

## Commonly Asked Questions about the Bored Tunnel Hybrid Alternative

### 1. Will the SR 99 bored tunnel be safe?

The tunnel will be safe for drivers in the event of an earthquake or accident. Structural engineers agree that tunnels are one of the safest places because they move with the earth during an earthquake. Seismic waves are amplified as they reach the surface of the earth, meaning structures above the ground are subject to a whiplash effect. If an accident happens, there will be adequate room on the shoulders for emergency vehicles to reach the scene. There will also be emergency exits and fire suppression and ventilation systems that meet federal standards.

### 2. Will the SR 99 bored tunnel be another Big Dig?

The Big Dig project and the SR 99 bored tunnel have little in common. The Big Dig was eight miles long and included immersed underwater tubes, a cut-and-cover tunnel through downtown Boston, and a cable-stay bridge over the Charles River. The SR 99 tunnel will be two miles long and mostly constructed underground. The original Big Dig cost estimate did not adequately account for project scope changes, construction mitigation and environmental requirements, inflation, and allowances for risk and escalation. The tunnel estimate of \$1.9 billion anticipates and includes allowances for these types of known but currently uncertain costs. There were also numerous management changes. Governor Gregoire is the project authority and WSDOT will be the manager, assisted by private-sector engineers and contractors, and accountable to the public and legislature. WSDOT is currently delivering over \$11 billion of state transportation investments, with 90 percent delivered early or on time, and 88 percent delivered under or on-budget.

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### 3. Will there be cost overruns and who will pay for them?

The current cost estimate for the tunnel portion of the bored tunnel hybrid alternative is \$1.9 billion; the total cost of the program, including city streets and transit investments, is \$4.24 billion. The tunnel costs include a base cost (\$1.107 billion), plus costs for mitigation, environmental requirements, engineering, right of way, inflation, and risk (\$797 million). A survey completed by Arup, an international tunnel construction company, found reasonably comparable tunnels recently completed around the world have cost significantly less. Independent experts and contractors have reviewed the costs and have responded that the estimate appears reasonable for this early stage of design. The state, county, and city will each be responsible for cost overruns on their projects.

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### 4. Does the SR 99 bored tunnel provide enough capacity for the future?

The tunnel with a connection from Elliott and Western avenues to the waterfront will accommodate the same number of trips on the viaduct today. Approximately 85,000 vehicles will use the tunnel when it opens in 2015 and 25,000 vehicles are predicted to use the waterfront. This equals 110,000 vehicles, which is the same number using the viaduct today. While the lanes within the tunnel have the ability to carry more than 85,000 vehicles a day, due to the SR 99 corridor constraints north and south of the tunnel, much of the future growth is expected to be accommodated through investments in transit service, which will carry 17,000 new riders, and improvements to city streets.

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### 5. How will drivers from northwest Seattle get to SR 99?

People living in northwest Seattle can either use I-5 or the bored tunnel for trips through downtown Seattle. They can also use a new four-lane Alaskan Way or downtown streets for local and through trips. Travel times are expected to increase by several minutes if drivers take Alaskan Way rather than using the bored tunnel. Access to Alaskan Way will be via a four-lane surface street connecting to Elliott and Western avenues. If drivers use SR 99 to go through downtown, they have three routes for getting to the bored tunnel: N. 46<sup>th</sup> Street and N. 39<sup>th</sup> Street north of the Aurora Bridge, and access near Mercer Street.

**6. How will drivers from West Seattle get to downtown Seattle?**

Drivers from West Seattle will have three options for getting to downtown Seattle depending on their destination. They can take SR 99 and exit near the sports stadiums. This will make trips destined for south downtown faster than today. These same trips can also stay on the Spokane Street Viaduct and use the new Fourth Avenue ramp to travel north into downtown. Trips from West Seattle going to north downtown or South Lake Union can use the bored tunnel and exit near Mercer Street.

**7. Will there be restrictions on freight using the SR 99 bored tunnel?**

Vehicles containing flammable or combustible materials will be prohibited from the tunnel, similar to current restrictions in the Battery Street Tunnel. These vehicles will need to take I-5 or surface streets, as they do today. A full list of precluded cargo, including some types of hazardous materials, can be found in the current City code. The Mercer Street and the Spokane Street Viaduct projects will improve connections to I-5.

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**8. Will the tunnel work if transit and city street investments are not funded?**

New transit service is an essential part of the bored tunnel hybrid alternative because it provides a reliable and efficient way for Seattle residents to get to and from downtown. Without the added transit service, drivers would have a more difficult time reaching the tunnel on city streets that become further congested due to population growth.

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**9. How does the tunnel work for freight?**

Building the bored tunnel will maintain a route for freight through Seattle and preserve I-5 for regional and state freight trips. It also provides a route for vehicles through the city, which would otherwise use city streets or I-5. Investments in new transit and city streets will also provide capacity for future growth, preserving mobility for freight through the city.

**10. How is the SR 99 bored tunnel different from the tunnel that was rejected in 2007?**

The tunnel proposed to Seattle voters was a cut-and-cover tunnel, which would have been constructed by excavating from the surface along the central waterfront. It also would have required the viaduct to be closed for several years, causing significant disruption to traffic and business access. The bored tunnel will be built primarily under First Avenue up to 200 feet below the surface, minimizing impacts on nearby businesses and traffic.

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**11. How will the bored tunnel hybrid alternative help the state economy?**

The bored tunnel hybrid alternative will support the state's economy by preserving capacity in the SR 99 corridor and I-5 for state and regional through trips. Future growth will be accommodated by investing in city streets and transit. Preserving the SR 99 corridor will also

keep freight moving by creating a route for vehicles through the city, keeping them off streets near Port of Seattle container terminals. The viaduct can also remain open during construction, minimizing disruptions to local businesses and traffic. Over 10,000 jobs will be sustained each year over the course of construction.

**12. Does agreeing to the bored tunnel hybrid mean other state projects will go unfunded?**

State funds for the viaduct replacement have been approved by the legislature as part of the 2003 and 2005 transportation investment programs. No other state funds will be required. The total state investment is up to \$2.8 billion; \$2.4 billion has already been funded and proposed legislation closes the gap through tolling SR 99. The Port of Seattle, King County, and City of Seattle have agreed to fund the remaining \$1.44 billion through local sources.

**13. Does the bored tunnel hybrid help the environment?**

The bored tunnel hybrid is a balanced approach: it maintains capacity for trips through Seattle, and relies on city streets and transit to handle future growth. Over one million new hours of transit service are part of the hybrid, which will carry 17,000 new riders. By moving people and goods more efficiently congestion will be minimized, reducing pollution from vehicles stuck in traffic. The tunnel will also treat stormwater, which improves water quality in Elliott Bay, and open space and public access will be created on the waterfront.

**14. How was agreement on the bored tunnel hybrid reached?**

An intensive public outreach effort in 2008 led to broad agreement that the bored tunnel hybrid alternative was the right choice. A 29-member stakeholder advisory committee representing business, neighborhoods, labor, and interest groups, met 16 times and a majority of the group asked that the executives further consider a bored tunnel replacement. Ten public meetings were held and over 85 briefings to community groups were made. Comments from the public covered a range of topics, with many focusing on preserving capacity for the future and opening up Seattle's waterfront.