

SR-99 DEEP BORE TUNNEL

Royal Brougham to Harrison Street

January 13th, 2009

Project Description:

- Replaces the central portion of the existing viaduct with a four-lane, bypass single bore tunnel on 1st Avenue.
- Demolishes the existing viaduct
- Restores Alaskan Way with four surface lanes and connection to Elliott and Western

Tunnel Benefits:

- Maintains highway capacity consistent with all scenarios investigated in 2008.
- Strong earthquake performance leading to reliable lifeline link after event.
- Opens the waterfront to improve the pedestrian promenade, new open space, bicycle trails, double track for the streetcar and better access from City
- Eliminates noise and visual impacts of elevated viaduct in central waterfront area.
- Alternative is favored by many local residents, stakeholders and local agencies.
- Alternative has long expected life - reduces long term life-cycle costs
- Provides a throughput corridor that is removed from the waterfront.
- Provides improved pedestrian and bicycle access along Alaskan Way.
- Connects the city to the waterfront
- Adds benefits through improved property values along the waterfront and additional open space

Project Risks:

- Catastrophic failure of viaduct and/or seawall could occur before replacement.
- Limited number of contractors qualified and available to pursue a project this large.
- Schedule is aggressive and requires accelerated environmental, design, procurement and construction
- Tunnel Boring Machine will be a few feet larger than the largest built to date but the technology has been proven in similar ground conditions
- Geotechnical data is based on a general knowledge of soils from other projects
- Potential legal and environmental challenges

Schedule:

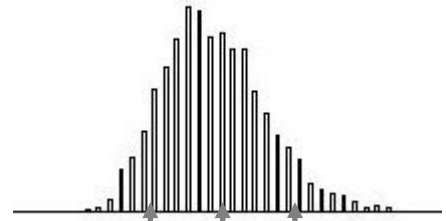
EIS / Early actions
2009-2010

Begin Construction
Fall 2010

Open to traffic
Fall 2015

Completion (follow-on actions) 2016

CEVP-Type Cost Range:



Most Probable Cost

(Range)

- 20% chance the cost is less than **\$1.2 billion**
- 60% chance the cost is less than **\$1.9 billion**
- 80% chance the cost is less than **\$2.2 billion**

Key Assumptions:

- Tunnel realigned under 1st Avenue
- Cross section is a stacked 2 over 2 configuration in a single 54' diameter tunnel
- Schedule is based on accelerated environmental, design, TBM procurement, pre-construction and permitting.
- Requires an advanced (incentivised) design/build contract to reduce total time for design, procurement of the TBM and construction
- Cost does not include a direct connection to Elliott and Western

Financial Fine Print:

- Cost is escalated to the midpoint of construction using Global Insight's recommendation per WSDOT policy .
- \$2.4 Billion is currently secured for the AWV & Seawall Project.
- Approximately \$1.5 billion remains for the tunnel
- Additional local money must be secured to complete the tunnel.
- The Port of Seattle and City of Seattle have proposals in process to add to the available project funding in order to complete the project.

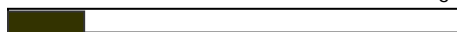
Level of

Low

Medium

High

Project Design:



January 13, 2009



Washington State
Department of Transportation