D-2 through D-5 provide segment and project-wide ridership for Segments B, C, D, and E. Based on the segment ridership forecasts discussed in the following sections, the full-length East Link Project would generate up to 42,000 riders in 2020 and up to 51,500 in 2030. Exhibit D-1 indicates forecast project-wide ridership for each SDEIS alternative.

D.2 Arterials and Local Streets

D.2.1 Traffic Forecasts and Station Trips

Table D-6 summarizes years 2020 and 2030 daily and PM peak-period ridership for the alternative with the highest ridership at each station by total automobile and person trips. Refer to the 2008 Draft EIS for the interim terminus analysis as the station locations are the same as in the 2008 Draft EIS and, therefore, have similar effects.

D.2.2 Arterial and Local Street Operations

This section provides data in tables and exhibits by segment for arterial and local street operations and construction. Exhibits D-2 through D-7 and Tables D-19 through D-23 provide the intersection LOS results. Table D-23 provides the intersection LOS results with potential mitigation.

D.2.2.1 Intersection Operations and LOS Segment B

Results and tables are provided for *Preferred Alternative B2M*. The Alternative B3 - 114th Extension Design Option performed consistent with Alternative B3, and Alternative B7 did not substantially change from the 2008 Draft EIS; as a result, results and tables are not provided. Exhibits D-2 and D-3 show the years 2020 and 2030 No Build Alternative and East Link intersection operations. Table D-20 indicates Segment B individual intersection delays and LOS.

Segment C

Exhibits D-4 and D-5 show years 2020 and 2030 No Build Alternative and East Link intersection operations in Segment C. Tables D-20 and D-21 indicate Segment C individual intersection delays and LOS for years 2020 and 2030, respectively.

Segment D

Exhibits D-6 and D-7 show Segment D years 2020 and 2030 intersection operations for the No Build Alternative and East Link. Table D-23 indicates Segment D individual intersection delays and LOS.

D.2.2.2 Traffic Safety

Tables D-7 through D-12 assesses traffic safety for SDEIS alternatives in Segments B, C, and D.

D.2.2.3 Parking

Table D-13 provides data the parking impacts from each alternative based on the current design level. In subsequent design refinements, the on- and off-street parking impacts might be adjusted.

Table D-14 lists the existing and proposed park-and-ride stalls and the forecasted PM peak-period (3-hour) vehicle usage at station park-and-ride facilities for years 2020 and 2030.

D.2.3 Construction Impacts

Project construction would result in temporary impacts on arterials, local streets, and parking within the construction areas. Construction activities expected to result in impacts include light rail construction, truck hauling, and construction staging. The impacts from truck hauling were evaluated based on the number of truck trips (provided in Table D-15) and potential haul routes as discussed in the 2008 Draft EIS.

D.2.3.1 Truck Volumes and Haul Routes

The exact number of construction truck trips that would be needed to construct each alternative depends on many variables that cannot be fully determined or finalized at this time; however, an estimate was prepared to understand potential East Link Project construction impacts on the local and regional transportation system. Table D-15 provides

a range of truck trips based on known estimated quantities for the main trip generation activities, including imported fill material, concrete, asphalt concrete pavement, and excavated material to be generated to construct each alternative.

D.2.3.2 Roadway and Parking Impacts

Table D-16 shows the construction impacts for the SDEIS alternatives in Segments B, C, and D.

D.3 Nonmotorized Facilities

Construction impacts to the pedestrian and bicycle circulation are discussed in Chapter 3 of the SDEIS.

D.3.1 Environmental Impacts

The station design elements for the SDEIS as part of the East Link Project would be similar to the facilities described in the 2008 Draft EIS. As shown in Table D-17, a range of bicycle racks and lockers are proposed at each SDEIS alternative station based on station design and anticipated ridership levels. Based on the updated ridership forecasts, Table D-18 estimates the PM peak-period pedestrian and bicycle trips generated by each station. These trips – along with the planned pedestrian and bicycle facilities – were used to qualitatively assess the degree of nonmotorized user activity surrounding the stations in Chapter 3 of the SDEIS. Exhibits D-9 through D-13 provide existing and future pedestrian and bicycle facilities surrounding the station areas.

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
King County Interstate and State Routes				
I-405	One lane each direction from I-5 to SR 181	X	X	Nickel Package
	One lane northbound from SR 181 to SR 167	X	X	Nickel Package
	One lane southbound from SR 169 to SR 167	X	X	Nickel Package
	One lane northbound from SR 167 to SR 169	X	X	TPA
	SR 515 half-diamond interchange (Talbot Road)	X	X	TPA
	One general-purpose lane northbound from 112th Avenue SE to SE 8th Street	X	X	Nickel Package
	One general-purpose lane and one outside HOV southbound from I-90 to SE 8th Street	X	X	Nickel Package
	NE 10th Street overcrossing	X	X	TPA
	Northbound braided crossing from NE 8th Street to SR 520	X	X	TPA

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
	One lane northbound from NE 70th to NE 124th	X	X	Nickel Package
	One lane northbound from NE 124th to NE 160th streets	X	X	TPA
	One lane southbound from SR 522 to SR 520	X	X	Nickel Package
	Two northbound lanes braided-crossing from NE 160th Street to SR 522	X	X	TPA
	NE 132nd Street interchange	X	X	TPA
	Totem Lake Freeway Station NE 128th	X	X	Sound Transit
	Totem Lake Transit Center	X	X	Sound Transit
	Northbound/southbound SR 167 to I-405 HOV direct connect		X	Destination 2030
	One lane each direction SR 169 to SR 900 (Sunset Boulevard)		X	Destination 2030
	Two lanes both directions Sunset Boulevard to Park Drive		X	Destination 2030
	HOV Direct Access NE 8th Street		X	ST/Destination 2030
	Three lanes both directions from Park Drive to NE 30th Street		X	Destination 2030
	Two lane northbound NE 30th Street to 52nd Avenue SE		X	Destination 2030
	Three lanes southbound from Coal Creek to NE 30th Street		X	Destination 2030
	Three lanes both directions from Coal Creek to I-90 (braids for I-90 to I-405)		X	Destination 2030
I-90	Two-way transit/HOV from Seattle to Mercer Island (Stage 1, 2, and 3)	X	X	TPA: only Stages 1 and 2; ST/WSDOT: Stage 3
	Eastgate access and 142nd Avenue SE	X	X	Sound Transit
SR 519	New ramp at South Atlantic Street and grade-separated crossing over Royal South Royal Brougham Way	X	X	Nickel Package
SR 520	Widen to eight lanes, including auxiliary and HOV lanes from West Lake Sammamish Parkway to SR 202	X	X	Nickel Package
	Six-lane (two general-purpose, one HOV) facility Between I-405 and Mountlake Boulevard (assuming the Eastside Transit and HOV Project and the tolling strategies documented in the EIS)	X	X	Destination 2030
SR 167	One southbound lane from I-405 to SW 41st Street	X	X	TPA
	One HOV lane southbound from 15th NW to 15th SW	X	X	Nickel Package
	Add HOV both directions from 15th Street SW to Pierce Co. Line	X	X	TPA
	Extend HOV lane from 8th Street SW to 15th Street NW – HOV	X	X	Nickel Package
I-5	One northbound lane NE 175th to NE 205th	X	X	Nickel Package
	Complete HOV from Pierce Co. Line to Tukwila	X	X	Nickel Package
SR 509	Phase 1: 180th to I-5		X	Destination 2030
SR 900	Add one lane both directions from SE 78th Street to I-90	X	X	Nickel Package
	Add HOV lanes both directions from park-and-ride lot to I-90	X	X	Nickel Package
SR 522	Business/transit Lane (Bothell-Kenmore areas)	X	X	Various sources
	UWBCC campus access: new interchange	X	X	Nickel Package

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
SR 518	Add one eastbound general-purpose lane from airport access to I-5	X	X	TPA
	EB GP Lane from airport to I-5	X	X	TPA
SR 161	Widen to five lanes from Jovita Boulevard to South 360th Street	X	X	Nickel Package
SR 99	Aurora Avenue N corridor transit/HOV lanes (North 105th to North 200th Streets)	X	X	Nickel Package
	Replace viaduct	X	X	Destination 2030
SR 18	One lane both directions Maple Valley to Issaquah Hobart Road	X	X	Nickel Package
	One lane both directions Issaquah Hobart Road to I-90		X	Destination 2030
Snohomish County Interstate and State Routes				
I-5	HOV lanes from SR 526 to US 2	X	X	Nickel Package/TPA
	New ramp southbound I-5 to westbound SR 525	X	X	TPA
SR 522	Four-lane widening from Snohomish River to US 2	X	X	Nickel Package
SR 9	Stages 1 and 2 from SR 522 to 176th Street SE	X	X	Nickel Package
I-405	One lane northbound NE 195th Street to SR 527	X	X	TPA
SR 527	Additional lanes from 164th Street SE to 112th Street SE	X	X	Nickel Package
Pierce County Interstate and State Routes				
I-5	HOV lanes from South 48th Street (Tacoma) to King and Pierce Co. line	X	X	Nickel Package
SR 161	Corridor improvements from 176th to 234th	X	X	Nickel Package
	Additional lanes from 36th to Jovita	X	X	Nickel Package
SR 16	HOV Improvements from Olympic View Drive to I-5	X	X	Nickel Package
	Tacoma Narrows Bridge: new bridge and approaches; toll on bridge (eastbound only)	X	X	Bond/Toll
SR 410	Additional lanes from 214th to 234th	X	X	Nickel Package/TPA
Bellevue Arterials				
150th Avenue SE	Widen to seven lanes from SE 36th to Newport Way; add turn lanes	X	X	TFP-011
Northup Way	One eastbound lane from 120th to 124th Avenues NE, intersection improvements at Northup Way and 124th	X	X	TFP-091, TFP-106
Northup Way	Provide sidewalks and bike lanes on both sides and a two-way center turn lane between Bellevue Way and NE 24th Street.		X	TFP-079
110th Avenue NE	Widen to five lanes between NE 4th and NE 8th Streets	X	X	TFP-110
NE 10th Street	Extend from 112th Avenue NE across I-405 and through the OHMC campus to connect with 116th Avenue NE	X	X	TFP-189
NE 8th Street/106th Avenue NE	Add westbound lane from 106th to 108th Avenue NE becoming right turn lane at 106th Avenue NE. Realign the roadway to the south to better utilize the new westbound travel lane (between 108th and 106th Avenues NE; funded in CIP) and preserve the existing large sequoia tree.	X	X	TFP-184 TFP-219

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
NE 12th Street	Widen bridge across I-405 to five lanes. Provide additional turn pockets at 112th and 116th intersections	X	X	Bel-Red Corridor FEIS
NE 10th Street at I-405	Add on-ramp to the north connecting to SR 520.	X	X	TFP-193
NE 2nd Street	Widen the existing roadway from 3 lanes with parking and turn pockets to 5 lanes from Bellevue Way to 112th Avenue NE		X	TFP-190
130th Avenue NE	Construct a two-way left-turn lane from Bel-Red Road to NE 20th Street		X	TFP-039/TFP-218, R-122, TIP-15
148th/150th Avenue SE	Widen by extending the third southbound lane from the ramp to westbound I-90 to south of Eastgate Way at the I-90 westbound off Ramp		X	TFP-154
129th Avenue SE	Extend 129th Avenue SE from SE 38th Street to Newport Way		X	TFP-103
NE 4th Street Extension	Extend 4th Street to 120th Avenue NE will consist of 5 vehicle lanes, bike lanes, sidewalks and will require construction of a sunken roadway and bridge(s) for BNSF RR tracks and Pedestrian over crossings. 120th Avenue widened between NE 4th and NE 8th streets.	X	X	TFP-207
120th Avenue NE	Widen to five lanes with sidewalks and bike lanes. Extend/realign roadway between NE 8th and Old Bel-Red Road.		X	TFP-208
NE 15th/16th Street (Phase I)	Construct a five lane roadway from 116th Avenue NE to 124th Avenue NE.	X	X	TFP-209
124th Avenue NE/Proposed NE 15th/16th Street Extension to Northup Way	Widen to five lanes with sidewalks. Key intersections at NE 15th/16th Street and Northup Way.		X	TFP-210
124th Avenue NE	Widen to 5 lanes with sidewalks between Bel-Red Road to planned NE 15th/16th Street Extension.		X	TFP-213
NE 15th/16th Street (Phase II)	Extend five lane roadway from 124th Avenue NE to 136th Place NE with a key intersection at 130th Avenue NE. Widen 136th Place NE five to three-lanes between NE 16th Street and NE 20th Street (reduction occurs at the intersection); add a double westbound left turn on NE 20th Street.		X	TFP-215
130th Avenue NE	Construct turn lanes, shared bike lanes, on-street parking and sidewalks between NE 16th and NE 20th Streets and widen to three lanes with shared bike lanes and sidewalks between NE 16th Street and Bel-Red Road.		X	TFP-218/TFP-039
Bel-Red Corridor Preferred Alt.	Land use changes included in the preferred alternative from the Bel-Red Corridor Project will be included in the FEIS. The land uses were approved by PSRC and the City of Bellevue.	X	X	City of Bellevue
Redmond Arterials				
Novelty Hill Road	Road improvements to Union Hill Road in the vicinity of 196th Avenue NE, 196th/195th Avenue NE from Union Hill Road NE to Novelty Hill Road and Novelty Hill Road at 196th Avenue NE. Work includes the replacement of the Evans Creek Bridge. Redmond is a partner with King County	X	X	RED-CIP-C26
164th Avenue NE	Rechannelize street to one through lane in each direction, two-way left-turn lane and bike lanes.	X	X	RED-TIP-S34
166th Avenue NE	Rechannelize to a cross section that includes 1 though lane in each direction, a center two-way left-turn lane and bike lanes.	X	X	RED-TIP-S41

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
Union Hill Road	Widen Union Hill Road from Avondale Road to 178th Place NE. Improvements include 2 through lanes and 1 right turn lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power and utility pole relocation.	X	X	RED-TFP- 049a
Union Hill Road	Widen Union Hill Road from 178th Place NE to 188th Avenue NE. Improvements include 2 through lanes in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power and utility pole relocation, right-of-way and easement acquisition. Construct permanent signal at 178th Place NE/Union Hill.	X	X	RED-TFP-049b
Union Hill Road	Widen Union Hill Road from 188th Place NE to east City Limits. Improvements include 2 through lanes in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power and utility pole relocation, right-of-way and easement acquisition.	X	X	RED-TFP-049c
162nd Avenue NE (Bear Creek Parkway Extension, west)	Construct new arterial from 159th Place NE to Leary Way. Improvements include 1 through lane in each direction, left turn lanes, curb, gutter, sidewalks, street lights, storm drainage, and right-of-way.	X	X	RED-TFP-050a
Redmond Way	Widen Redmond Way from SR 520 to 187th Avenue NE. Improvements include 6-7 lanes from SR 520 to East Lake Sammamish Pkwy (ELSP) and 4-5 lanes from ELSP to 187th Avenue NE, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power.	X	X	RED-TFP-065
160th Avenue NE	Construct new 160th arterial from current terminus at approximately NE 99th Street north to the intersection with Red-Wood Road and modify existing 160th arterial from NE 90th Street north to current terminus. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, right of way and easement acquisition.	X	X	RED-TFP-072a
NE 116th Street	Widen NE 116th Street from Red-Wood Road to Avondale Road. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, equestrian trail, street lights, storm drainage, underground power, right-of-way and easement acquisition. Project also includes construction of roundabout at 172nd Avenue NE.	X	X	RED-TFP-105
188th Avenue NE	Construct new 188th Avenue NE arterial from NE 68th Street to Union Hill Road. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, right-of-way and easement acquisition.	X	X	RED-CIP-C52
188th Avenue NE	Complete 188th Avenue NE arterial from Redmond Way to NE 68th Street. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, right-of-way and easement acquisition.		X	RED-TFP-117
185th Avenue NE	Construct new 185th Avenue NE arterial from NE 80th Street to Union Hill Road. Improvements include 1 through lane in each direction, left turn lanes, sidewalks, street lights, storm drainage, right-of-way, easements and traffic signal at Union Hill Road.	X	X	RED-TFP-118
161st Avenue NE	Construct new 161st Avenue NE from Bear Creek Pkwy Extension to Redmond Way. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, parking, sidewalks, street lights, storm drainage, right-of-way, easements and traffic signals at Cleveland Street and Bear Creek Pkwy.	X	X	RED-TMP-001
164th Avenue NE	Construct new 164th Avenue NE from NE 76th Street to Cleveland Street. Improvements include 1 through lane in each direction, bike lanes, parking, sidewalks, street lights, storm drainage, right-of-way and easements.	X	X	RED-TMP-002

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
NE 36th Street/NE 31st Street	Construct new NE 36th Street and bridge over SR 520 in the vicinity of NE 36th Street and NE 31st Street. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, sidewalks, street lights, storm drainage, right-of-way and easements.	X	X	RED-TMP-004
172nd Avenue NE	Construct new 172nd Avenue NE from NE 122nd Street to NE 124th Street. Improvements include 1 through lane in each direction, sidewalks, street lights, traffic calming, storm drainage and easements.	X	X	RED-TMP-007
NE 85th Street	Reconfigure NE 85th Street from 154th Avenue NE to 164th Avenue NE to 1 through lane in each direction, center left turn lane, bike lanes, parallel parking and pedestrian amenities.	X	X	RED-TMP-009
164th Avenue NE	Reconfigure 164th Avenue NE from Redmond Way to NE 87th Street to 1 through lane in each direction, center left turn lane, bike lanes and pedestrian amenities.	X	X	RED-TMP-010
Old Redmond Road	Widen Old Redmond Road to three lanes from 132nd Avenue NE to 136th Avenue NE and rechannelize from 136th Avenue NE to 140th Avenue NE. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power, right-of-way and easement acquisition.	X	X	RED-TMP-016
152nd Avenue NE, North	Implement a multimodal pedestrian corridor concept on 152nd Avenue NE from NE 24th Street to NE 31st Street to create a lively and active signature street in the Overlake Village. Pending the results of the 152nd Avenue NE Corridor Study, the proposed cross section for the improvements would include 1 through lane in each direction, accommodations for bus-based transit and its connections to light rail transit (LRT), left turn lanes, planted medians, bike lanes, parking, pedestrian supportive sidewalks, street lights, pedestrian amenities, storm drainage, right-of-way and easements. This corridor will also include the LRT line and an LRT station.	X	X	RED-OV-065a
Redmond Way and Cleveland Street	Convert Redmond Way from 160th Avenue NE to Avondale Way to 1 through lane in each direction and center turn lane with west end having two westbound starting at 161st Avenue NE and east end having two eastbound lanes starting at 168th Avenue NE. Convert Cleveland Street to 1 through lane in each direction. Improvements include curb extensions, widened sidewalks, pedestrian amenities, gateway treatments and realignment of street at eastern and western ends to improve traffic flow.	X	X	RED-TMP-079
Redmond Way	Widen Redmond Way bridge at Bear Creek. Improvements would include 2 through lanes in each direction, 2 eastbound left turn lanes to NE 76th Street, 1 eastbound right turn lane to westbound SR 520 onramp, sidewalks, Bear Creek and E Lake Sammamish Trail connections, street lights, storm drainage, right-of-way and easements.		X	RED-TMP-013
166th Avenue NE	Reconfigure 166th Avenue NE from NE 85th Street to NE 104th Street to 1 through lane in each direction, center left turn lane and bike lanes.	X	X	RED-TMP-019
NE 83rd Street	Widen NE 83rd Street from 160th Avenue NE to 161st Avenue NE. Improvements include widened sidewalks, increased parking, street lights, pedestrian amenities and intersection modifications.	X	X	RED-TMP-061
NE 70th Street	Construct new NE 70th Street from Redmond Way to 180th Avenue NE. Includes 1 through lane in each direction, left-turn lanes and sidewalks.	X	X	RED-TMP-029
NE 73rd Street Extension	Construct new NE 73rd Street for neighborhood access and circulation from 185th Avenue NE to 188th Avenue NE. Improvements include 1 through lane in each direction, left turn lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements.	X	X	RED-TIP-C51
	Extend improvements (from RED-TIP-C51) to 192nd Avenue NE		X	RED-TMP-070

TABLE D-1
No-Build Transportation Projects ^a

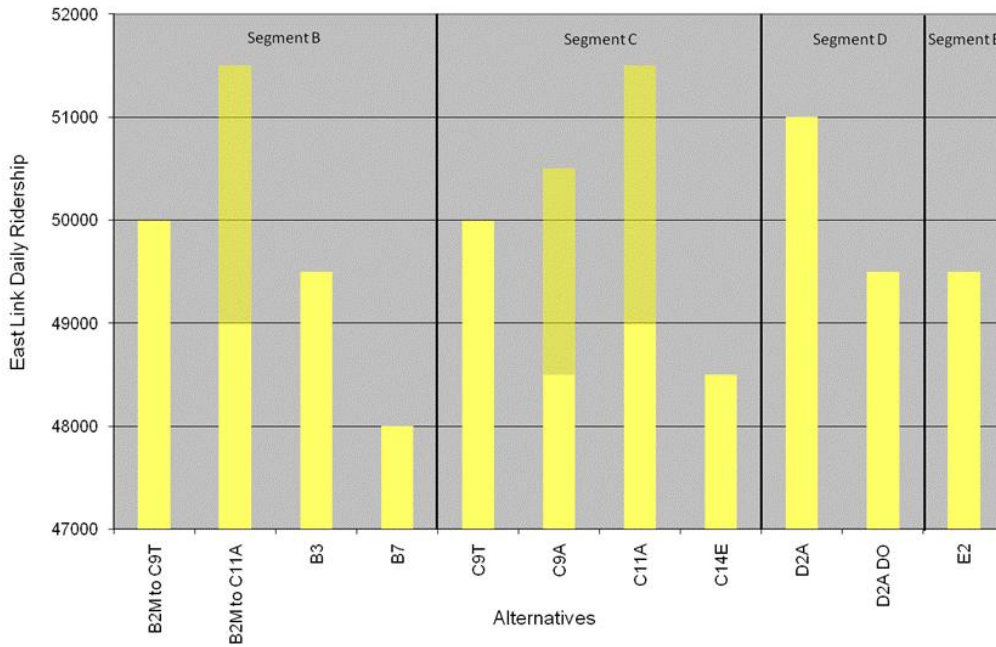
Facility	Project Detail	2020	2030	Source
NE 76th Street Extension	Construct new NE 76th Street from 185th Avenue NE to 188th Avenue NE. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements.	X	X	RED-TIP-50
	Extend improvements (from RED-TIP-50) to 192nd Avenue NE		X	RED-TMP-071
192nd Avenue NE Extension	Construct new 192nd Avenue NE for local access and circulation from NE 68th Street to Union Hill Road. Improvements include 1 through lane in each direction, left turn lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements.		X	RED-TMP-072
NE 40th Street Transit Center SR 520 Pedestrian Crossing	Provide a new direct pedestrian connection over SR 520 between the Overlake Transit Center and the Microsoft west campus (near the NE 38th Street alignment).		X	RED-OV-032
148th Avenue NE	Create third northbound through lane on 148th Avenue NE from NE 22nd Street to SR 520 westbound on-ramp using primarily existing right turn lanes and modify SR 520 westbound on-ramp to allow HOV access. At NE 24th Street and 148th Avenue NE intersection add second left turn lane on the eastbound and westbound approaches, add right turn lane on northbound approach, and extend right turn lane on westbound approach.	X	X	RED-TMP-078
Overlake Neighborhood Preferred Alt.	Land use changes included in the preferred alternative from the Overlake Neighborhood Plan will be included in the Final EIS analysis; the land uses were approved by PSRC and the City of Redmond.	X	X	City of Redmond
Kirkland Arterials				
NE 120 Street	Construct new three-lane roadway with pedestrian and bicycle facilities from Slater Avenue to 124 Avenue NE	X	X	R-21
Seattle Arterials				
Lander Street	Overcrossing of BNSF Railway	X	X	Seattle
Spokane Street	Addition of freeway ramps to 4th Avenue	X	X	Seattle
Alaskan Way Viaduct	New ramp connections at South Atlantic Street, South Royal Brougham Way, and King Street		X	Destination 2030/Seattle
King County Arterials				
Military Road	From S 272nd to S 304th, widen to four or five lanes	X	X	CP-5
Issaquah Bypass	New facility		X	CP-7
Issaquah Hobart Road	From Issaquah to SR 18, widen to four lanes	X	X	CP-6
Carr Road	Widen from SR 167 to Benson Road	X	X	CP-8
SE 212th/SE 208th	From SR 167 to SR 515 widen to six lanes (transit HOV priority lanes)	X	X	CP-14
Woodinville-Duvall Road	Widen between 171st Avenue NE and Avondale Road	X	X	CP-12
Avondale Road NE	From NE 155th to NE 168th Streets, widen to three lanes	X	X	CP-13
Transit Assumptions				

TABLE D-1
No-Build Transportation Projects ^a

Facility	Project Detail	2020	2030	Source
Central Link	2020: Northgate to Stadium: 4-minute peak and 6-minute off-peak; Stadium to South 200th Street 8-minute peak and 12-minute off-peak 2030: Lynnwood to Stadium 3.5-minute peak and - minute off-peak; Stadium to Redondo/Star Lake (272nd) 7-minute peak and 10-minute off peak	X	X	Sound Transit
ST Express	2009 SIP	X	X	Sound Transit
Sounder	Everett to Seattle (four peak-period trips add Mukilteo Station), Tacoma to Seattle (nine peak-period trips add South Tacoma and Lakewood Station)	X	X	Sound Transit
Street Car	Waterfront Streetcar	X	X	King County Metro
	South Lake Union Streetcar	X	X	Seattle
	First Hill Streetcar	X	X	Sound Transit
Transit Service	Regional and local bus services operated by Sound Transit, King County Metro, Community Transit, Everett Transit and Pierce Transit. Sound Transit and King County Metro will be provide transit service integration plans for both No-Build and Build alternatives for 2020 and 2030 horizon years. The PSRC model assumes service provide by Kitsap Transit and the Washington State Ferries as well.	X	X	Agency service plans

^a Italicized projects are those that have been completed, shaded projects are new from when the 2008 DEIS was published.

EXHIBIT D-1
East Link Year 2030 Project-wide Ridership Forecast



Note: In Segment C, the shaded bars represent the increase in systemwide ridership associated with implementing light rail transit signal priority.

TABLE D-2
Year 2020 and 2030 Daily Ridership Forecasts In Segment B

Station	2020				2030			
	B2M		B3	B7	B2M		B3	B7
	To C9T	To C11A*			To C9T	To C11A*		
South Bellevue	4,000	4,000	4,000	N/A	4,500	4,500	4,500	N/A
SE 8th	500	N/A	N/A	N/A	500	N/A	N/A	N/A
118th	N/A	N/A	N/A	1,500	N/A	N/A	N/A	1,500
Segment B totals	4,500	4,000	4,000	1,500	5,500	4,500	4,500	1,500
Project-wide ridership	40,500	39,500 to 42,000	40,000	39,000	50,000	49,000 to 51,500	49,500	48,000

Note: Due to rounding, station ridership might not sum exactly to segment totals.
 * Higher ridership forecasts indicate signal priority for the light rail train through downtown Bellevue.
 N/A Indicates stations that are not applicable to this alternative.

TABLE D-3
Year 2020 and 2030 Daily Ridership Forecasts in Segment C

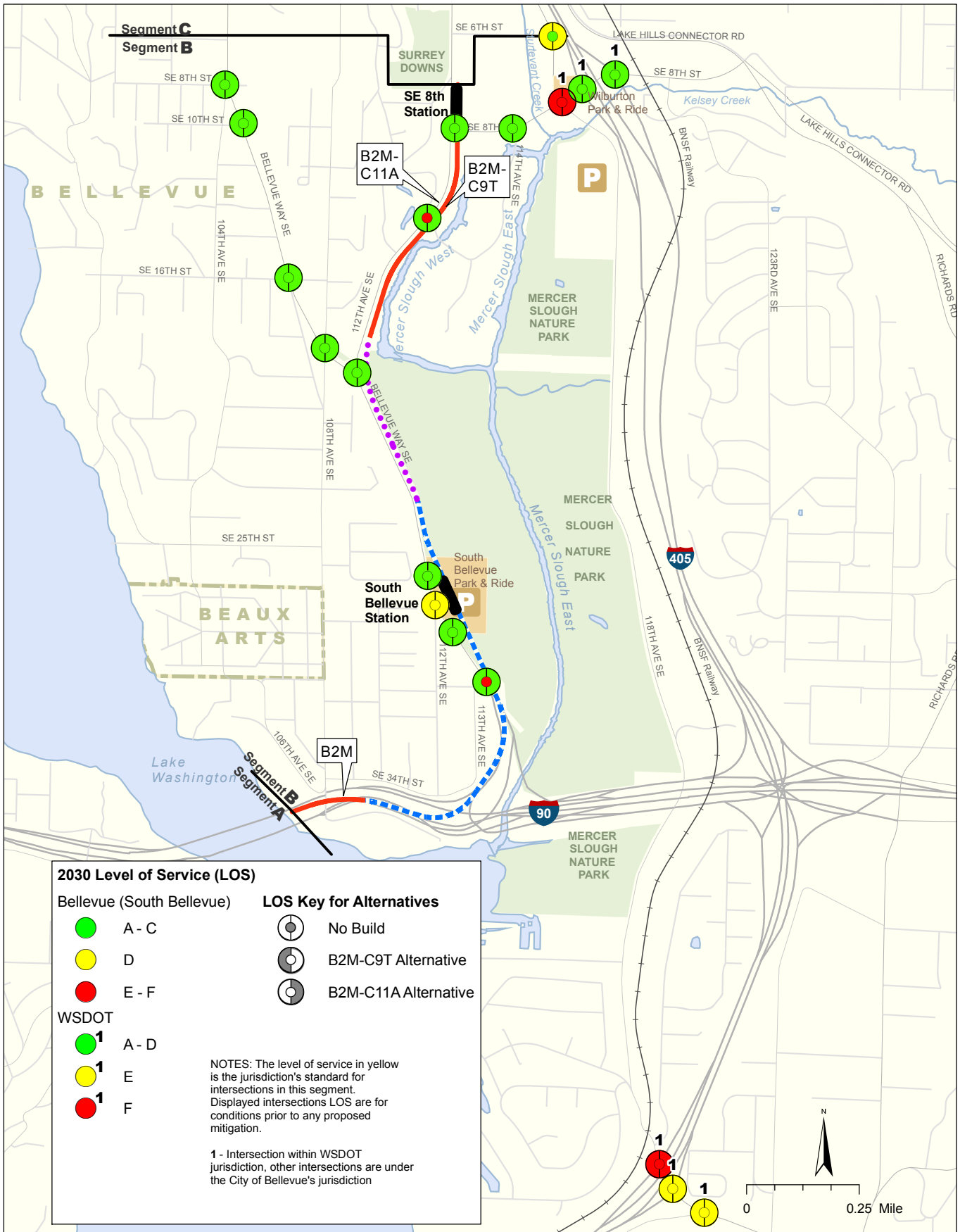
Station	2020				2030			
	C9T	C9A*	C11A*	C14E	C9T	C9A*	C11A*	C14E
108th	N/A	N/A	1,500 (2,000)	N/A	N/A	N/A	2,000 to 2,500 (2,500 to 3,000)	N/A
East Main	N/A (2,500)	2,000 (2,500)	N/A	N/A	N/A (3,000)	2,500 (3,000)	N/A	N/A
Bellevue Transit Center	5,000 (4,000)	3,500 to 4,000 (3,500 to 4,000)	4,000 to 4,500 (4,500 to 5,000)	3,500 (3,500)	6,000 (5,000)	4,000 to 4,500 (4,500 to 5,000)	5,000 to 5,500 (5,500 to 6,000)	4,000 (4,000)
Hospital	500 (500)	500 (500)	500 (500)	1,000 (1,000)	1,000 (1,000)	1,000 (1,000)	1,000 (1,000)	1,500 (1,500)
Segment C totals	5,500 (7,000)	6,000 to 6,500 (6,500 to 7,000)	6,500 to 7,000 (7,500 to 8,000)	4,500 (4,500)	7,000 (9,000)	7,500 to 8,000 (8,500 to 9,000)	8,000 to 9,000 (8,500 to 9,500)	5,500 (5,500)
Project-wide ridership	40,500 (39,500)	39,000 to 41,000 (37,500 to 39,500)	39,500 to 42,000 (38,000 to 40,500)	39,000 (37,000)	50,000 (49,000)	48,500 to 50,500 (46,500 to 48,500)	49,000 to 51,500 (48,000 to 49,500)	48,500 (46,000)

Note: Due to rounding, station ridership might not sum exactly to segment totals.
 Ridership forecasts for Segment C Alternatives connected to either *Preferred Alternative B2M* (with *Preferred Alternative C11A* or *Preferred Alternative C9T*) or *Alternative B3* (with *Alternative C9A* and *Alternative C14E*) are shown outside of the parentheses and forecasts shown inside the parentheses are with the connection to *Alternative B7*.
 * Higher ridership forecasts indicate signal priority for the light rail train through downtown Bellevue.
 N/A Indicates stations that are not applicable to this alternative

TABLE D-4 Year 2020 and 2030 Daily Ridership Forecasts in Segment D				
Station	2020		2030	
	D2A	D2A: NE 24th Design Option	D2A	D2A: NE 24th Design Option
120th	500	500	1,000	500
130th	1,000	1,000	1,000	1,000
Overlake Village	1,000	1,000	1,000	1,000
Overlake Transit Center	3,000	2,500	4,000	3,000
Segment D totals	5,500	5,000	7,000	6,000
Project-wide ridership	41,500	40,000	51,000	49,500
Note: Due to rounding, station ridership might not sum exactly to segment totals.				

TABLE D-5 Year 2020 and 2030 Daily Ridership Forecasts in Segment E		
Station	2020	2030
	E2	E2
SE Redmond	1,500	2,000
Downtown Redmond	1,000	1,500
Segment E totals	3,000	3,500
Project-wide ridership	40,000	49,500
Note: Due to rounding, station ridership might not sum exactly to segment totals.		

TABLE D-6 2020 and 2030 PM Peak-Period (3-Hour) and Daily Station Ridership Forecast							
Station	Alternative	2020			2030		
		Daily Station Boardings ^a	PM Peak Auto Trips ^b	PM Peak Person Trips ^c	Daily Station Boardings ^a	PM Peak Auto Trips ^b	PM Peak Person Trips ^c
Segment B, South Bellevue							
South Bellevue	B2M to C9T, B2M to C11A, B3	3,000	1,560 (1,110)	2,270	4,000	1,860 (1,150)	2,820
SE 8th	B2M to C9T (Main)	500	50	260	500	60	320
118th	B7	1,000	510 (900)	1,470	1,000	540 (910)	1,610
Segment C, Downtown Bellevue							
East Main	C9A	2,000	210	1,210	2,500	260	1,530
108th	C11A	1,500	170	970	2,500	220	1,270
Bellevue Transit Center	All Segment C Alternatives	5,000	420	4,720	6,000	600	5,270
Hospital	All Segment C Alternatives	1,000	100	570	1,500	160	900
Segment D, Bel-Red/Overlake							
120th	D2A	500	70	390	500	80	470
130th	D2A	1,000	320 (350)	710	1,000	450 (370)	1,140
Overlake Village	D2A	1,000	310 (190)	600	1,000	570 (230)	1,130
Overlake Transit Center	D2A	3,000	550 (230)	1,790	4,000	800 (270)	2,650
Segment E, Downtown Redmond							
SE Redmond	E2	1,000	1,230 (1,640)	1920	1,500	1,230 (1,640)	1920
Downtown Redmond	E2	1,000	140	830	1,500	160	950
^a The highest alternative ridership data are shown for each station. ^b The PM peak auto trips include drop-off/pick-up and park and ride (if applicable) trips. At stations with a park and ride, the auto trips outside the parenthesis are forecasts from the Sound Transit ridership model while the auto trips in parentheses are the trips used in the traffic analysis. These values can differ if the demand is different than the capacity of the park-and-ride lot and if the park-and-ride currently exists, because only the difference between the existing and the planned capacity is used in the traffic analysis. ^c PM peak person trips include all people boarding and alighting bus and light rail. Note: Due to rounding, ridership might not sum exactly to totals.							



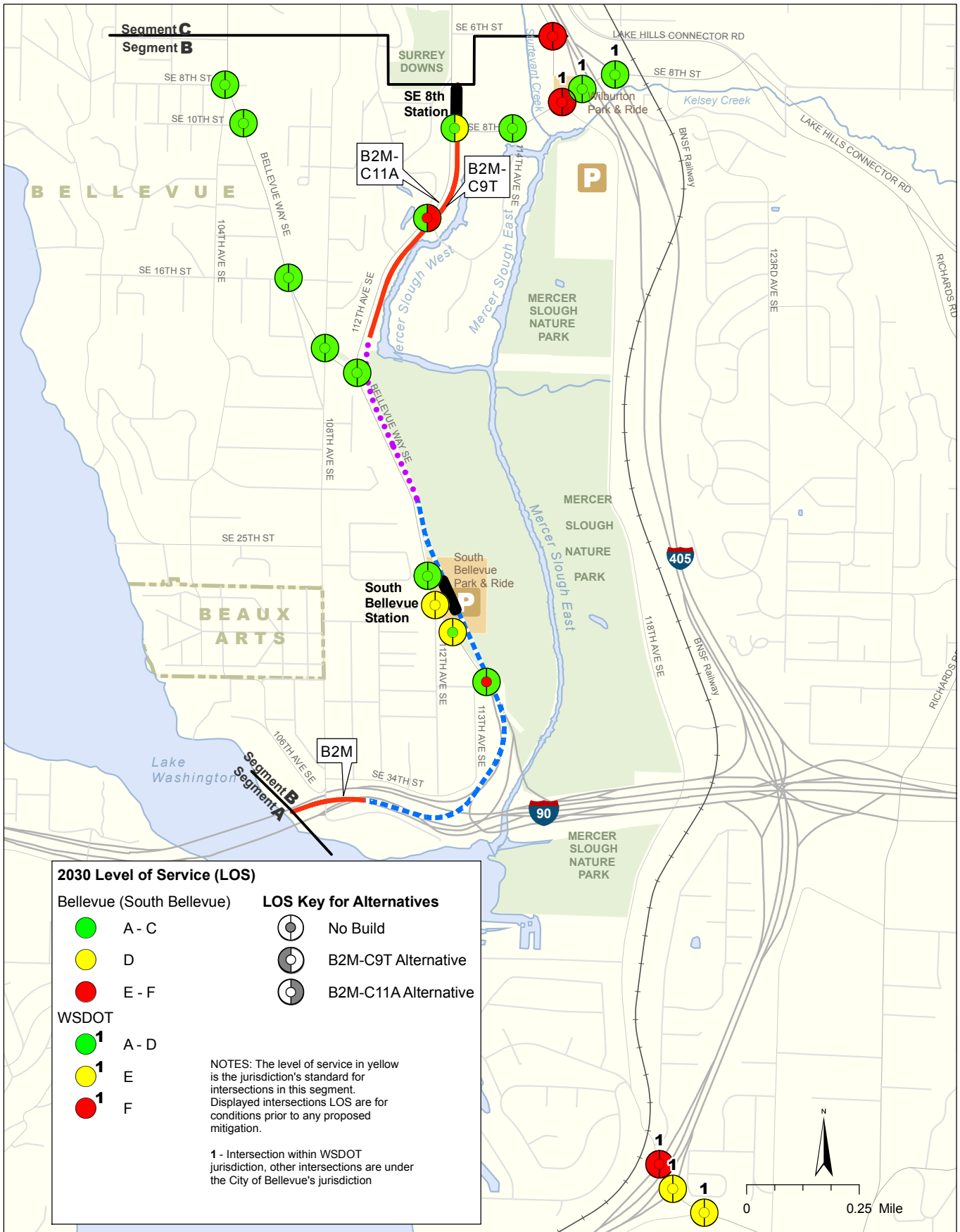
- At-Grade Route
- - - Elevated Route
- - - Retained-Cut Route
- - - Retained-Fill Route
- - - Tunnel Route

- Proposed Station
- New and/or Expanded Park-and-Ride Lot

NOTE: The level of service in white indicates that this intersection does not exist for this alternative.

Source: Data from King County (2006) modified by CH2M HILL.

Exhibit D-2. 2020 Level of Service at Intersections Segment B East Link Project



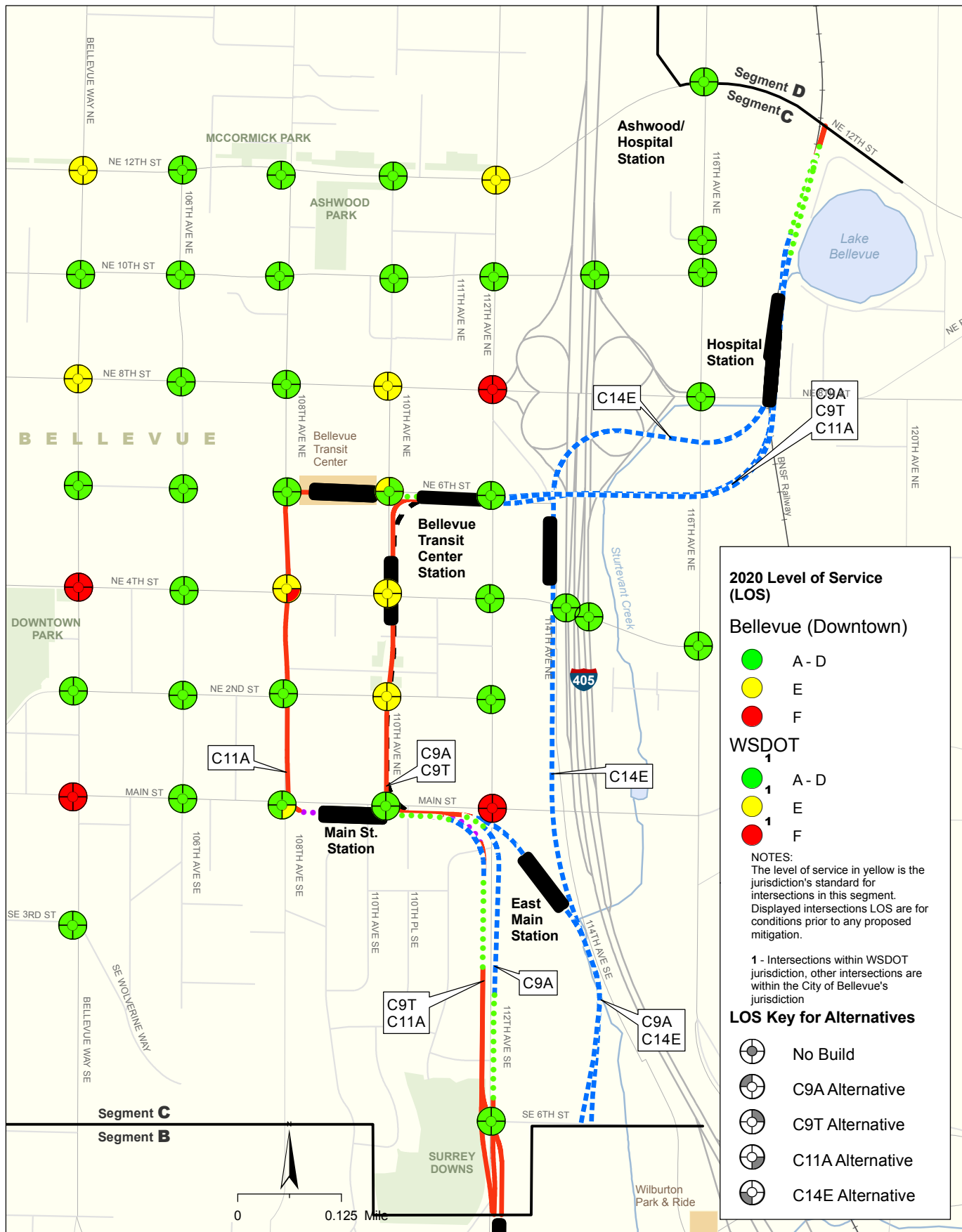
- At-Grade Route
- - - Elevated Route
- - - Retained-Cut Route
- - - Retained-Fill Route
- - - Tunnel Route

- Proposed Station
- New and/or Expanded Park-and-Ride Lot

NOTE: The level of service in white indicates that this intersection does not exist for this alternative.

Source: Data from King County (2006) modified by CH2M HILL.

Exhibit D-3. 2030 Level of Service at Intersections Segment B East Link Project



- At-Grade Route
- - - Elevated Route
- - - Retained-Cut Route
- - - Retained-Fill Route
- - - Tunnel Route

- Proposed Station
- P New and/or Expanded Park-and-Ride Lot

2020 Level of Service (LOS)

Bellevue (Downtown)

- A - D
- E
- F

WSDOT

- 1 A - D
- 1 E
- 1 F

NOTES:
 The level of service in yellow is the jurisdiction's standard for intersections in this segment.
 Displayed intersections LOS are for conditions prior to any proposed mitigation.

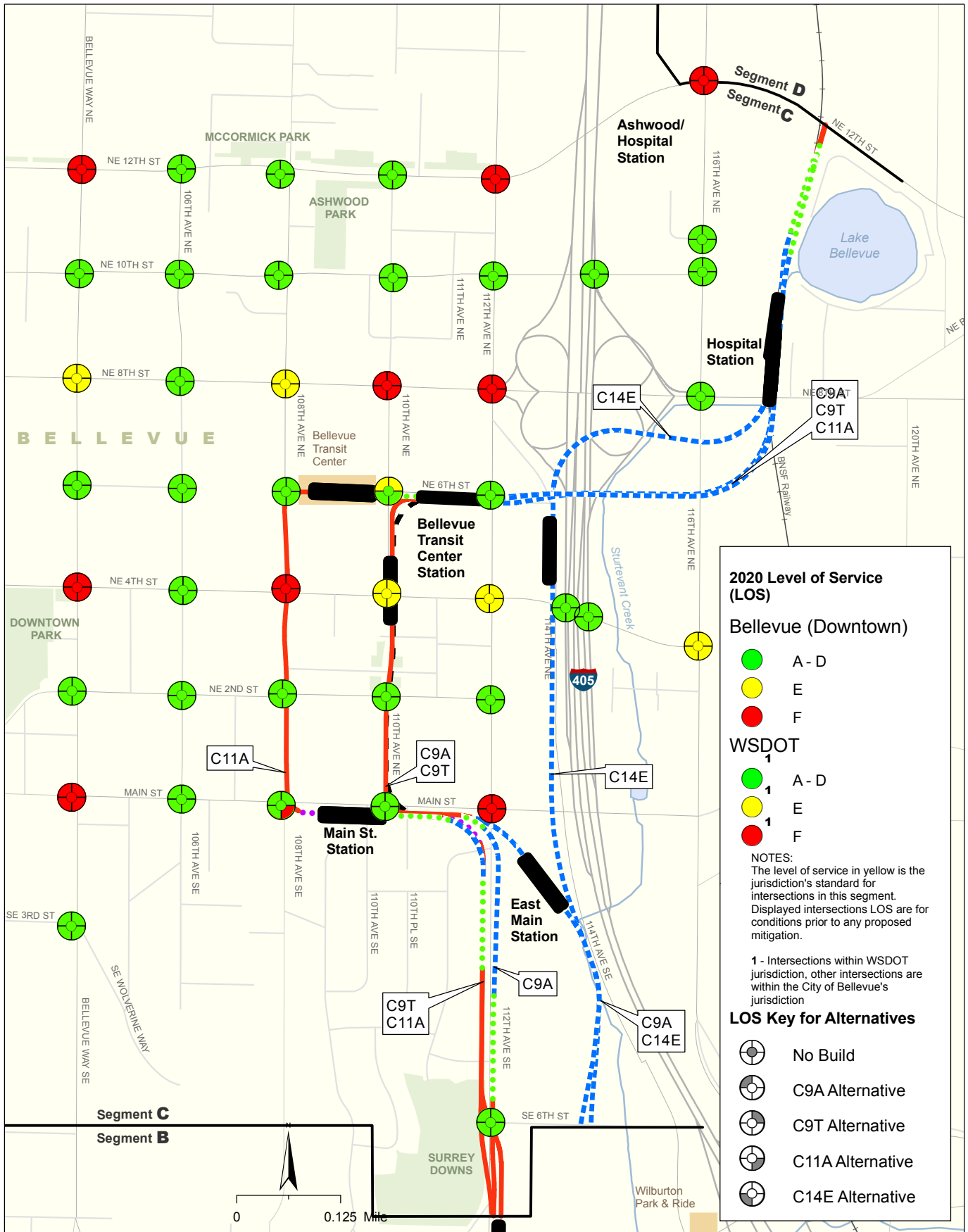
1 - Intersections within WSDOT jurisdiction, other intersections are within the City of Bellevue's jurisdiction

LOS Key for Alternatives

- No Build
- C9A C9A Alternative
- C9T C9T Alternative
- C11A C11A Alternative
- C14E C14E Alternative

Source: Data from City of Bellevue (2005) and King County (2006) modified by CH2M HILL.

Exhibit D-4. 2020 Level of Service at Intersections Segment C East Link Project

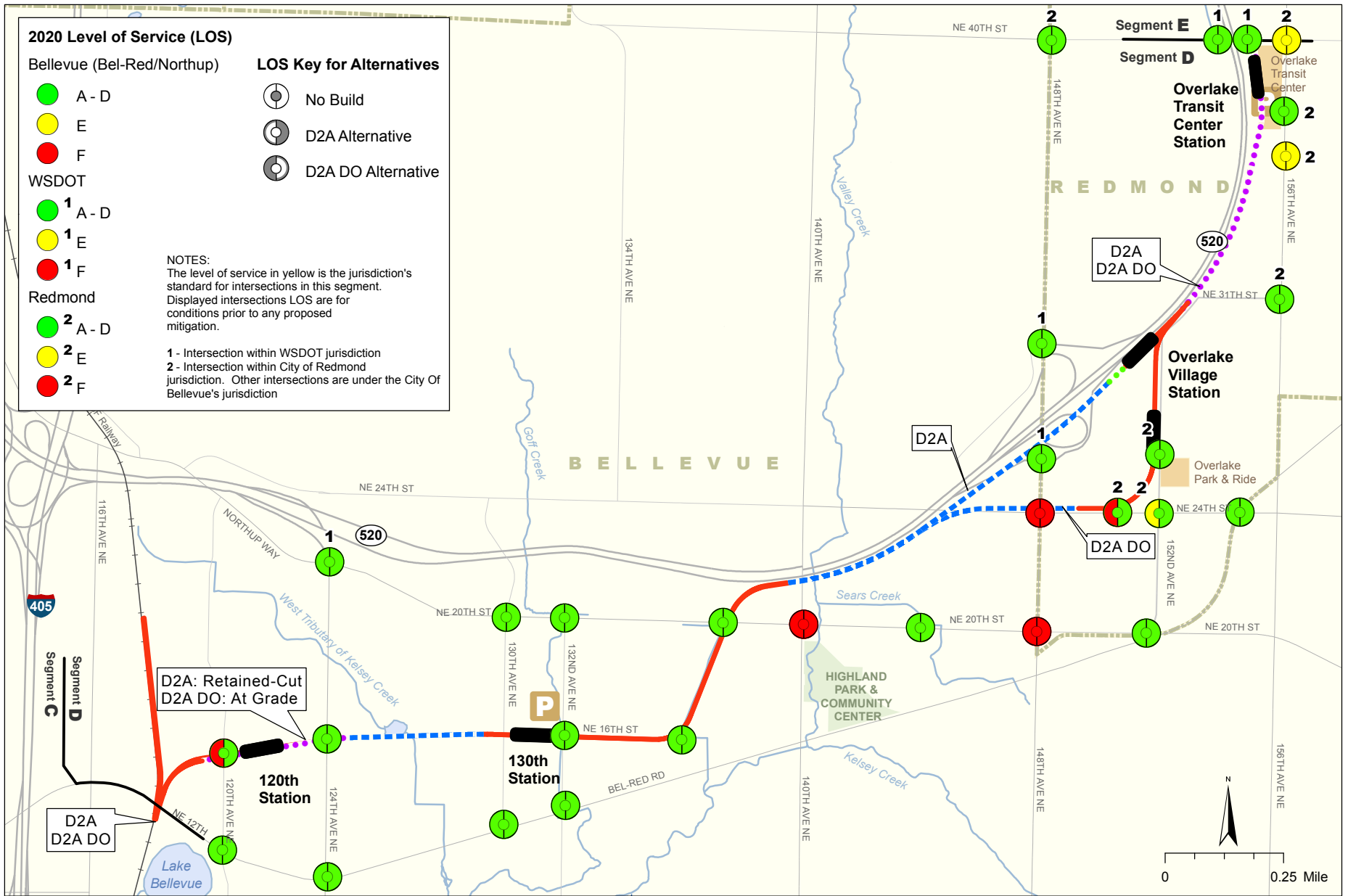


- At-Grade Route
- Elevated Route
- Retained-Cut Route
- Retained-Fill Route
- Tunnel Route

- Proposed Station
- New and/or Expanded Park-and-Ride Lot

Source: Data from City of Bellevue (2005) and King County (2006) modified by CH2M HILL.

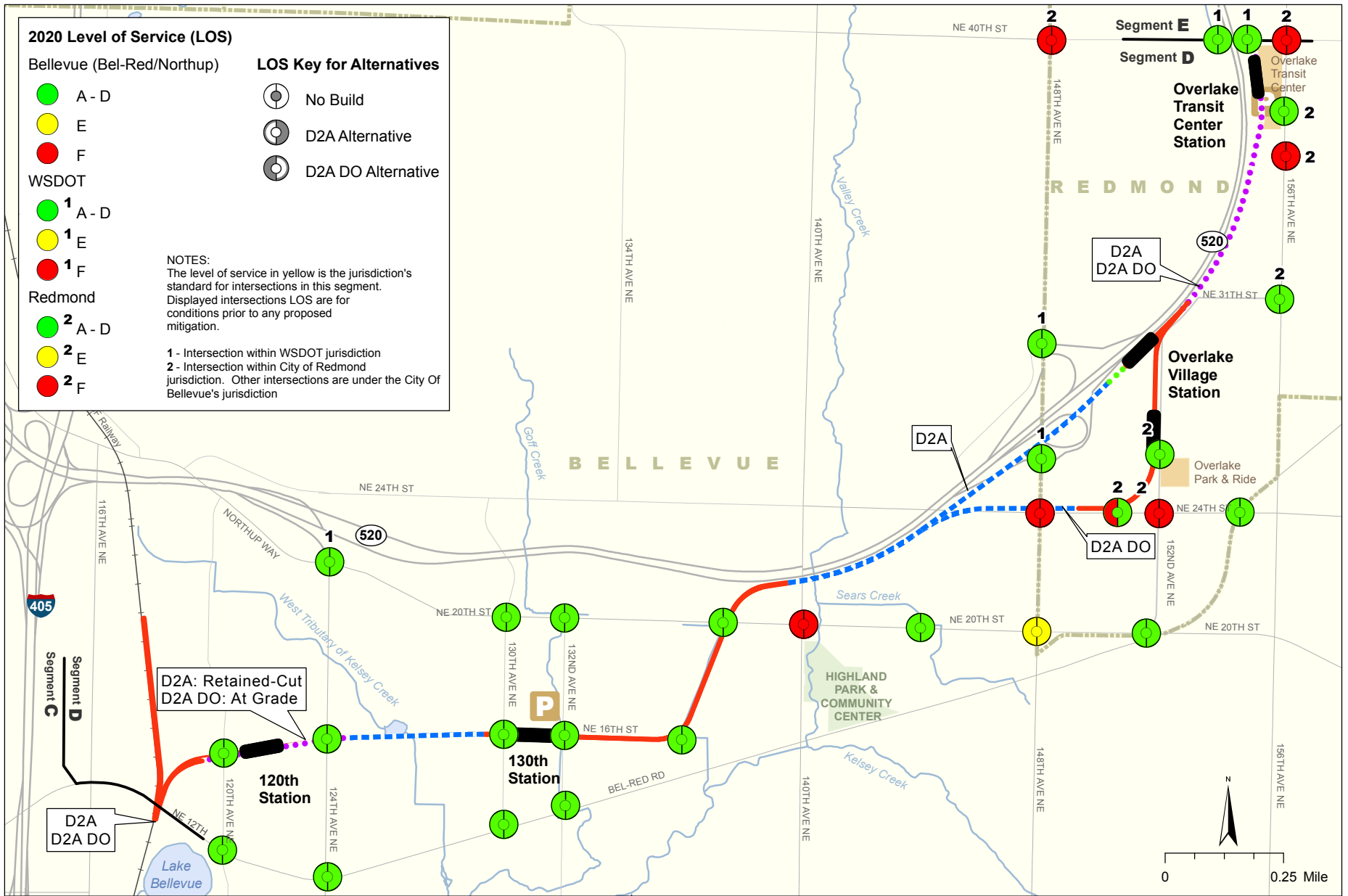
Exhibit D-5. 2030 Level of Service at Intersections Segment C East Link Project



Source: Data from City of Bellevue (2005), City of Redmond (2005), and King County (2006) modified by CH2M HILL.

- At-Grade Route
- - - Elevated Route
- - - Retained-Cut Route
- - - Retained-Fill Route
- - - Tunnel Route
- Proposed Station
- P New and/or Expanded Park-and-Ride Lot

Exhibit D-6. 2020 Level of Service at Intersections
Segment D
 East Link Project



Source: Data from City of Bellevue (2005), City of Redmond (2005), and King County (2006) modified by CH2M HILL.

- At-Grade Route (Solid red line)
- Elevated Route (Dashed blue line)
- Retained-Cut Route (Dotted purple line)
- Retained-Fill Route (Dotted green line)
- Tunnel Route (Dashed black line)
- Proposed Station (Black rectangle)
- New and/or Expanded Park-and-Ride Lot (Brown 'P' in a square)

Exhibit D-7. 2030 Level of Service at Intersections
Segment D
 East Link Project

TABLE D-7 <i>Preferred Alternative B2M Safety Assessment</i>		
Alternative	Track Section in Right-of-Way	Safety Assessment
B2M (to C9T)	Bellevue Way SE from I-90 connection to 112th Avenue SE	<p>The alignment begins as an elevated track as it exits I-90 with grade-separated crossings over Bellevue Way interchange ramps, SE 30th Street, and the South Bellevue Transit Station. The largest apparent traffic safety issue would be the relatively close location of some of the piers to the roadway—including piers located near any ramps for the Bellevue Way interchange. However, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterials. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile median barrier, or guardrail could be used to further minimize traffic safety risks. Piers located near the Bellevue Way interchange ramps should be adequately protected with guardrail or crash cushions to reduce the likelihood of a severe accident.</p> <p>Near the Bill Pace Fruit and Produce Farm, the alignment transitions to an open-cut section with grade-separated street and driveway crossings over the track. An important safety feature would be barriers to prevent vehicles and pedestrians from falling onto the tracks. For the bridges over the track, a potential traffic safety issue would be motor vehicle collisions with guardrails or bridge rails. Crashworthy-end treatments and lateral offset to the railings—combined with relatively low travel speeds (less than or equal to 35 mph)—should provide adequate protection, especially against severe collisions.</p>
	112th Avenue SE from Bellevue Way SE to SE 6th Street	<p>The alignment is at-grade, side-aligned on the east side of 112th Avenue SE with at-grade, gated crossings at SE 15th and 8th Streets. Both intersections are signalized to assign right-of-way to trains and vehicles. The gates would reduce the potential for a vehicle to be on the tracks when a train approaches the intersections. A pedestrian crossing is also provided approximately 250 feet south of SE 6th Street. Please refer to <i>Preferred Alternative C9T</i> for more information regarding the operation of the pedestrian crossing with the intersection of 112th Avenue SE and SE 6th Street.</p>
B2M (to C11A)	Bellevue Way SE from I-90 Connection to 112th Avenue SE	Refer to the <i>Preferred Alternative B2M</i> (to C9T) safety assessment for the same road section.
	112th Avenue SE from Bellevue Way SE to SE 6th Street	<p>The alignment remains side-aligned rising from an open-cut section to at-grade approximately 500 feet north of Bellevue Way. This section would have no vehicle crossings over the tracks. At approximately 1,400 feet north of Bellevue Way SE, the track crosses the northbound lanes of 112th Avenue SE at-grade to become a median-aligned, at-grade alignment. The transition from side-aligned to median-aligned includes gates and signals for northbound traffic as well as a gated pedestrian crossing. The gates would maintain separation between the different travel modes and reduce the collision potential. Following, SE 8th Street is a signalized intersection and all remaining cross streets (i.e., SE 15th Street), and driveways have right-in/right-out access. Relative to alignments that operate outside of the roadway this low-speed median alignment would have the most potential vehicle conflicts and, therefore, would have the highest accident exposure, but it would also have less-severe accidents due to slower travel speeds. The train crossing through major intersections is signal-controlled to assign right-of-way to trains and vehicles. This median alignment resembles the current light rail train operations along the four mile track in the center median of Martin Luther King, Jr. Way in the City of Seattle. Since the opening of the Central Link system in July 2009, seven light rail train and vehicle accidents and one light rail train and pedestrian accident occurred and overall corridor accidents per year reduced from 327 (before light rail) to 134 (after light rail). The light rail train and vehicle or pedestrian accidents constitute about 6% of the total number of accidents along the corridor and the corridor total reduced by close to 60% once the LRT revenue service began. The LRT median barrier restricting vehicle turns to signalized intersection was a contributing factor in the overall accident reduction along the corridor. None of the LRT-related accidents were considered life-threatening and all of the LRT-vehicle accidents involved vehicles illegally turning.</p> <p>Of the existing midblock accidents, there were two rear-end and one right-angle accidents that could be prevented by the light rail median prohibiting midblock turns if any of the accidents involved a vehicle turning left into or out of a driveway.</p>

TABLE D-8 <i>Preferred Alternative C11A Safety Assessment</i>	
Track Section in Right-of-Way	Safety Assessment
112th Avenue SE from near SE 6th Street (Connection to <i>Preferred Alternative B2M</i>)	Approximately 300 feet south of SE 6th Street, the alignment transitions from median at-grade to at-grade side-aligned by crossing the southbound lanes of 112th Avenue SE. The transition does not include gates but instead controls vehicle traffic using the signal at SE 6th Street and a separate signal for the trains at the crossing. To clear the southbound lanes when a train needs to cross, only northbound movements at the SE 6th Street traffic signal would be allowed. This approach also utilizes an appropriate clearance interval to allow vehicles to clear the tracks before permitting the train to cross. Additional issues might include nighttime visibility, providing sufficient lighting so that drivers can clearly see trains at night. Additionally, the clearance interval should consider the possibility for a red-light runner, whether intentionally or unintentionally. Adjacent to the signalized intersection at SE 6th Street, the tracks cross the sidewalk at a gated crossing to reduce the potential conflict with pedestrians and bicyclists.
112th Avenue SE from SE 6th Street to 108th Avenue NE (Connection to <i>Preferred Alternative B2M</i>)	The segment is side-aligned with no track crossings before SE 1st Place. Shortly before SE 1st Place the alignment transitions to elevated and back to at-grade after the crossing. With driveway and street crossings eliminated, no substantial effect on the number of accidents would be expected.
Segment B boundary to 108th Avenue NE (Connection to Alternatives B3 or B7)	The alignment enters the segment elevated with a grade-separated crossing over 112th Avenue SE. The alignment transitions to back to at-grade, south of Main Street, west of 112th Avenue SE. With driveway and street crossings eliminated, no substantial effect on the number of accidents would be expected.
108th Avenue NE and NE 6th Street from Main Street to 110th Avenue NE	<p>The alignment is a low-speed median alignment, which would likely have the highest accident exposure but would also have less severe accidents due to slower travel speeds. The train crossing through major intersections is signal-controlled to assign right-of-way to trains and vehicles. On 108th Avenue NE, southbound vehicles are provided with left-turn pockets for turning across the tracks, while northbound left turns across the tracks would not be permitted. Southbound left turns would have a protected signal phase to prohibit drivers from being responsible for determining when to turn when a train is approaching. Additionally, driveways are right-in/right-out, eliminating vehicle-train conflicts between intersections. This median alignment resembles the current light rail train operations along the four mile track in the center median of Martin Luther King, Jr. Way in the City of Seattle. Since the opening of the Central Link system in July 2009, seven light rail train and vehicle accidents and one light rail train and pedestrian accident occurred and overall corridor accidents per year reduced from 327 (before light rail) to 134 (after light rail). The light rail train and vehicle or pedestrian accidents constitute about 6% of the total number of accidents along the corridor and the corridor total reduced by close to 60% once the LRT revenue service began. The LRT median barrier restricting vehicle turns to signalized intersection was a contributing factor in the overall accident reduction along the corridor. None of the LRT-related accidents were considered life-threatening and all of the LRT-vehicle accidents involved vehicles illegally turning.</p> <p>Of the existing midblock accidents, there were two side-swipe and one right-angle accidents that could be prevented by the light rail median prohibiting midblock turns if any of the accidents involved a vehicle turning left into or out of a driveway.</p> <p>Along NE 6th Street, the train remains at-grade, median-aligned with buses operating on the outside of the platform. To reach the platform, pedestrians would have to cross the bus lanes. However, this would not be different from the current design of the Bellevue Transit Center, which has pedestrians crossing to the median for loading and unloading.</p>
NE 6th Street from 110th Avenue NE to end of Segment C	The alignment transitions to a median-elevated and eventually to a side-elevated as the alignment crosses over I-405. After crossing I-405, the alignment has grade-separated crossings over 116th Avenue NE and NE 8th Street. The largest apparent traffic safety issue would be the relatively close location of some of the piers to the roadway—including piers located near any ramps for the NE 8th Street interchange. However, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterials. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile median barrier, or guardrail could be used to further minimize traffic safety risks. Piers located near the NE 8th Street interchange ramps should be adequately protected with guardrail or crash cushions to reduce the likelihood of a severe accident.

TABLE D-9 <i>Preferred Alternative C9T Safety Assessment</i>	
Track Section in Right-of-Way	Safety Assessment
112th Avenue SE and Main Street from SE 6th Street to tunnel portal (Connection to Preferred Alternative B2M)	<p>The at-grade alignment crosses from the east side of 112th Avenue SE to the west side through the intersection at SE 6th Street. The intersection is signalized but does not include gates. Approximately 400 feet north of SE 6th Street, the sidewalk paralleling 112th Avenue NE on the west side crosses the alignment at a gate-controlled crossing. (Note: In Segment B, approximately 250 feet south of SE 6th Street, a similar pedestrian and bicycle crossing is provided on the east side of 112th Avenue SE.) Two potential areas of concern would be the ungated crossing of 112th Avenue through the SE 6th Street intersection and the long distance pedestrians would have to walk to cross 112th Avenue SE, especially pedestrians that want to cross east-west north of SE 6th Street.</p> <p>Active devices could be used where necessary to inform drivers of an approach train while waiting at the intersection. To keep pedestrians and bicyclists from cutting-crossing the tracks to avoid the additional distance to the gated crossings, directional signing to inform pedestrians and bicyclists where to cross and fencing to might be needed.</p> <p>The remaining section is at-grade side-aligned with no driveway or street crossings until it portals into the tunnel next to Main Street. This portion of the alignment would likely have no substantial change in the number of accidents.</p>
Segment B boundary to tunnel portal (Connection to Alternative B3 or B7)	The alignment enters the segment elevated with a grade-separated crossing over 112th Avenue SE. The alignment transitions to the tunnel portal after the crossing south of Main Street. This portion of the alignment would have no substantial change in the number of accidents.
Main Street, 110th Avenue NE, and NE 6th Street between the tunnel portals	The alignment is in a tunnel and would not have interaction with vehicles.
NE 6th Street from tunnel portal to end of Segment C	The alignment exits the tunnel and transitions to a median-elevated and eventually to a side-elevated as the alignment crosses over I-405. After crossing I-405, the alignment has grade-separated crossings over 116th Avenue NE and NE 8th Street. The largest apparent traffic safety issue would be the relatively close location of some of the piers to the roadway—including piers located near any ramps for the NE 8th Street interchange. However, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterials. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile median barrier, or guardrail could be used to further minimize traffic safety risks. Piers located near the NE 8th Street interchange ramps should be adequately protected with guardrail or crash cushions to reduce the likelihood of a severe accident.

TABLE D-10 Alternative C9A Safety Assessment	
Track Section in Right-of-Way	Safety Assessment
Connection from Preferred Alternative B2M to Main Street at 110th Avenue NE	<p>The alignment is a low-speed median alignment, which would likely have the highest accident exposure but would also have less severe accidents due to slower travel speeds. The train crossing through major intersections is signal-controlled to assign right-of-way to trains and vehicles. At SE 6th Street, vehicles are provided with left-turn pockets for turning across the tracks. Left turns would have a protected signal phase to prohibit drivers from being responsible for determining when to turn when a train is approaching. Additionally, SE 4th Street, SE 1st Street and driveways are right-in/right-out, eliminating vehicle-train conflicts between intersections.</p> <p>This median alignment resembles the current light rail train operations along the four mile track in the center median of Martin Luther King, Jr. Way in the City of Seattle. Since the opening of the Central Link system in July 2009, seven light rail train and vehicle accidents and one light rail train and pedestrian accident occurred and overall corridor accidents per year reduced from 327 (before light rail) to 134 (after light rail). The light rail train and vehicle or pedestrian accidents constitute about 6% of the total number of accidents along the corridor and the corridor total reduced by close to 60% once the LRT revenue service began. The LRT median barrier restricting vehicle turns to signalized intersection was a contributing factor in the overall accident reduction along the corridor. None of the LRT-related accidents were considered life-threatening and all of the LRT-vehicle accidents involved vehicles illegally turning.</p> <p>The alignment then becomes elevated and crosses over 112th Avenue SE and the alignment quickly transitions to at-grade side aligned on the south side of Main Street with a gated crossing at 110th Place SE. At this crossing, there is minimal distance between the track and Main Street for a vehicle turning onto Main Street to wait without having to stop on the tracks. Although 110th Place SE is a low-volume road, a vehicle could be waiting on the tracks to turn onto Main Street when a train approaches. This would require the train to come to a stop to avoid a collision, possibly having to stop in the intersection of Main Street and 110th Avenue SE. While right-out access for 110th Place SE would eliminate the left-turn onto Main Street and should minimize the time spent waiting on the tracks, it would not eliminate the possibility of a vehicle waiting on the tracks when a train approaches.</p> <p>An additional traffic safety issue would occur where piers for the elevated track are placed close to the roadway. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, a low-profile barrier, or guardrail could be used to further minimize traffic safety risks.</p>
Connection from Alternative B3 or B7 to Main Street at 110th Avenue NE	<p>The alignment enters the segment elevated with a grade-separated crossing over 112th Avenue SE. The alignment quickly transitions to at-grade side aligned with a gated crossing at 110th Place SE. At this crossing, there is minimal distance between the track and Main Street for a vehicle turning onto Main Street to wait without having to stop on the tracks. Although 110th Place SE is a low-volume road, a vehicle could be waiting on the tracks to turn onto Main Street when a train approaches. This would require the train to come to a stop to avoid a collision, possibly having to stop in the intersection of Main Street and 110th Avenue SE. While right-out access for 110th Place SE would eliminate the left-turn onto Main Street and should minimize the time spent waiting on the tracks, it would not eliminate the possibility of a vehicle waiting on the tracks when a train approaches.</p> <p>An additional traffic safety issue would occur where piers for the elevated track are placed close to the roadway. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, a low-profile barrier, or guardrail could be used to further minimize traffic safety risks.</p>
110th Avenue NE from Main Street to NE 6th Street	<p>The alignment is a low-speed median alignment and would likely have the highest accident exposure but would also have less severe accidents due to slower travel speeds. The train crossing through major intersections is signal controlled to assign right-of-way to trains and vehicles. On 110th Avenue, southbound vehicles are provided with left-turn pockets for turning across the tracks while northbound left turns across the tracks are not permitted. Southbound left turns have a protected signal phase to prohibit drivers from being responsible for determining when to turn when a train is approaching. Additionally, driveways are right-in/right-out, thereby eliminating vehicle-train conflicts between intersections. This median alignment resembles the current light rail train operations along the four mile track in the center median of Martin Luther King, Jr. Way in the City of Seattle. Since the opening of the Central Link system in July 2009, seven light rail train and vehicle accidents and one light rail train and pedestrian accident occurred and overall corridor accidents changed from 327 (before light rail) to 134 (after light rail). The light rail train and vehicle or pedestrian accidents constitute about 6% of the total number of accidents along the corridor and the corridor total reduced by close to 60% once the LRT revenue service began. The LRT median barrier restricting vehicle turns to signalized intersection was a contributing factor in the overall accident reduction along the corridor. None of the LRT-related accidents were considered life-threatening and all of the LRT-vehicle accidents involved vehicles illegally turning. Of the existing midblock accidents, there was one rear-end accident that could be prevented by the light rail median prohibiting midblock turns if the accident involved a vehicle turning left into or out of a driveway.</p>
NE 6th Street from 110th Avenue NE to end of Segment C	<p>The alignment begins as a retained fill and transitions to a median-elevated and eventually to a side-elevated as the alignment crosses over I-405. After crossing I-405, the alignment has grade-separated crossings over 116th Avenue NE and NE 8th Street. The largest apparent traffic safety issue would be the relatively close location of some of the piers to the roadway—including piers located near any ramps for the NE 8th Street interchange. However, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterials. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile median barrier, or guardrail could be used to further minimize traffic safety risks. Piers located near the NE 8th Street interchange ramps should be adequately protected with guardrail or crash cushions to reduce the likelihood of a</p>

TABLE D-10 Alternative C9A Safety Assessment	
Track Section in Right-of-Way	Safety Assessment
	<p>severe accident.</p> <p>At the Bellevue Transit Center Station, a pedestrian scramble phase is used at the west end of the platform to allow for pedestrian movements across NE 6th Street, 110th Avenue NE, and to/from the station platform in the median of NE 6th Street. Clearly signing and enforcing no right turns on red are important to safely operating the pedestrian scramble.</p> <p>No substantial change in the number of accidents would be expected.</p>

TABLE D-11 Alternative C14E Safety Assessment	
Track Section in Right-of-Way	Safety Assessment
<p>Connection to B7 from SE 6th Street to connection with the BNSF Railroad alignment.</p>	<p>This segment is elevated, predominately paralleling I-405 on the west side from just north of SE 6th Street to NE 6th Street. Following, the alignment crosses I-405 over the NE 8th Street interchange and then crosses over 116th Avenue NE and NE 8th Street before connecting to the BNSF Railway. Elevated crossings occur at Main Street, NE 2nd Street, NE 4th Street, NE 6th Street, 116th Avenue NE, NE 8th Street, and the NE 8th Street interchange with I-405.</p> <p>The largest possible traffic safety issue would be if piers are located close to the roadway — whether obstructing driver sight lines at intersections or driveways or as a fixed-object collision if a vehicle leaves the roadway. However, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterial crossings. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile barriers, or guardrail could be used to further minimize traffic safety risks. Regarding the NE 8th Street interchange, piers located close to the roadway, especially located on the outside of a horizontal curve, should have adequate protection, such as guardrail or crash cushions, should a vehicle leaves the ramp or roadway.</p>

TABLE D-12 <i>Preferred Alternative D2A Safety Assessment</i>		
Alternative	Track Section in Right-of-Way	Safety Assessment
D2A	Connection from BNSF Railway to 124th Avenue NE to intersection with proposed NE 15th Street	This section is outside of the road with grade-separated crossings under NE 12th Street, proposed NE 15th/16th Street, 120th Avenue NE, and 124th Avenue NE. A potential traffic safety issue would be motor vehicle collisions with guardrails or bridge rails on the bridges over the light rail. Crashworthy-end treatments and lateral offset to the railings—combined with relatively low travel speeds (less than or equal to 35 mph)—should provide adequate protection, especially against severe collisions. Additionally, pedestrian accommodations, such as a raised sidewalk or a sidewalk behind a guardrail, should reduce the potential for a pedestrian to be struck by a vehicle when crossing the bridge. Overall, no substantial effect on the number of accidents would be expected.
	Intersection with proposed NE 15th Street to 130th Avenue NE	The elevated median alignment separates vehicular traffic from light rail operations, thereby preventing any vehicle-train accidents. Appropriate use of curb, low-profile median barrier, wide median (to provide offset), or guardrail (if needed) would minimize the risk of a vehicle striking the pier or an accident resulting in a severe or fatal injury. Overall, this short section would likely have no substantial effect on the number of accidents.
	NE 16th Street and 136th Place NE from 130th Avenue NE to NE 20th Street	<p>The existing roadway has no midblock accidents that would be expected to be prevented by adding light rail tracks that prevent midblock turns. Low-speed median alignments would likely have the highest accident exposure but would also have less severe accidents. As such, total accident frequency in the track section could increase.</p> <p>The 130th Avenue Station is located in the center of the planned roadway, and passengers cross two lanes of traffic to reach the platform. Directing pedestrians to high-visibility crossings (i.e., signs and markings) or to crossings controlled by a traffic signal could increase driver awareness and might reduce the risk to pedestrians. This median alignment resembles the current light rail train operations along the four mile track in the center median of Martin Luther King, Jr. Way in the City of Seattle. Since the opening of the Central Link system in July 2009, seven light rail train and vehicle accidents and one light rail train and pedestrian accident occurred and overall corridor accidents per year reduced from 327 (before light rail) to 134 (after light rail). The light rail train and vehicle or pedestrian accidents constitute about 6% of the total number of accidents along the corridor and the corridor total reduced by close to 60% once the LRT revenue service began. The LRT median barrier restricting vehicle turns to signalized intersection was a contributing factor in the overall accident reduction along the corridor. None of the LRT-related accidents were considered life-threatening and all of the LRT-vehicle accidents involved vehicles illegally turning.</p>
	Along SR 520 from NE 20th Street to Overlake Transit Center Station	This section is outside of the travel way, primarily within WSDOT right-of-way. The section includes grade-separated crossings at 140th Avenue NE, NE 24th Street, SR 520 ramps at 148th Avenue NE, and NE 36th Street. The largest possible traffic safety issue would be if piers are located close to the roadway. WSDOT sightline and clearzone requirements for the highway and interchanges will be met. Additionally, relatively low travel speeds (less than or equal to 35 mph) and 6-inch curbs should provide adequate protection for the arterial crossings. At locations where collisions with a pier would be of concern, taller (9-inch) curbs, low-profile barriers, or guardrail could be used to further minimize traffic safety risks. Regarding the SR 520 ramps, piers located close to the roadway should have adequate protection, such as guardrail or crash cushions, should a vehicle leaves the ramp. Near intersections or driveways, locating the piers to minimize blocking sight lines is important. Overall, no substantial effect on the number of accidents would be expected.
D2A-At-Grade Design Option and NE 24th Design Option	Connection from BNSF to 124th Avenue to intersection with Proposed NE 15th Street	<i>Preferred Alternative D2A</i> - 120th At-Grade Design Option would have a similar safety assessment as <i>Preferred Alternative D2A</i> , except where the 120th At-Grade Design Option operates at-grade through 120th Avenue NE just north of NE 16th Street. The crossing at 120th Avenue NE is gated, and the intersection of NE 16th Street and 120th Avenue NE is signalized to assign right-of-way to trains and vehicles. The gates should reduce the potential for a vehicle to be on the tracks when a train approaches the intersection.
	NE 20th Street to approximately 150 feet west of 151st Place NE	<i>Preferred Alternative D2A</i> - NE 24th Design Option would have similar safety conclusions as the Alternative D2A section along SR 520 from NE 20th Street to Overlake Transit Center Station. Therefore, no substantial effect on the number of accidents would be expected.

TABLE D-12*Preferred Alternative D2A Safety Assessment*

Alternative	Track Section in Right-of-Way	Safety Assessment
	NE 24th Street and 152nd Avenue NE from approximately 150 feet west of 151st Place NE to SR 520	This section is side-aligned with NE 24th Street, with the only crossing at the gated, signalized intersection of NE 24th Street and 151st Place NE. While gates and a traffic signal should help separate traffic and assign right-of-way through the area, the crossing of 151st Place NE is in a horizontal curve. This results in the track crossing 151st Place NE at a slight skew and curving away from the intersection, creating additional separation from the NE 24th Street and the intersection. This crossing is not typical to most side-aligned crossings. As a result, approaching trains might not be as easily visible for vehicles turning from NE 24th Street onto 151st Place NE. Highly visible and clear signs and markings would be important in minimizing conflicts and collisions.
	Along SR 520 from 152nd Avenue to Overlake Transit Center Station	<i>Preferred Alternative D2A</i> - NE 24th Design Option would have similar safety conclusions as the Alternative D2A section along SR 520 from NE 20th Street to Overlake Transit Center Station. Therefore, no substantial effect on the number of accidents would be expected.

TABLE D-13

Parking Impacts Summary by Alternative

Alternative	Parking Spaces Removed	
	On-Street	Off-Street
Segment B		
B2M (to C9T)	0	25
B2M (to C11A)	0	25
Segment C^a		
C9A	20	315-345
C9T	0	385-410
C11A	10	340 - 360
C14E	0	220
Segment D		
D2A	30	316
D2A, 120th At-Grade Design Option	30	316
D2A, NE 24th Design Option	30	376
Segment E^a		
E2	16	94
^a Segment C and E on-street parking is the total of unrestricted and restricted on-street parking. Restricted parking includes all parking spaces with special-use restrictions, such as drop-off and loading zones. Notes: Indicated parking impacts are permanent displacements; parking losses associated with construction are not included.		

Station	Alternative	Total Existing Parking Stalls	Total Proposed Parking Stalls	2020 Park-and-Ride Vehicle Demand ^a	2030 Park-and-Ride Vehicle Demand ^a
South Bellevue	B2M, B3	519	1,400	1,560	1,860
118th	B7	-	1,030	510	540
130th	D2A	-	300	320	450
Overlake Village	D2A	203	203	310	570
Overlake Transit Center	D2A	170	320	550	800
SE Redmond	E2	-	1,400	1,230	1,230

^a 3-hour PM peak-period park-and-ride auto demand from Sound Transit's transit ridership model; 3-hour PM peak-period is a close representation of daily park-and-ride demand.

Alternative	Average Truck Trips ^a	
	Per Day	Per Hour ^b
Segment B		
B2M (to C9T)	60 to 70	6 to 7
B2M (to C11A)	80 to 90	8 to 9
Segment C		
C11A	35 to 40	3 to 4
C9T	75 to 85	7 to 9
C9A	25 to 30	2 to 3
C14E	40 to 45	4 to 5
Segment D		
D2A	85 to 95	8 to 10
D2A, 120th At-Grade Design Option	80 to 90	8 to 9
D2A, NE 24th Design Option	95 to 105	9 to 11
Segment E		
E2	55 to 65	5 to 7

^a A range of truck trips is provided based on a low and high factor of the known quantities of imported fill, material, concrete, asphalt concrete pavement, and excavated waste material that would be needed for each alternative's construction.

^b Assumes a minimum of ten construction hours per day.

Note: For suggested haul routes, refer to the 2008 Draft EIS.

TABLE D-16 Construction Impacts by Segment								
Segment/Location	Alternative	Roadway Classification	Construction Truck Traffic ^a	Road Closure ^b	Traffic Detour		On-Street Parking Loss? ^c	Bus Route Impact?
					Detour Route Available?	Neighborhood Traffic Intrusion?		
Segment B, South Bellevue								
Bellevue Way south of 112th Avenue SE	B2M	Principal arterial	Moderate	Partial, long-term	No	Low	No	Yes
112th Avenue SE	B2M to C9T	Principal arterial	Moderate	Partial, long-term	Yes	Low	No	Yes
	B2M to C11A	Principal arterial	Moderate	Partial, long-term	Yes	Moderate	No	Yes
Segment C, Downtown Bellevue								
108th Avenue NE, from Main to NE 6th Street	C11A	Minor arterial	High	Partial, long-term	Yes, but commercial access to street limited	Low	Yes	Yes
110th Avenue NE, from Main to NE 6th Street	C9T, C9A	Minor arterial	High	Partial, long-term & Full, short-term	Yes, but commercial access to street limited	Low	Yes	Yes
112th Avenue NE south of Main Street	C9A, C9T, C11A	Principal arterial	Moderate	Partial, long-term	Yes, but commercial access to street limited	Low	No	Yes
Main Street, from 112th to 110th Avenue NE	C9A, C9T	Minor arterial	High	Partial, short-term	Yes	Low	No	Yes
Main Street, from 112th to 108th Avenue NE	C11A	Minor arterial	High	Partial, short-term	Yes	Low	No	Yes
NE 6th Street, from 110th to 112th Avenue NE	C9A, C9T, C11A	Minor arterial	Moderate	Partial, long-term	Yes	Low	No	Yes
114th Avenue NE, from Main to NE 6th Street	C14E	Minor arterial	Moderate	Partial, long-term	Yes	Low	No	No
Segment D, Bel-Red/Overlake								
120th Avenue NE crossing	D2A	Collector arterial	Low	Partial, short-term	Yes	Low	Yes	No
124th Avenue NE crossing	D2A	Minor arterial	Low	Partial, short-term	Yes	Low	Yes	No
130th Avenue NE crossing	D2A	Collector arterial	Low	Partial, short-term	Yes	Low	Yes	No
NE 16th Street, between 132nd and 136th Avenues NE	D2A	Local arterial	Low	Partial, long-term	Yes	Low	Yes	Yes
136th Avenue NE, between NE 16th and NE 20th Streets	D2A	Collector arterial	Low	Partial, long-term	Yes	Low	Yes	Yes

TABLE D-16 Construction Impacts by Segment								
Segment/Location	Alternative	Roadway Classification	Construction Truck Traffic ^a	Road Closure ^b	Traffic Detour		On-Street Parking Loss? ^c	Bus Route Impact?
					Detour Route Available?	Neighborhood Traffic Intrusion?		
NE 151st Place NE at NE 24th Street	D2A - NE 24th Design Option	Minor arterial	Low	Partial, short-term	Yes	Low	No	No
152nd Avenue NE north of NE 24th Street	D2A - NE 24th Design Option	Local arterial	Low	Partial, long-term	No	Low	No	Yes
Microsoft Road	D2A	Local arterial	Low	Partial, short-term	Yes	Low	No	No

^a Low truck traffic is associated with routes that would have minimal fill, excavation, and concrete work, while high truck traffic is associated with major fill, excavation, and concrete work; moderate is between these two boundaries.

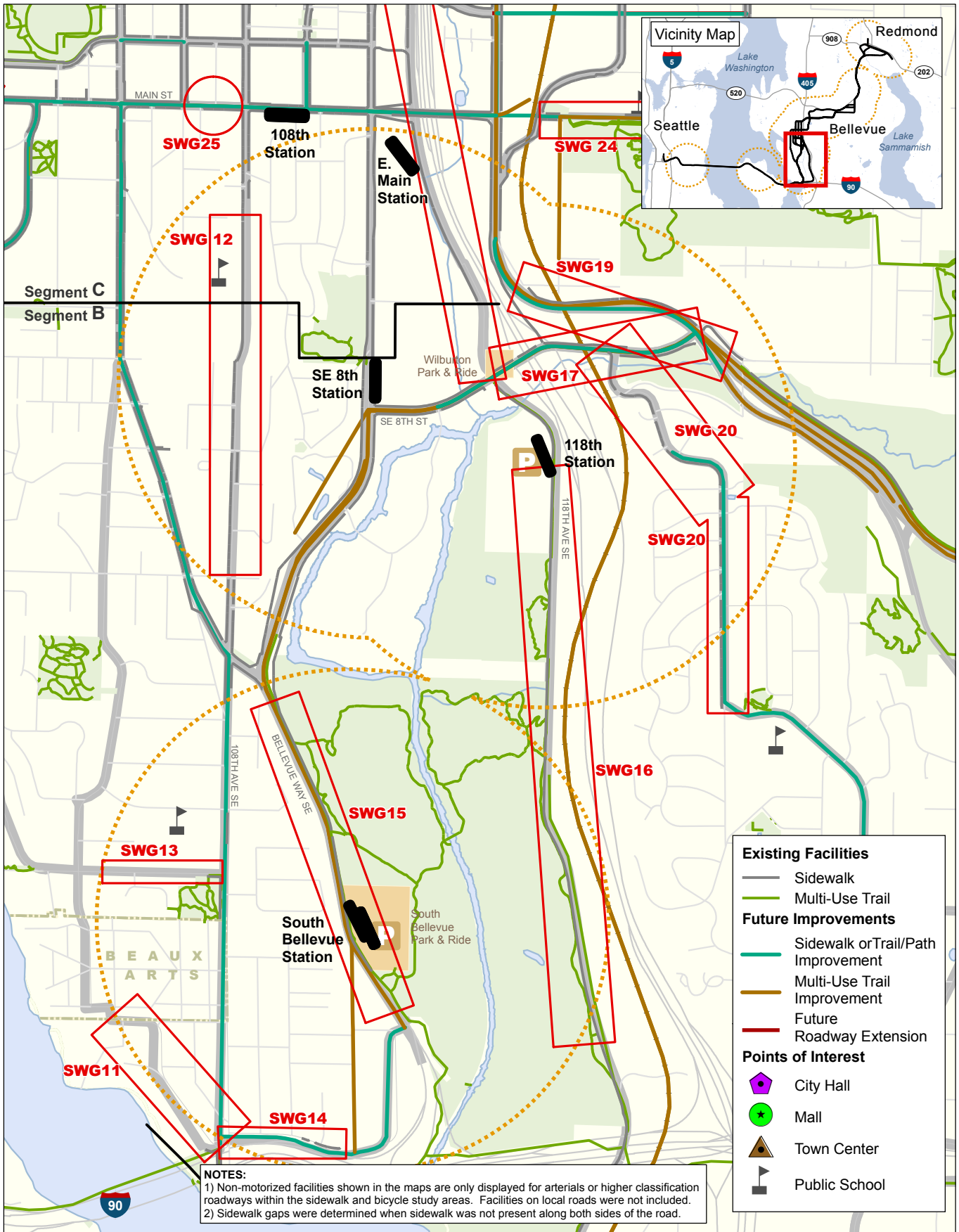
^b Partial road closure assumes some lanes are open to traffic. Short- and long-term durations were determined to be less or more than one year. Full short-term closures would be required for specific activities like station construction, retained cut and fill construction, and column drilling or girder placement and can be as short as one night/day closure to less than one year.

^c On-street parking loss is for street parking only and does not consider that some off-street parking might be lost due to the location of construction and staging areas.

TABLE D-17 Proposed Station Bicycle Facilities		
Station	Bicycle Racks	Bicycle Lockers
Segment B		
South Bellevue	180	20
SE 8th	56	4
Segment C		
East Main	56	4
108th	56	4
Bellevue Transit Center	106	14
Hospital	72	8
Segment D		
120th	54	6
130th	54	6
Overlake Village	54	6
Overlake Transit Center	188	12

Note: Stations will be designed to accommodate these quantities. Approximately 50-65% of proposed facilities will be provided at project opening for each station, with capacity for expansion in the future.

TABLE D-18 PM Peak-Period Pedestrian and Bicycle Trips Generated at Stations		
Station	2020 Pedestrian and Bicycle Trips^{a, b}	2030 Pedestrian and Bicycle Trips^{a, b}
Segment B		
South Bellevue	90	130
SE 8th	240	290
118th	210	250
Segment C		
East Main	970	1,240
108th Avenue	780	1,040
Bellevue Transit Center	2,890	3,500
Ashwood/Hospital	580	580
Segment D		
120th	360	430
130th	320	730
Overlake Village	220	500
Overlake Transit Center	730	1,120
Segment E		
SE Redmond	70	70
Downtown Redmond	320	380
<p>^a Pedestrian and bicycle trips reported for the alternative with the highest station ridership. ^b Trips include both boarding and alighting.</p>		



NOTES:
 1) Non-motorized facilities shown in the maps are only displayed for arterials or higher classification roadways within the sidewalk and bicycle study areas. Facilities on local roads were not included.
 2) Sidewalk gaps were determined when sidewalk was not present along both sides of the road.

Source: Data from City of Bellevue (2003, 2004, 2005 and 2007) and King County (2005 and 2006).

- Sidewalk Gap (SWG)
- Sidewalk Study Area (1/2 mile)
- Arterial Street
- Proposed Station

- New and/or Expanded Park-and-Ride Lot
- Existing Park & Ride / No expansion

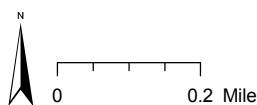
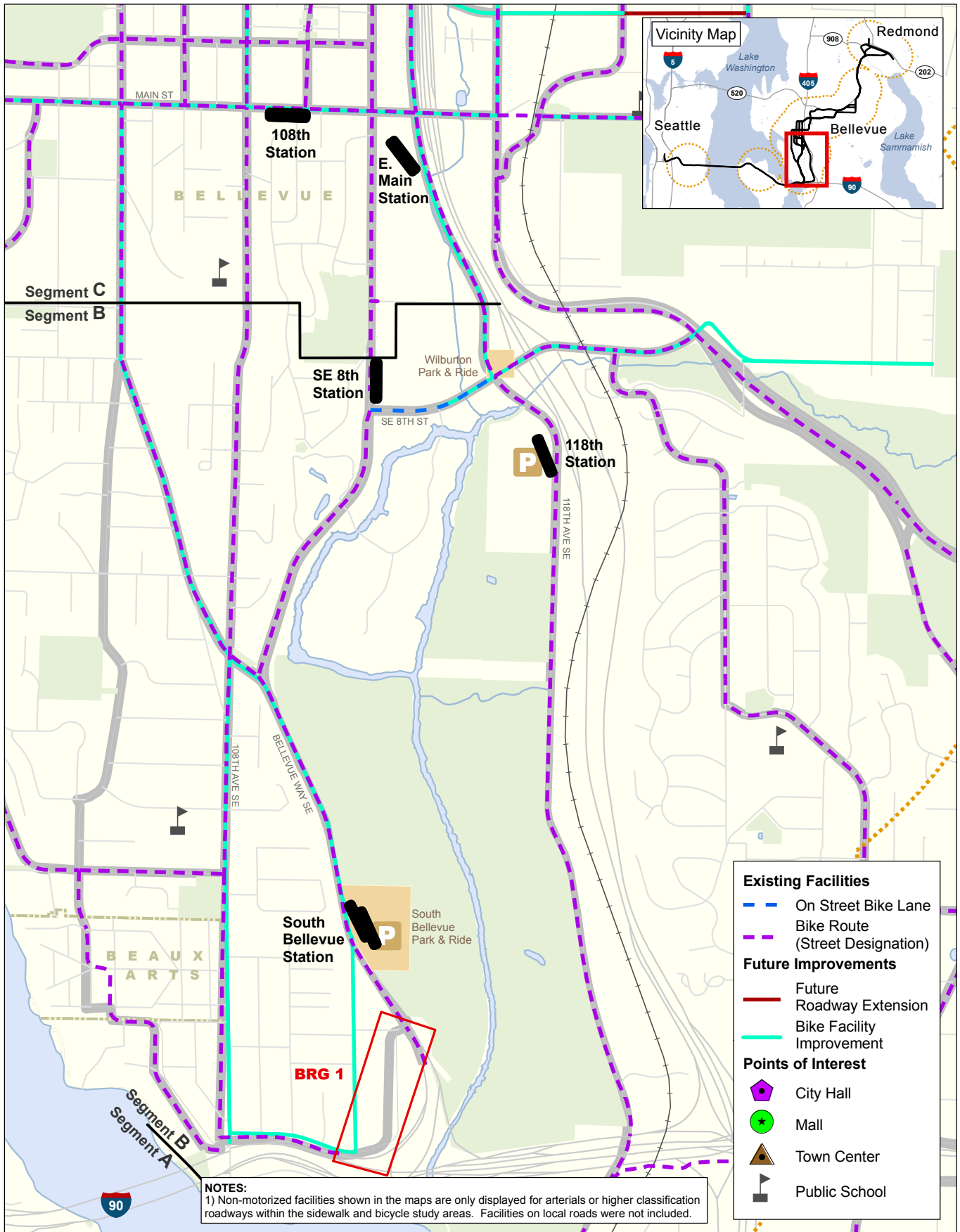


Exhibit D-8. Existing and Future No Build Sidewalk and Trail Facilities, Segment B
 East Link Project

- Existing Facilities**
- Sidewalk
 - Multi-Use Trail
- Future Improvements**
- Sidewalk or Trail/Path Improvement
 - Multi-Use Trail Improvement
 - Future Roadway Extension
- Points of Interest**
- ◆ City Hall
 - ★ Mall
 - ▲ Town Center
 - Public School



Source: Data from City of Bellevue (2003, 2004, 2005 and 2007) and King County (2005 and 2006).

- Bike Route Gap (BRG)
- Bicycle Study Area (1 mile)
- Arterial Street
- Proposed Station

- New and/or Expanded Park-and-Ride Lot
- Existing Park & Ride / No expansion

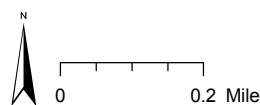


Exhibit D-9. Existing and Future No Build Bicycle Facilities, Segment B
East Link Project

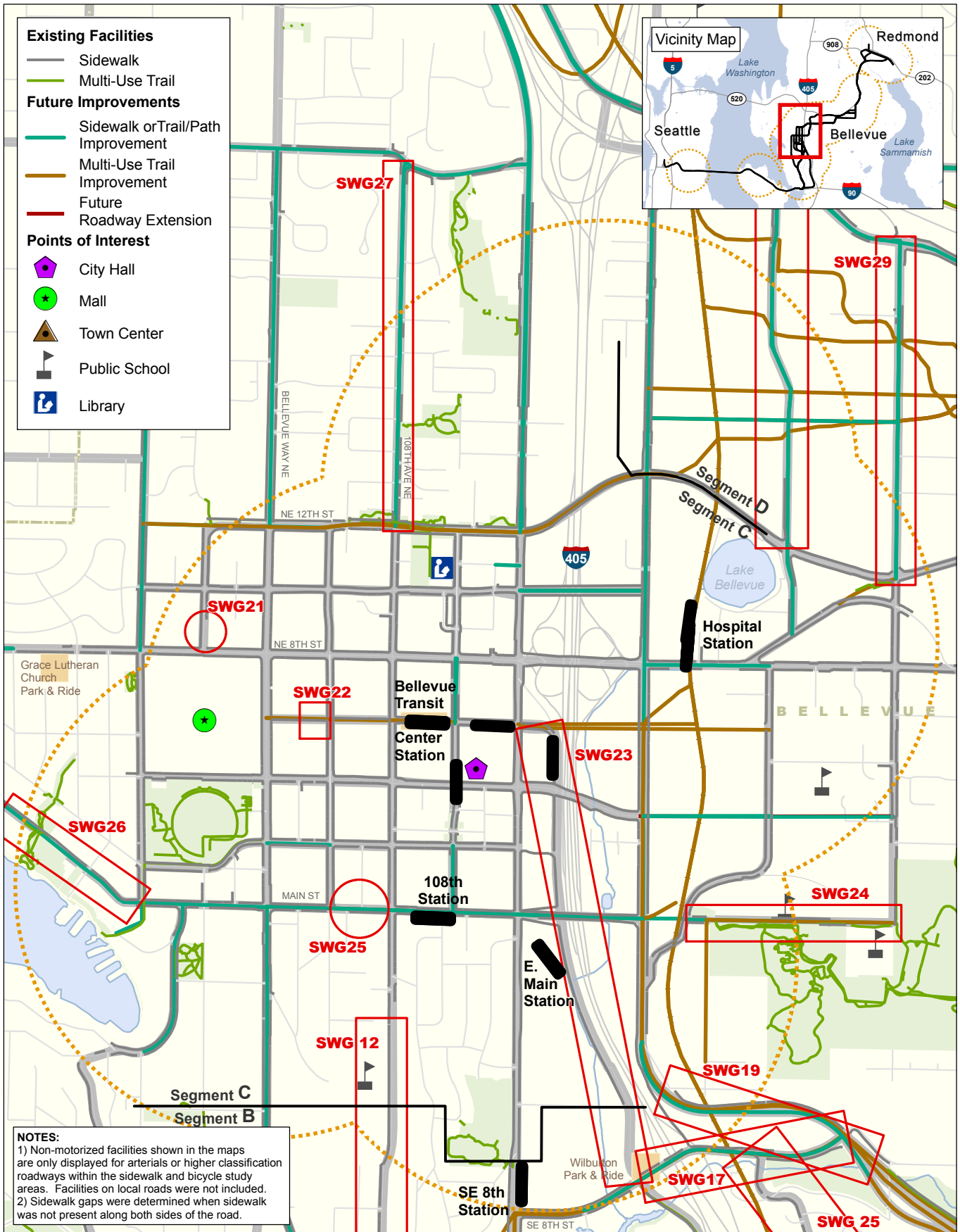


Exhibit D-10. Existing and Future No Build Sidewalk and Trail Facilities, Segment C East Link Project



Source: Data from City of Bellevue (2003, 2004, 2005 and 2007) and King County (2005 and 2006).

- Bike Route Gap (BRG)
- Bicycle Study Area (1 mile)
- Arterial Street
- Proposed Station

- New and/or Expanded Park-and-Ride Lot
- Existing Park & Ride / No expansion

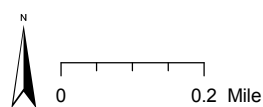
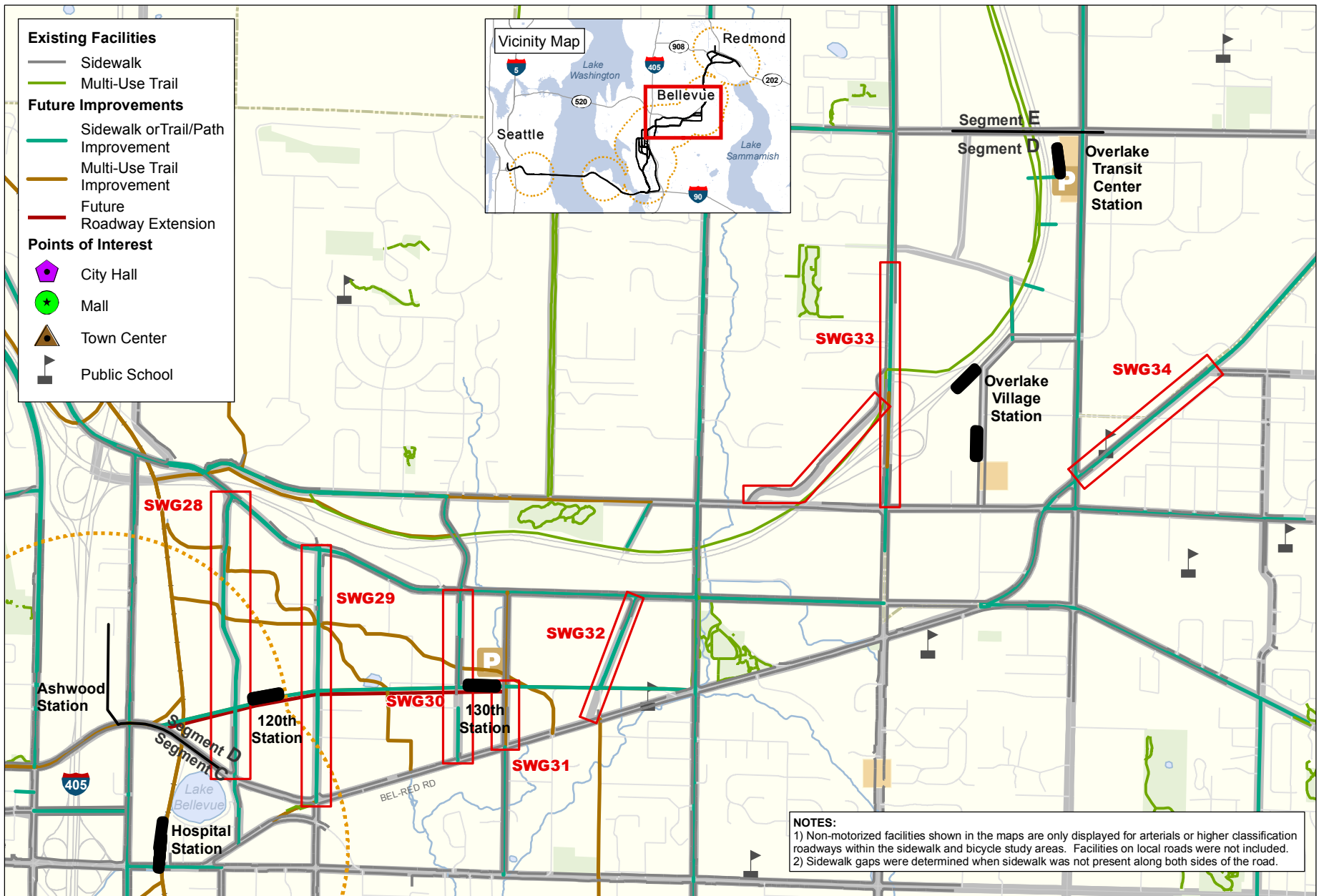


Exhibit D-11. Existing and Future No Build Bicycle Facilities, Segment C East Link Project



Source: Data from City of Bellevue (2003, 2004, 2005 and 2007) and King County (2005 and 2006).

- Sidewalk Gap (SWG)
- Sidewalk Study Area (1/2 mile)
- Arterial Street
- Proposed Station
- New and/or Expanded Park-and-Ride Lot
- Existing Park & Ride / No expansion

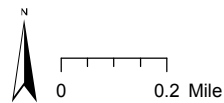
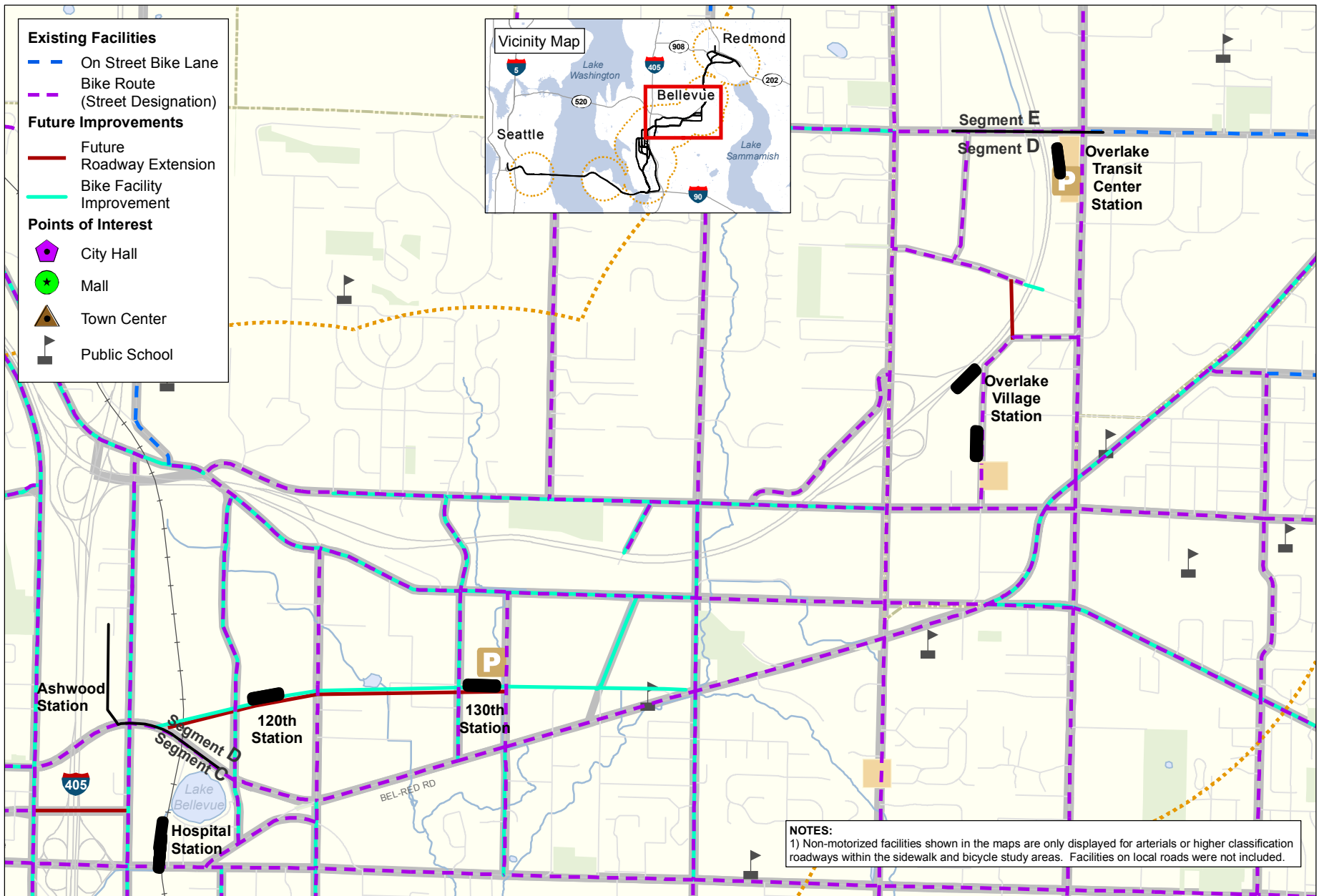


Exhibit D-12. Existing and Future No Build Sidewalk and Trail Facilities, Segment D
East Link Project



Source: Data from City of Bellevue (2003, 2004, 2005 and 2007) and King County (2005 and 2006).

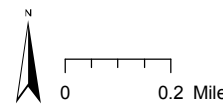
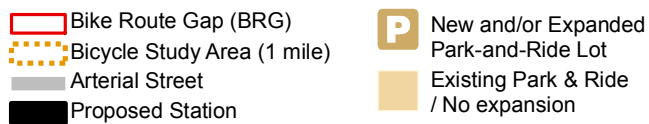


Exhibit D-13. Existing and Future No Build Bicycle Facilities, Segment D
East Link Project

TABLE D-19 2020 and 2030 PM Peak-Hour Intersection LOS for Segment B												
Intersection	2020						2030					
	No-Build Alternative		Preferred Alternative B2M to C9T		Preferred Alternative B2M to C11A		No-Build Alternative		Preferred Alternative B2M to C9T		Preferred Alternative B2M to C11A	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and Bellevue Way SE	C	24	C	29	C	30	C	26	C	31	C	32
112th Avenue SE and SE 8th Street	C	24	C	24	C	30	C	22	C	27	D	35
118th Avenue SE and SE 8th Street	F	138	F	144	F	142	F	190	F	191	F	191
1-405 northbound ramps and SE 8th Street	C	23	C	23	C	22	C	24	C	24	C	23
I-405 southbound ramps and SE 8th Street	C	28	C	26	C	26	C	27	C	27	C	27
Bellevue Way SE and SE 30th Street	F	Over 300	A	7	A	7	F	Over 300	A	7	A	7
Bellevue Way SE and South Bellevue Park-and-Ride (S)	C	26	C	29	C	29	C	28	D	40	D	42
Bellevue Way SE and South Bellevue Park-and-Ride (N)	B	10	B	12	B	12	B	10	B	12	B	12
114th Avenue SE and SE 6th Street	C	34	D	35	D	37	F	106	F	110	F	116
SE 8th Street and 114th Avenue SE (Bellefield Business Park)	C	20	C	22	C	25	B	19	C	21	C	24
Bellevue Way SE and 108th Avenue SE	B	14	B	16	B	16	B	18	B	20	B	20
Bellevue Way SE and SE 16th Street	A	4	A	4	A	4	A	4	A	5	A	5
Bellevue Way SE and 104th Avenue SE	A	4	A	4	A	4	A	4	A	4	A	4
Bellevue Way SE and SE 10th Street	A	8	A	8	A	8	A	8	A	8	A	8
Bellevue Way SE and 112th Avenue SE/South Bellevue Park-and-Ride	D	47	D	43	D	43	D	55	D	51	D	50
112th Avenue SE and SE 15th Street	F	151	B	14	B	15	F	135	B	11	C	15
I-405 northbound ramps and Coal Creek Parkway SE	D	39	D	37	D	36	D	51	D	51	D	51
I-405 southbound ramps and Coal Creek Parkway SE	E	60	E	59	E	60	F	102	F	102	F	102
119th Avenue SE and Coal Creek Parkway SE	D	38	D	38	D	38	D	45	D	45	D	45

Notes:
 Bold type text indicates where intersections fail to meet agency LOS standards: WSDOT is LOS E, and Bellevue is LOS D.
 Delay is measured by average seconds of delay per vehicle.
 Reported intersection operations results are for conditions prior to any proposed mitigation

TABLE D-20 2020 PM Peak-Hour Intersection LOS for Segment C										
Intersection	2020									
	No-Build		C9A		C9T		C11A		C14E	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and SE 6th Street	A	9	A	10	A	10	B	15	A	10
Bellevue Way SE and SE Wolverine Way	B	11	B	11	B	11	B	11	B	11
Bellevue Way and Main Street	F	98	F	103	F	105	F	111	F	101
Bellevue Way NE and NE 2nd Street	C	30	C	33	C	31	C	29	C	34
Bellevue Way NE and NE 4th Street	F	86	F	91	F	91	F	93	F	86
Bellevue Way NE and NE 6th Street	A	1	A	1	A	1	A	1	A	1
Bellevue Way NE and NE 8th Street	E	65	E	71	E	72	E	72	E	70
Bellevue Way NE and NE 10th Street	D	37	D	37	D	37	D	36	D	37
Bellevue Way NE and NE 12th Street	E	67	E	67	E	67	E	67	E	68
112th Avenue NE and NE 12th Street	E	72	E	71	E	71	E	70	E	71
112th Avenue NE and NE 10th Street	D	48	D	47	D	46	D	46	D	48
112th Avenue NE and NE 8th Street/I-405 southbound ramp	F	90	F	91	F	89	F	87	F	87
112th Avenue NE and NE 6th Street	C	23	C	34	C	30	C	29	C	21
112th Avenue NE and NE 4th Street	D	49	D	50	D	47	D	50	D	47
112th Avenue NE and NE 2nd Street	C	34	D	36	D	35	D	44	D	39
112th Avenue and Main Street	F	117	F	112	F	116	F	125	F	119
110th Avenue NE and NE 12th Street	C	21	C	20	C	21	C	21	C	22
110th Avenue NE and NE 10th Street	C	34	D	36	C	32	C	31	C	33
110th Avenue NE and NE 8th Street	E	72	E	75	E	73	E	79	E	77
110th Avenue NE and NE 6th Street	B	18	E	77	D	44	C	24	C	30
110th Avenue NE and NE 4th Street	E	57	E	79	E	59	E	60	E	57
110th Avenue NE and NE 2nd Street	E	62	E	57	E	62	E	64	E	58
110th Avenue and Main Street	B	16	C	31	B	17	B	12	B	16
108th Avenue NE and NE 12th Street	C	29	C	30	C	29	C	33	C	29
108th Avenue NE and NE 10th Street	C	26	C	25	C	25	C	25	C	26
108th Avenue NE and NE 8th Street	D	42	D	44	D	38	D	50	D	40

TABLE D-20 2020 PM Peak-Hour Intersection LOS for Segment C										
Intersection	2020									
	No-Build		C9A		C9T		C11A		C14E	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
108th Avenue NE and NE 6th Street	C	23	C	25	C	23	C	23	C	23
108th Avenue NE and NE 4th Street	E	69	E	74	E	69	F	116	E	75
108th Avenue NE and NE 2nd Street	C	31	C	32	C	32	D	47	C	34
108th Avenue and Main Street	C	24	C	29	C	23	E	65	C	22
106th Avenue NE and NE 12th Street	C	21	C	20	C	20	B	18	B	19
106th Avenue NE and NE 10th Street	C	24	C	23	C	23	C	23	C	23
106th Avenue NE and NE 8th Street	D	45	D	45	D	46	D	46	D	46
106th Avenue NE and NE 6th Street	C	21	C	23	C	22	C	23	C	21
106th Avenue NE and NE 4th Street	D	54	D	55	D	53	D	54	D	54
106th Avenue NE and NE 2nd Street	C	23	C	22	C	23	C	24	C	23
106th Avenue NE and Main Street	C	30	C	33	C	31	C	31	C	31
NE 4th Street and I-405 southbound ramp	C	30	C	30	C	30	C	31	C	33
NE 4th Street and I-405 northbound ramp	C	35	C	34	D	35	C	34	D	35
116th Avenue NE and OHMC	B	13	B	13	B	13	B	13	B	13
116th Avenue NE and NE 12th Street	D	51	D	51	D	52	D	52	D	52
116th Avenue NE and NE 10th Street	B	12	B	12	B	12	B	12	B	12
116th Avenue NE and NE 8th Street	D	49	D	51	D	51	D	52	D	51
116th Avenue NE and NE 4th Street	D	54	D	53	D	53	D	54	D	53
NE 10th Street and I-405/SR 520 On Ramp	A	9	A	9	A	9	A	9	A	9

Notes:
 Bold type text indicates where intersections fail to meet agency LOS standards: WSDOT and Bellevue are LOS E
 Delay is measured by average seconds of delay per vehicle.
 Reported intersection operations results are for conditions prior to any proposed mitigation

TABLE D-21 2030 PM Peak-Hour Intersection LOS for Segment C										
Intersection	2030									
	No-Build		C9A		C9T		C11A		C14E	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
112th Avenue SE and SE 6th Street	C	29	C	34	C	34	B	17	C	33
Bellevue Way SE and SE Wolverine Way	B	14	B	13	B	13	B	12	B	13
Bellevue Way and Main Street	F	118	F	122	F	122	F	123	F	114
Bellevue Way NE and NE 2nd Street	C	30	C	30	C	30	C	31	C	28
Bellevue Way NE and NE 4th Street	F	82	F	86	F	85	F	80	F	84
Bellevue Way NE and NE 6th Street	A	3	A	1	A	1	A	1	A	1
Bellevue Way NE and NE 8th Street	E	69	E	77	E	76	E	76	E	73
Bellevue Way NE and NE 10th Street	D	45	D	44	D	43	D	45	D	43
Bellevue Way NE and NE 12th Street	F	101	F	100	F	100	F	101	F	100
112th Avenue NE and NE 12th Street	F	102	F	102	F	101	F	101	F	105
112th Avenue NE and NE 10th Street	D	43	D	47	D	44	D	47	D	49
112th Avenue NE and NE 8th Street/I-405 southbound ramp	F	119	F	115	F	120	F	119	F	119
112th Avenue NE and NE 6th Street	C	27	D	48	C	32	D	41	C	24
112th Avenue NE and NE 4th Street	E	58	E	57	E	55	E	58	E	63
112th Avenue NE and NE 2nd Street	C	32	C	34	C	32	D	41	D	44
112th Avenue and Main Street	F	187	F	188	F	187	F	194	F	186
110th Avenue NE and NE 12th Street	C	20	C	21	C	20	B	20	C	21
110th Avenue NE and NE 10th Street	D	43	D	43	D	46	D	52	D	45
110th Avenue NE and NE 8th Street	F	120	F	129	F	121	F	126	F	122
110th Avenue NE and NE 6th Street	C	29	E	70	E	71	C	33	D	40
110th Avenue NE and NE 4th Street	E	63	E	71	E	60	E	69	E	62
110th Avenue NE and NE 2nd Street	C	25	C	32	C	24	C	27	C	26
110th Avenue and Main Street	B	18	D	36	B	19	D	42	B	19
108th Avenue NE and NE 12th Street	C	29	C	32	C	32	C	32	C	32
108th Avenue NE and NE 10th Street	C	32	C	27	C	27	C	26	C	27
108th Avenue NE and NE 8th Street	E	66	E	79	E	80	E	74	E	67

TABLE D-21 2030 PM Peak-Hour Intersection LOS for Segment C										
Intersection	2030									
	No-Build		C9A		C9T		C11A		C14E	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
108th Avenue NE and NE 6th Street	C	24	C	28	C	25	B	19	C	23
108th Avenue NE and NE 4th Street	F	96	F	109	F	104	F	154	F	99
108th Avenue NE and NE 2nd Street	B	15	B	18	B	14	C	23	B	15
108th Avenue and Main Street	C	32	D	40	C	34	F	104	C	33
106th Avenue NE and NE 12th Street	D	38	D	37	D	37	D	38	D	37
106th Avenue NE and NE 10th Street	C	28	C	24	C	26	C	26	C	26
106th Avenue NE and NE 8th Street	D	51	D	55	D	54	D	52	D	53
106th Avenue NE and NE 6th Street	B	14	B	16	B	16	C	24	B	16
106th Avenue NE and NE 4th Street	D	55	D	52	D	54	D	52	D	55
106th Avenue NE and NE 2nd Street	C	30	C	28	C	29	C	27	C	30
106th Avenue NE and Main Street	D	43	D	48	D	45	D	54	D	44
NE 4th Street and I-405 southbound ramp	D	46	D	42	D	43	D	45	D	43
NE 4th Street and I-405 northbound ramp	C	33	C	33	C	33	C	33	C	33
116th Avenue NE and OHMC	B	15	B	15	B	16	B	16	B	15
116th Avenue NE and NE 12th Street	F	80	F	81	F	81	F	81	F	80
116th Avenue NE and NE 10th Street	B	15	B	15	B	15	B	15	B	15
116th Avenue NE and NE 8th Street	D	52	D	54	D	54	D	54	D	54
116th Avenue NE and NE 4th Street	E	61	E	60	E	62	E	61	E	62
NE 10th Street and I-405/SR 520 on-ramp	A	5	A	5	A	5	A	5	A	5
<p>Notes:</p> <p>Bold type text indicates where intersections fail to meet agency LOS standards. WSDOT and Bellevue are LOS E.</p> <p>Delay is measured by average seconds of delay per vehicle.</p> <p>Reported intersection operations results are for conditions prior to any proposed mitigation</p>										

TABLE D-22
2020 and 2030 PM Peak-Hour Intersection LOS in Segment D

Intersection	2020						2030					
	No-Build Alternative		Alternative D2A 520		Alternative D2A Design Option		No-Build Alternative		Alternative D2A 520		Alternative D2A Design Option	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
120th Avenue NE and NE 12th Street	C	34	D	35	D	35	D	37	D	37	D	39
120th Avenue NE and NE 16th Street	B	15	B	15	F	88	C	27	C	29	D	43
124th Avenue NE and Northup Way	D	49	D	49	D	50	D	44	D	47	D	47
124th Avenue NE and Bel-Red Road	C	32	C	32	C	32	C	29	C	31	C	31
124th Avenue NE and NE 16th Street	C	24	C	24	C	26	C	23	C	25	C	26
130th Avenue NE and Bel-Red Road	B	12	B	14	B	14	B	12	B	12	B	10
130th Avenue NE and NE 16th Street	N/A	N/A	N/A	N/A	N/A	N/A	C	31	D	49	D	47
130th Avenue NE and NE 20th Street	C	26	C	27	C	28	C	29	C	30	C	31
132nd Avenue NE and Bel-Red Road	B	16	B	17	C	20	C	22	C	25	C	25
132nd Avenue NE and NE 16th Street	C	19	D	37	D	40	C	33	D	46	D	46
132nd Avenue NE and NE 20th Street	B	12	B	13	B	14	B	14	B	19	B	17
136th Avenue NE and NE 16th Street	B	14	C	23	C	26	C	20	C	26	C	23
136th Avenue NE and NE 20th Street	B	13	B	16	B	18	B	19	D	36	C	34
140th Avenue NE and NE 20th Street	F	82	F	85	F	88	F	132	F	130	F	129
NE 20th Street and mall entrance	B	14	B	13	B	14	B	14	B	14	B	14
148th Avenue NE and SR 520 westbound ramps	D	36	D	35	D	35	D	39	D	39	D	39
148th Avenue NE and SR 520 eastbound ramps	C	25	C	22	C	23	C	28	C	29	C	32
NE 24th Street and 148th Avenue NE	F	144	F	142	F	142	F	152	F	152	F	152
NE 24th Street and 151st Avenue NE	C	24	C	24	F	82	C	27	C	32	F	99
NE 20th Street and 152nd Avenue NE	D	40	D	40	D	40	A	9	B	12	B	12
NE 24th Street and 152nd Avenue NE	D	46	D	48	E	59	F	83	F	102	F	109
NE 26th Street and 152nd Avenue NE	B	10	B	13	B	15	A	10	B	16	B	16
NE 24th Street and Bel-Red Road	C	31	C	30	C	31	C	35	C	31	C	32
NE 40th Street and 148th Avenue NE	D	45	D	47	D	48	F	86	F	86	F	86
NE 40th Street and SR 520 westbound ramps	C	28	C	26	C	26	C	28	C	29	C	29

TABLE D-22
2020 and 2030 PM Peak-Hour Intersection LOS in Segment D

Intersection	2020						2030					
	No-Build Alternative		Alternative D2A 520		Alternative D2A Design Option		No-Build Alternative		Alternative D2A 520		Alternative D2A Design Option	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
NE 40th Street and SR 520 eastbound ramps	C	31	C	26	C	26	D	38	D	39	D	39
NE 40th Street and 156th Avenue NE	E	71	E	71	E	72	F	105	F	109	F	109
Overlake Park-and-Ride Entrance and 156th Avenue NE	A	10	B	11	B	11	B	10	B	11	B	11
NE 36th Street and 156th Avenue NE	E	68	E	61	E	61	F	102	F	86	F	86
NE 31st Street and 156th Avenue NE	D	43	D	41	D	42	D	50	D	53	D	53
148th Avenue NE and 20th Avenue	F	91	F	90	F	90	E	78	E	79	E	79

Notes:
 Bold type text indicates where intersections fail to meet agency LOS standards. WSDOT, Bellevue, and Redmond are LOS E.
 Delay is measured by average seconds of delay per vehicle.
 Reported intersection operations results are for conditions prior to any proposed mitigation N/A Intersection is not provided in this condition

TABLE D-23 2020 and 2030 PM Peak-Hour Intersection Mitigation LOS in Segments B, C, and D													
Intersection	Alternative	2020						2030					
		No-Build		Build		Build Mitigated		No-Build		Build		Build Mitigated	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Segment B													
112th Avenue SE and SE 8th Street	B2M to C9T	C	24	C	24	C	23	C	22	C	27	C	26
Segment C													
112th Avenue NE and Main Street	C11A	F	117	F	125	E	75	F	187	F	194	F	118
Segment D													
120th Avenue NE and NE 16th Street	D2A At-Grade Design Option	B	15	F	88	D	39	C	27	D	43	D	43
151st Avenue NE and NE 24th Street	D2A NE 24th Design Option	C	24	F	82	D	55	C	27	F	99	E	56
152nd Avenue NE and NE 24th Street	All alternatives	D	46	E	59	C	25	F	83	F	109	C	25
Notes: Bold type text indicates where intersections fail to meet agency LOS standards Delay is measured by average seconds of delay per vehicle.													