

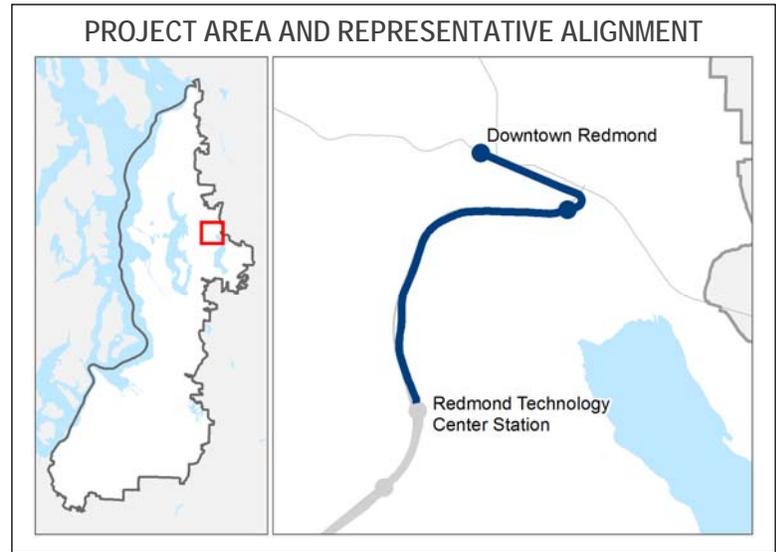
# Redmond Technology Center Station to SE Redmond to Downtown Redmond Light Rail (East Link)

|                    |               |
|--------------------|---------------|
| Subarea            | East King     |
| Primary Mode       | Light Rail    |
| Facility Type      | Corridor      |
| Length             | 3.7 miles     |
| Date Last Modified | July 21, 2016 |

**SHORT PROJECT DESCRIPTION**

This project would extend East Link to Downtown Redmond, as described in ST Board Resolution R2013-09 and the FTA and FHWA Record of Decision. The project would include stations at Southeast Redmond and Downtown Redmond.

*Note: The elements included in this representative project will be refined during future phases of project development and are subject to change.*



| KEY ATTRIBUTES   |   |
|--|---|
| <b>REGIONAL LIGHT RAIL SPINE</b><br><i>Does this project help complete the light rail spine?</i> | Yes   |
| <b>CAPITAL COST</b><br><i>Cost in Millions of 2014 \$</i>  | \$949 — \$1,016   |
| <b>RIDERSHIP</b><br><i>2040 daily project riders</i>   | 7,000 — 9,000   |
| <b>PROJECT ELEMENTS</b>  | <ul style="list-style-type: none"> <li>• Approximately 3.7 miles of light rail with a mixture of cut-and-cover, retained-cut, at-grade, and elevated profiles</li> <li>• One elevated station: SE Redmond</li> <li>• One at-grade station: Downtown Redmond</li> <li>• Stations accommodate 4-car trains</li> <li>• Peak headways: 6 minutes</li> <li>• Parking garage at the Southeast Redmond station with approximately 1,400 stalls</li> <li>• Downtown Redmond terminal station with tail tracks (with double crossover) up to 850 feet long to the west of the station for train layover and turnback operations</li> <li>• Non-motorized access facilities (bicycle/pedestrian), transit-oriented development (TOD)/planning due diligence, bus/rail integration facilities, and sustainability measures (see separate document titled "Common Project Elements")</li> </ul> |
| <b>NOT INCLUDED</b>  | <ul style="list-style-type: none"> <li>• Parking not included at Downtown Redmond station</li> <li>• Operations and maintenance facility not included. Note that 10 vehicles will be accommodated at the Link Operations and Maintenance Satellite Facility (OMSF) (per the OMSF FEIS), and the remaining 4 vehicles will be accommodated at another ST maintenance facility (a separate ST3 project)</li> <li>• Light rail vehicles not included</li> <li>• See separate document titled "Common Project Elements," "Light Rail Operations and Maintenance Facilities," and "Light Rail Vehicles"</li> </ul>   |
| <b>ISSUES &amp; RISKS</b>  | <ul style="list-style-type: none"> <li>• Risk associated with construction adjacent to SR 520</li> <li>• Crossing over SR 520 from SE Redmond to Downtown Redmond will need additional analysis</li> <li>• Coordination with City of Redmond for guideway and station along Redmond Central Connector</li> </ul>  |

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## KEY ATTRIBUTES

### ISSUES & RISKS

- Relocation of stormwater trunk line under segments of the Redmond Central Connector
- The multi-use function of the Downtown Redmond segment of the Eastside Rail Corridor will require substantial coordination and must be consistent with Redmond and Sound Transit's Light Rail Easement Agreement (Redmond's Spur Rail Corridor, Downtown City Segment) (2012), and the Redmond Central Connector Master Plan (2011) and Infrastructure Alignment Plan Process (2010)
- Five existing or proposed at-grade crossings along Redmond Central Connector; at-grade profiles included in this project could result in more potential conflicts with other modes; this could affect speed and reliability
- Accommodating light rail tail tracks in mixed-use residential/commercial area and in a constrained area
- Recent widening of SR 520 may require modification of the project design that could alter potential effects to Marymoor Park
- Flood-prone areas along Sammamish River and Bear Creek that may experience effects of climate change
- Light rail is a permitted use in the City of Redmond

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State and federal project-level environmental reviews have been completed for this project. The cost estimate is based on the alignment and station areas subsequently selected by the Sound Transit Board. Specific project elements assumed here for cost estimating and evaluation purposes (e.g. profile, station sites, number of parking stalls, etc.) are subject to change since final decisions on specific project elements will be determined through additional environmental review, if necessary, and final engineering and design efforts. Additional opportunities for public participation will be provided at that time.

## Long Description:

This project would complete East Link to Downtown Redmond, as described in ST Board Resolution R2013-09 and the FTA and FHWA Record of Decision, and as identified in the Regional Transit Long-Range Plan as completing the light rail spine to Downtown Redmond. This project would extend light rail from the Redmond Technology Center Station (formerly called the Overlake Transit Center Station) to Downtown Redmond. The route would follow SR 520 to an elevated Southeast Redmond Station southeast of the SR 520/SR 202 intersection. The route would then turn west, cross over the SR 520/SR 202 interchange and enter the former BNSF Railway corridor (now known as the Redmond Central Connector). The alignment would transition to at-grade and continue to the Downtown Redmond station west of Leary Way.

## Assumptions:

- Accommodation of the Redmond Central Connector trail per the Redmond/Sound Transit light rail easement (2012)
- Accommodates future extension of 168<sup>th</sup> Avenue NE at-grade across tracks; this would require reconstruction of 168<sup>th</sup> Avenue NE on the south side of the tracks to raise its profile
- No parking facilities at the Downtown Redmond station
- For non-motorized station access allowances, the Southeast Redmond station is categorized as a suburban station and the Downtown Redmond station is characterized as an urban station
- For bus/rail integration, facilities have been assumed at Downtown Redmond station

## Environmental:

Environmental compliance pursuant to the State Environmental Policy Act (SEPA) for East Link was completed with the East Link Project Final Environmental Impact Statement (EIS) issued on July 15, 2011, and the East Link Extension 2013 SEPA Addendum issued on March 26, 2013. The Federal Transit Administration (FTA) and Federal Highway Administration issued a Record of Decision (ROD) for the project on November 16, 2011 and November 17, 2011, respectively, completing the National Environmental Policy Act process. The East Link segment from the Redmond Technology Center Station to Downtown Redmond was covered in the Final EIS and FTA ROD.

Sound Transit will complete additional project-level state and federal environmental reviews as necessary; provide mitigation for significant impacts; obtain and meet the conditions of all required permits and approvals; and strive to exceed compliance and continually improve its environmental performance.

## Utilities:

Utility relocation as needed to complete the project, including fiber optics, sewer, water, overhead electric/communications, etc.

## Right-of-Way and Property Acquisition:

- The right-of-way required for the guideway is mostly within the SR 520 and Eastside Rail Corridor rights-of-way, but property acquisitions are possible for some adjacent parcels
- Property acquisition required for stations and parking
- If Marymoor Park is affected as a result of design modifications, property acquisition may be required to mitigate those effects
- Property acquisition for bus/rail integration facility

## Potential Permits/Approvals Needed:

- Anticipated permits and approvals are identified in the East Link Project Final Environmental Impact Statement Executive Summary (pp. iv-v, July 2011)
- City of Redmond Site Plan Entitlement Permit

## Project Dependencies:

- East Link completion to the Redmond Technology Center Station
- Completion of the OMSF
- Purchase of additional light rail vehicles is required to operate service on this corridor

# Redmond Technology Center Station to SE Redmond to Downtown Redmond Light Rail (East Link)

Potential Project Partners:

- WSDOT
- City of Redmond
- King County
- FTA
- Transit partners serving project: King County Metro

# Redmond Technology Center Station to SE Redmond to Downtown Redmond Light Rail (East Link)

## Cost:

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*In Millions of 2014\$*

| ITEM   | COST            | COST WITH RESERVE |
|--|-----------------|-------------------|
| Agency Administration                          | \$50.39         | \$53.92           |
| Preliminary Engineering & Environmental Review | \$29.82         | \$31.91           |
| Final Design & Specifications                  | \$59.11         | \$63.25           |
| Property Acquisition                           | \$82.78         | \$88.58           |
| Construction                                   | \$602.92        | \$645.13          |
| Construction Management                        | \$53.20         | \$56.92           |
| Third Parties                                  | \$12.02         | \$12.86           |
| Vehicles                                       | \$0.00          | \$0.00            |
| Contingency                                    | \$59.11         | \$63.25           |
| <b>Total</b>                                   | <b>\$949.36</b> | <b>\$1,015.81</b> |

*Design Basis:*

Conceptual

*The costs expressed above include allowances for TOD planning and due diligence, Sustainability, Bus/rail integration facilities, and Non-Motorized Access. These allowances, as well as the costs for Parking Access included above, are reflected in the following table. Property acquisition costs are not included in the table below, but are included within the total project cost above. For cost allowances that are not applicable for this project, "N/A" is indicated.*

| ITEM                                      | COST    | COST WITH RESERVE |
|---|---------|-------------------|
| TOD planning and due diligence            | \$0.47  | \$0.50            |
| Sustainability                            | \$5.64  | \$6.04            |
| Parking access                            | \$73.11 | \$78.22           |
| Non-motorized (bicycle/pedestrian) access | \$13.18 | \$14.10           |
| Bus/rail integration facilities           | \$2.75  | \$2.94            |

# Redmond Technology Center Station to SE Redmond to Downtown Redmond Light Rail (East Link)

Evaluation Measures:

| MEASURE   | MEASUREMENT/RATING  | NOTES   |
|---|---|---|
|  <p><b>Regional Light Rail Spine</b><br/><i>Does project help complete regional light rail spine?</i></p>  | Yes   |   |
|  <p><b>Ridership</b><br/><i>2040 daily project riders</i></p>  | 7,000 — 9,000   |   |
|  <p><b>Capital Cost</b><br/><i>Cost in Millions of 2014 \$</i></p>   | \$949 — \$1,016   |   |
|  <p><b>Annual O&amp;M Cost</b><br/><i>Cost in Millions of 2014 \$</i></p>  | \$9   |   |
|  <p><b>Travel Time</b><br/><i>In-vehicle travel time along the project (segment)</i></p>   | 7 min   |   |
|  <p><b>Reliability</b><br/><i>Percentage of alignment/route in exclusive right-of-way</i></p>  | High  |   |
|  <p><b>System Integration</b><br/><i>Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities</i></p>  | Medium  | Low to medium current activity; Medium number of potential future bus transit connections in Downtown Redmond and Southeast Redmond |
|  <p><b>Ease of Non-motorized Access</b><br/><i>Qualitative assessment of issues and effects related to non-motorized modes</i></p>   | Medium-Low  | Low to medium intersection density providing non-motorized access with SR 520 and wetlands as barriers                              |
|   | <p><b>Percent of Non-motorized Mode of Access</b><br/><i>Percent of daily boardings</i></p>   | 25-80%  |
|  <p><b>Connections to PSRC-designated Regional Centers</b><br/><i>Number of PSRC-designated regional growth and manufacturing/industrial centers served</i></p>  | 2 centers   | Redmond-Overlake, Redmond Downtown  |
|  <p><b>Land Use and Development/TOD Potential</b><br/><i>Quantitative/qualitative assessment of adopted Plans &amp; Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations</i></p>   | Medium-High   | Strong support in local and regional plans; approx. 50% land is compatibly zoned  |
|   | <p><i>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</i></p> <p><i>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</i></p> | Medium-High<br><br>Pop/acre = 2014: 6; 2040: 7<br>Emp/acre = 2014:13; 2040: 18<br>Pop + Emp/acre = 2014: 18; 2040: 26               |
|  <p><b>Socioeconomic Benefits</b><br/><i>Existing minority / low-income populations within 0.5 mile of potential station areas</i></p> <p><i>2014 and 2040 population within 0.5 mile of potential station areas</i></p> <p><i>2014 and 2040 jobs within 0.5 mile of potential station areas</i></p> | 46% Minority; 9% Low-Income<br><br>Pop: 2014: 5,300; 2040: 6,900<br><br>Emp: 2014: 12,100; 2040: 17,400   |   |

For additional information on evaluation measures, see <http://soundtransit3.org/document-library>