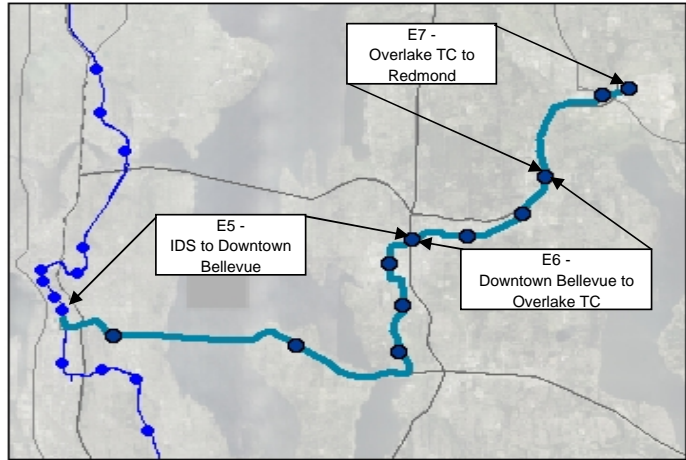


HCT-RC BRT: Downtown Bellevue to Overlake Transit Center

Project Number
Subarea
Primary Mode Impacted
Facility Type
Version Number
Date Last Modified

E6
East King
ST Express
BRT Facility
3.0
5/19/2006

Project Locator Map



Short Project Description

Continue Rail Convertible Bus Rapid Transit (RC BRT) project from east of downtown Bellevue to the Overlake Transit Center with a connection to a transit maintenance facility. This segment of RC BRT would have three stations which would serve the Bel-Red corridor, the Overlake Station neighborhood, and the Overlake Transit Center. The alignment and station locations will be determined through project level design and environmental review. The cost estimates presented here reflect whether the connection at the western end of this segment is to an underground or aerial alignment through downtown Bellevue. This project is a 3.1 mile component of the total proposed RC BRT line from Seattle to Redmond via I-90 and downtown Bellevue.

Project Purpose: Provide reliable High Capacity Transit (HCT) within its own ROW from east of downtown Bellevue to Overlake Transit Center.

Cost and Schedule

Cost (in Millions of 2005\$)

Alignment incl. underground component cost

Schedule

	Low	High
Agency Admin	\$18.3	\$21.0
Environmental Clearances and PE	\$15.2	\$17.5
Final Design, Specs, Permitting	\$38.1	\$43.8
ROW Acquisition	\$126.6	\$145.5
Construction	\$330.8	\$380.4
Vehicles	Not Included	Not Included
Contingency	\$40.0	\$46.0
Total Cost	\$569.0	\$654.3

Proposed Schedule Not Yet Developed

Alignment incl. aerial component cost

	Low	High
Agency Admin	\$17.4	\$20.1
Environmental Clearances and PE	\$14.5	\$16.7
Final Design, Specs, Permitting	\$36.3	\$41.8
ROW Acquisition	\$126.6	\$145.5
Construction	\$315.5	\$362.8
Vehicles	Not Included	Not Included
Contingency	\$29.1	\$33.4
Total Cost	\$539.4	\$620.3

Design Basis

Conceptual

Environmental Documentation Required

- Environmental Impact Statement Required
- Environmental Assessment Required
- Environmental Checklist Required

HCT-RC BRT: Downtown Bellevue to Overlake Transit Center

Relationships to Other Projects

<i>Relationship</i>	<i>Project</i>
Dependent on	Project E5: RC BRT Line and Stations from Seattle to downtown Bellevue and all associated projects that this project is dependent on or impacted by
Dependent on	Project E8 - Construction of the Maintenance Facility and Vehicle Purchase
Impacted by	The proposed City of Bellevue redevelopment plans between Bellevue-Redmond Road and SR 520, and the designation of a Transportation Corridor

Project Partners

<i>Agency</i>	<i>Department</i>	<i>Contact</i>	<i>Phone</i>	<i>e-mail</i>
WSDOT				
KC Metro				
City of Bellevue				
City of Redmond				

Long Description

This capital project scope and the companion capital cost estimate are intended to include the entire project development cycle (agency and project administration, environmental clearance, design, all aspects of property acquisition permits, agreements, construction, testing, commissioning and contingencies) from project initiation through the start-up of operations.

At this stage of project development, a representative alignment was used to develop a cost estimate. The final alignment and station locations would be determined through project level design and environmental review. The base cost estimate includes design allowance contingency, construction change order contingency, and unallocated contingency.

Assumptions:

- Project E5 – RC BRT Line and Stations from Seattle to downtown Bellevue, has been constructed or will be constructed at the same time as this project
- Project E6 – RC BRT Line and Stations from downtown Bellevue to Overlake Transit Center is not a discrete project. This project is a segment within the East corridor alignment from Seattle IDS to a proposed terminal station in Redmond
- No direct access facilities to be provided to the RC BRT transit only guideway
- Underground alignment option will be bored tunnels and/or cut and cover tunnel construction for this section of alignment
- Guideway infrastructure (drainage, walkways, structural components, etc.) constructed during the RC BRT phase will facilitate future installation of LRT components, ducting, catenary pole footing and stray current protection
- LRT rail and systems installation will not occur within the RC BRT guideway construction phase
- Fire/Life Safety systems and ventilation facilities constructed in the RC BRT phase will accommodate the more stringent design criteria for both bus and light rail operations
- Existing Overlake Transit Center provides bus transfer facilities in Overlake
- Vehicles and maintenance facility included in capital cost of Project E8

Representative Alignment Project Elements

Alignment facilities

- 0.3 miles of at-grade alignment
- 2.8 miles of new aerial alignment with elevated alternative through downtown Bellevue
- 2.6 miles of new aerial alignment and 0.2 miles new underground alignment with subway alternative through downtown Bellevue

Station facilities

- One at-grade station in Bellevue
- Two aerial stations in Redmond
- Up to 820 structured parking stalls
- New kiss-and-ride facilities at up to two stations
- New local bus transfer facilities (four bays) at up to two stations
- 1 percent for art per ST policy

HCT-RC BRT: Downtown Bellevue to Overlake Transit Center

Utilities

Utility investigations have not been carried out. Relocation of standard utilities along the alignment has been assumed as part of the scope and has been estimated using an average per route-foot allowance.

ROW

Property interests required for the prototypical alignment include fee acquisitions, partial takes, easements and interagency agreements. Right-of-way requirements include construction staging and contractor laydown areas. No specific provisions are made for contractor parking. Cost estimates include associated relocation, administration and legal costs, and contingency.

Mitigation:

The final project scope will include all mitigation(s) committed to by ST in pertinent, future project-level environmental documents.

Exclusions:

- Maintenance facility will be costed separately (refer to E8 project description)
- Vehicle costs will be costed separately (refer to E8 project description)
- Non-structural architectural and aesthetic elements in excess of the ST art program
- Grade separated pedestrian crossings of arterials

Permits

WSDOT agreements for:

- Transit agreement to operate within the SR 520 ROW

City of Bellevue agreements:

- Transitway agreement to operate within the city streets
- Transitway agreement to operate within the proposed Transportation Corridor (generally aligning with NE 16th Street)
- Station Permits

City of Redmond agreements:

- Transitway agreement to operate within the city streets
- Station Permits

Others:

- Potential operating agreement with King County Metro

Project Dependencies

- Construction of Project E5 – RC BRT line from Seattle to downtown Bellevue
- Construction of the Maintenance Facility (Project E8)

ST has developed scope definitions for ST2 project proposals for the purposes of developing cost estimates, implementation schedules, a financial plan, and the estimation of project benefits. This scope definition should not be construed as a commitment that all defined features will be included in the final developed project.

Evaluation Measures

Measure	Measurement/ Rating	Notes
Average Weekday Ridership	9,000	
Capital Cost (Underground Align.)	\$569.0 - \$654.3	in Millions of 2005\$
Capital Cost (Aerial Align.)	\$539.4 - \$620.3	in Millions of 2005\$
Annual Operating Cost (Underground Align.)	\$7.0	in Millions of 2005\$. O&M costs for this project are subject to change and will be recalculated when the full extent of the operation of the ST2 bus system for all of the Sound Transit subareas is known.
Annual Operating Cost (Aerial Align.)	\$7.0	in Millions of 2005\$. O&M costs for this project are subject to change and will be recalculated when the full extent of the operation of the ST2 bus system for all of the Sound Transit subareas is known.
Travel Time & Reliability	Medium	
Connectivity & Integration	High	
Land Use & Development	High	
Customer Experience	High	
Risk	Low	

HCT-RC BRT: Downtown Bellevue to Overlake Transit Center

Key Issues and Benefits

Issues:

- System shut-down during conversion/time required to convert to LRT operations.

The estimated capital cost range to convert the prototypical RC BRT alignment to LRT operations between downtown Seattle and Redmond Terminal Station is **\$772.9 million to \$892.2 million** (2005\$). The conversion cost is dependant on the amount of LRT infrastructure provided at the time of RC BRT implementation, the construction schedule for conversion, the level of bus operations provided during the conversion period and assumes the HCT guideway is closed for the duration of conversion. It is anticipated that further analysis will be completed to define the conversion process and that the conversion cost will be refined.

- Alignment between downtown Bellevue and Overlake Transit Center will be determined through project level design and environmental review
- ROW along the alignment, especially within the new transportation corridor proposed by the City of Bellevue
- Park-and-ride capacity
- Location of RC BRT vehicle maintenance facility
- Environmental mitigation

Benefits:

- Provides exclusive transit right-of-way between downtown Bellevue and Overlake, the two largest job centers on the Eastside
- Provides direct HCT connection between the regional growth centers of downtown Seattle, downtown Bellevue, and the Overlake manufacturing / industrial center
- Supports long range transportation and land use plans
- Increases transit reliability and visibility
- Increases job accessibility, particularly from Seattle to the Eastside
- Increases accessibility to special events in Seattle and Bellevue