Alaskan Way Viaduct Replacement Program









Lynn Peterson Secretary of Transportation

Roger Millar Deputy Secretary

Linea Laird Assistant Secretary Todd Trepanier Program Administrator Chris Dixon Project Manager, Seattle Tunnel Partners Marshall Foster Director, Office of the Waterfront, City of Seattle

Joint Transportation Committee December 17, 2015



Today's Agenda





- SR 99 Tunnel Project update
- Monitoring the viaduct and other structures
- Program budget update
- Upcoming projects
- Coordination with partner agencies



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Chris Dixon, Project Manager, Seattle Tunnel Partners

Background and experience

- Grew up in construction
- BSCE 1975
- 40 years experience
- Lived in 10 states and nine countries

STP Project Manager

- Manage design/construction
- Make day-to-day decisions
- Assure contract compliance
- Represent STP
- Negotiate subcontracts, purchase orders, changes, claims





Repairing Bertha





Recent and current activities

- Continuing system tests
- Completing assembly
- Backfilling the access pit





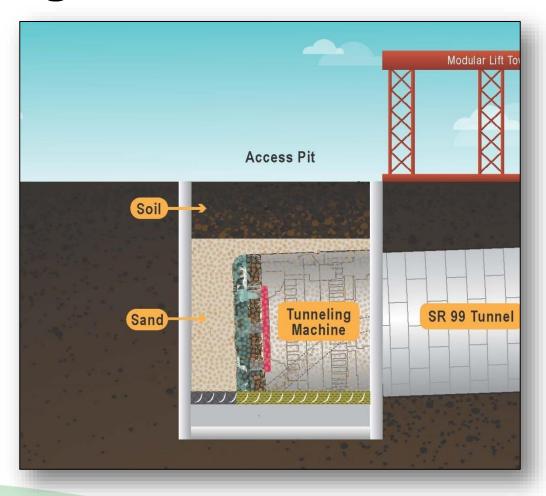
Repairing Bertha



Testing the cutterhead rotation



Decommissioning access pit dewatering wells





Repairing Bertha

STP's next steps

- Finish backfilling access pit
- Perform load tests and begin tunneling inside access pit
- Mine to planned maintenance stop (Safe Haven 3)



STP's current schedule

Key dates in STP's current schedule (October 2015)

- Late December 2015: Ready to resume tunneling
- Late January 2016: Reach planned maintenance site (Safe Haven 3)
- March 2016: Tunnel under viaduct
- January 2017: Complete tunneling
- June 2017: Final concrete pour
- April 2018: Complete testing and commissioning
- April 2018: Tunnel ready for traffic



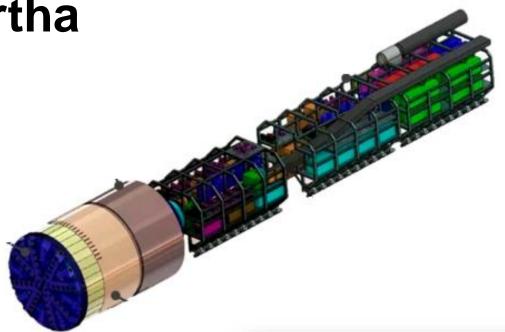
Mining with Bertha

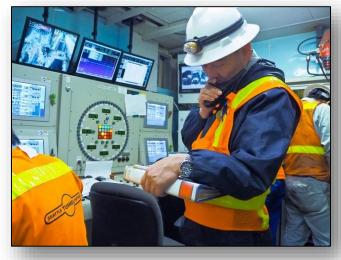
TBM Mining

- TBM Parameters
- Alignment Control
- Pressure Control
- Ground Control
- Ground Conditioning
- Grouting
- Interventions (planned maintenance)

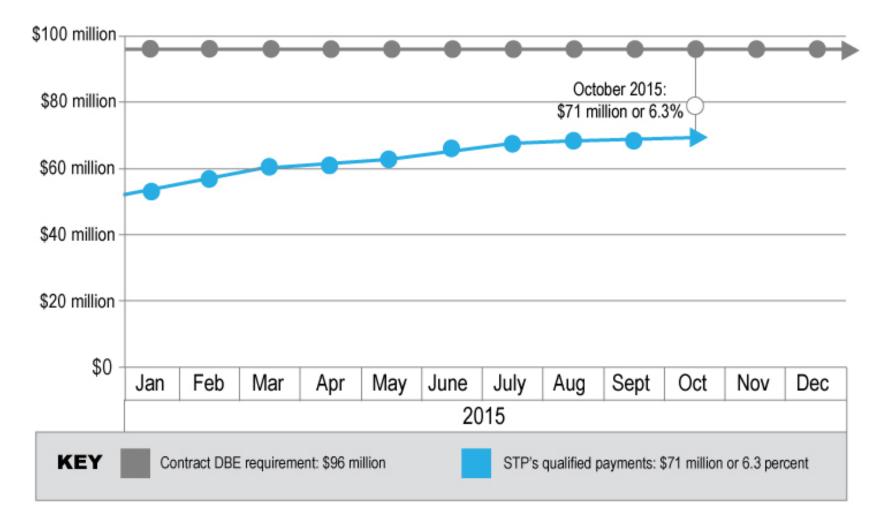
Monitoring

- Geotechnical Instrumentation
- Settlement/Movement Instrumentation
- Construction Monitoring Task Force



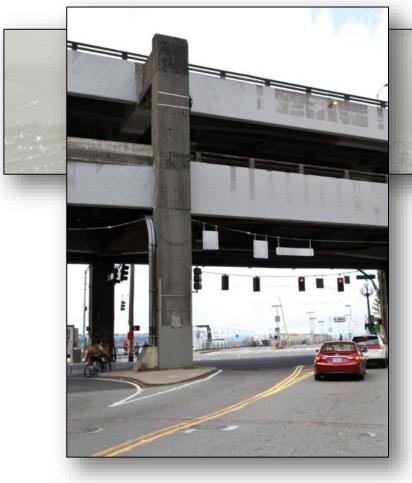


DBE progress





Today's Agenda

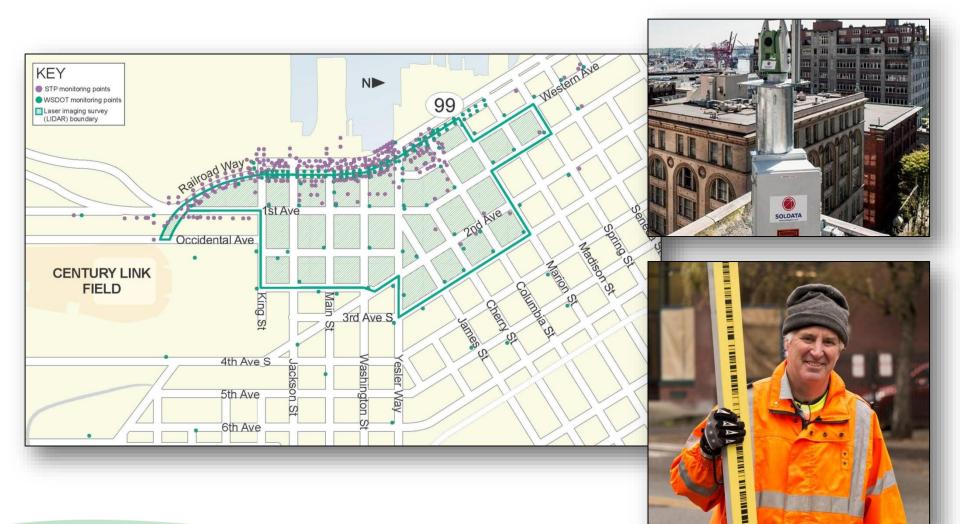




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Ground monitoring

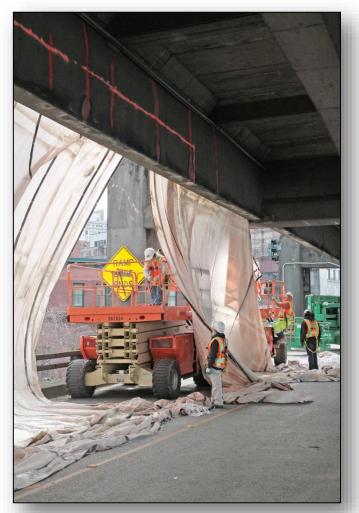


Washington State Department of Transportation

Tunneling under the viaduct

Closure overview

- Viaduct to close for approximately two weeks while tunneling machine passes beneath
- Closure projected to occur in March, per STP schedule
- Details to be finalized after tunneling resumes
- Structure will be continuously monitored



Crews reinforce the viaduct in 2012 in preparation for the tunneling machine's passage beneath the structure.



Tunneling under the viaduct

Working with our partners

- Regular coordination meetings
- Traffic operations
- Communicating with the public:
 - o Media outreach
 - Social media
 - Community briefings



The viaduct was closed for eight days in 2011 while crews demolished the structure's southern mile.



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Change order update

Current change orders	
Requested by STP	\$227.5 million*
Executed	\$33.5 million**
Denied by WSDOT	\$154.9 million*
Under review	\$39.1 million

- * Includes \$125.3 million claim for costs associated with tunneling machine stoppage
- ** Includes \$11.8 million from the Port of Seattle Fund, per contract



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South Access Project

Tunnel connections and surface streets at the south portal





The future south portal

North Surface Streets Project



The north portal vicinity prior to construction



North Surface Streets Project



The future north portal vicinity



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Working with our partners

The Alaskan Way Viaduct Replacement Program includes projects led by the Washington State Department of Transportation, City of Seattle, King County and Port of Seattle.





SR 99 tunnel and waterfront agreements

- Moving Forward Letter of Agreement 2009
- State-City Memoranda of Agreement 2009 and 2011
- State agreed to pay for the SR 99 Tunnel, the new Alaskan Way surface street, demolition of Viaduct and decommissioning of Battery Street Tunnel
 - State funding to be used for transportation improvements including streets, bicycle facilities, sidewalks (including standard elements such as street trees)
- City agreed to fund the seawall, City utility relocations, the waterfront promenade, Mercer corridor, Spokane Street Viaduct and First Avenue Streetcar.



WSDOT funding responsibility for surface street improvements





Why is the new Alaskan Way/Elliott Way important?

- Unlike the Viaduct, the SR 99 Tunnel has no off-ramps or on-ramps through the downtown corridor or connections to northwest Seattle via Western Avenue.
- The new SR 99 Tunnel, Alaskan Way and Elliott Way must function together to meet the transportation needs of the area.
- The new Alaskan Way/Elliott Way surface street must accommodate freight, ferry traffic and transit, as well provide local access to waterfront businesses and public recreation.



Existing SR 99 traffic patterns





Traffic changes after bored tunnel opens





Functions of the street



VEHICLES, PARKING AND LOADING FERRIES: LOADING AND UNLOADING TRANSIT: SW TRANSIT PATHWAY NORTH/SOUTH BICYCLE AND PEDESTRIAN MOVEMENT



2030 average daily traffic





Key freight corridor

- Alaskan Way is the only surface freight route through downtown Seattle
- Tunnel does not allow hazmat cargo or overlegal loads
- Critical to support other state investments in freight (SR 99 Tunnel, SR 519)





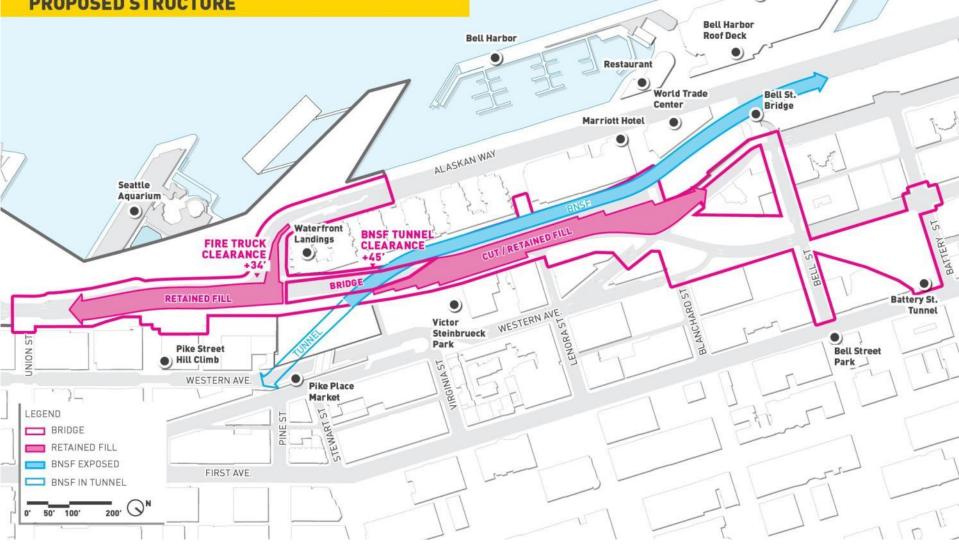


Practical design and value engineering

- The City is committed to using State transportation funds wisely and coordinating closely with WSDOT
- The City is utilizing Practical Design and Value Engineering in the design of a safe and cost effective surface street
- Examples where a practical design approach has been incorporated:
 - Elliott Way structural design (bridge and walls)
 - Elliott Way lane configurations
 - Alaskan Way lane configurations
 - Alaskan Way pedestrian accommodations
 - o Bike facility design

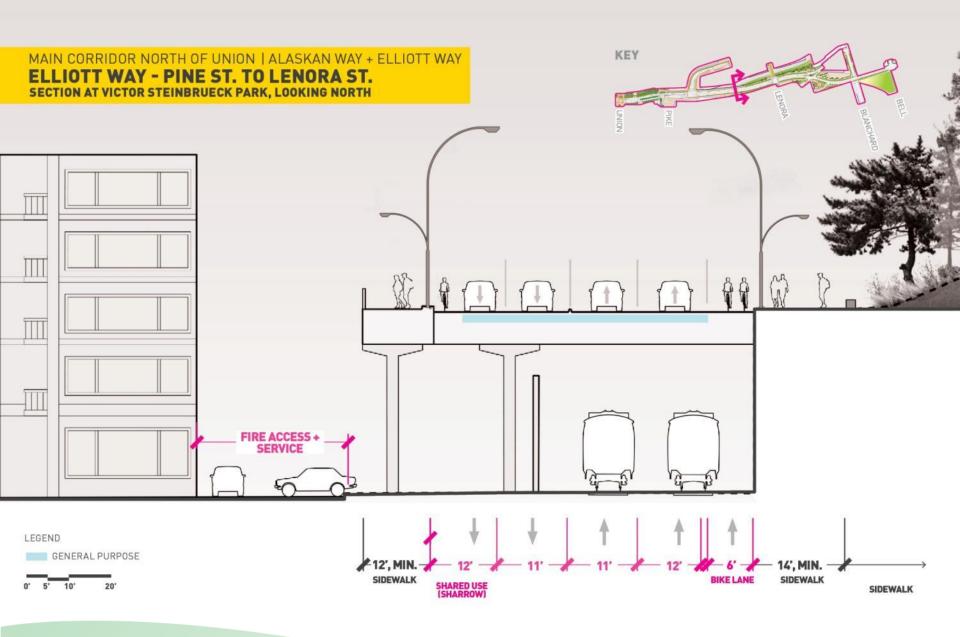


MAIN CORRIDOR NORTH OF UNION | ALASKAN WAY + ELLIOTT WAY PROPOSED STRUCTURE



Cruise Ship Terminal

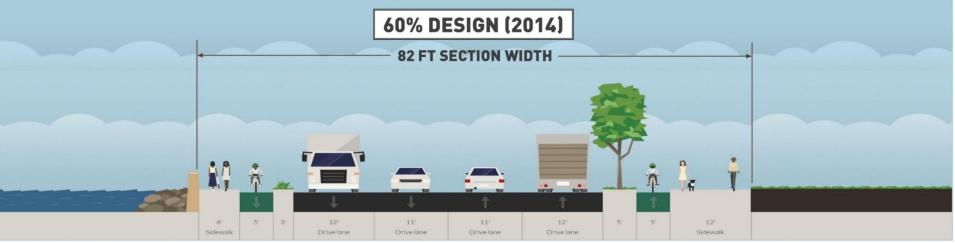






ELLIOTT WAY: PINE TO LENORA (SOUTH SEGMENT)

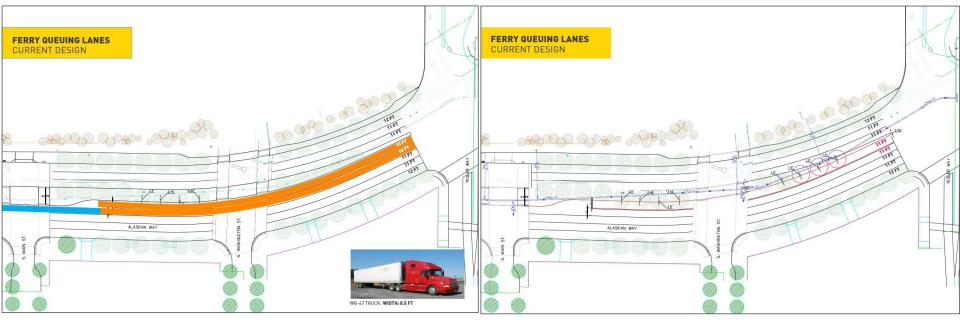
SEPTEMBER 2015







Practical design: Alaskan Way widths



FERRY QUEUING LANES CURRENT DESIGN



Practical design: Alaskan Way widths

- Early design featured 10-foot wide ferry queuing lanes from King Street to Yesler Way, and did not add "turning roadway width" through the curve
- WSF preferred that the lanes be 12 feet wide per the Design Manual
- WB-67 turn simulation validated 10-foot lane width from King to Washington streets, but indicated an 11-foot lane width was needed from Washington Street to Yesler Way
- Design was revised per results of turn simulations performance based design



Updated environmental review schedule

- Draft EIS was released in June 2015
 - Public comment period (60 days)
 - Public meeting in July
 - Received more than 100 comments
- City will complete a Supplemental Draft EIS in spring 2016
- Final EIS is anticipated in fall 2016





Alaskan Way Agreement development schedule

End of 2015	Practical Design Report
Early 2016	Begin drafting elements of agreement
Mid 2016	Complete 60 percent design
	Updated cost estimate
	CEVP Workshop
End of 2016	Complete funding agreement for design and construction



How to reach us





Our information center, Milepost 31, is located at 211 First Ave. S. in Seattle's Pioneer Square neighborhood. Website: www.AlaskanWayViaduct.org

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