

# HOUSE BILL REPORT

## ESSB 5768

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### As Passed House - Amended:

April 22, 2009

**Title:** An act relating to identifying the final design for the state route number 99 Alaskan Way viaduct replacement project as a deep bore tunnel.

**Brief Description:** Concerning the state route number 99 Alaskan Way viaduct replacement project.

**Sponsors:** Senate Committee on Transportation (originally sponsored by Senators Murray, Jarrett, Swecker, Haugen and Kohl-Welles).

### Brief History:

#### Committee Activity:

Transportation: 3/18/09, 4/2/09 [DPA].

#### Floor Activity

Passed House - Amended: 4/22/09, 53-43.

### Brief Summary of Engrossed Substitute Bill (As Amended by House)

- Declares that the state will replace the Alaskan Way Viaduct (Viaduct) with a deep bore tunnel, which must include four general purpose lanes in a stacked formation.
- Establishes that the state's maximum contribution to the Viaduct project is \$2.4 billion. Provides that if the state's costs exceed \$2.4 billion, no more than \$400 million must be financed with toll revenue. Further provides that any costs in excess of \$2.8 billion must be borne by property owners in the Seattle area who benefit from replacing the existing Viaduct with a tunnel.
- Provides that the city and county departments of transportation are responsible for the cost, delivery, and risks associated with the project components for which each department is responsible.
- Directs the Washington State Department of Transportation (WSDOT) to prepare a traffic and revenue study for the purpose of determining the bore tunnel's potential to generate toll revenue, and to provide a final report by January 2010 to the Governor and Legislature.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

- Requires the state, city, and county departments of transportation to establish a single source of accountability for all elements of the Viaduct project.
- Directs the WSDOT to provide updated cost estimates for construction of the deep bore tunnel and for the full Viaduct replacement project to the Legislature and Governor by January 1, 2010.
- Requires that any contract entered into by the WSDOT for construction of the deep bore tunnel must include incentives and penalties to encourage on-time completion of the tunnel and to minimize the potential for cost overruns.
- Permits motor vehicles equipped with compression brakes to be operated in the deep bore tunnel.
- Modifies the emergency clause to take effect on July 1, 2009, instead of immediately.

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## HOUSE COMMITTEE ON TRANSPORTATION

**Majority Report:** Do pass as amended. Signed by 16 members: Representatives Clibborn, Chair; Liias, Vice Chair; Armstrong, Eddy, Finn, Herrera, Johnson, Moeller, Rolfes, Sells, Springer, Takko, Upthegrove, Wallace, Williams and Wood.

**Minority Report:** Do not pass. Signed by 12 members: Representatives Roach, Ranking Minority Member; Rodne, Assistant Ranking Minority Member; Campbell, Cox, Dickerson, Driscoll, Ericksen, Klippert, Kristiansen, Morris, Shea and Simpson.

**Staff:** Kathryn Leathers (786-7114)

### **Background:**

The State Route 99 Alaskan Way Viaduct (Viaduct) is a major arterial serving significant numbers of freight and passenger vehicles through downtown Seattle. Studies in the mid-1990s showed that the 1950s-era Viaduct was nearing the end of its useful life. The Viaduct's age and vulnerability were signaled by crumbling and cracking concrete, exposed rebar, weakening column connections, and deteriorating railings.

In early 2001 a team of design and seismic experts began work to determine whether it was feasible and cost-effective to strengthen the Viaduct by retrofitting it. During this investigation, the 6.8 magnitude Nisqually earthquake shook the Puget Sound region. The earthquake further damaged the Viaduct, causing the Washington State Department of Transportation (WSDOT) to temporarily shut it down.

A team of experts concluded that it was not cost-effective to fully retrofit the majority of the Viaduct; instead, the experts concluded that the Viaduct would need to be rebuilt or replaced. While inspections are regularly conducted and repairs have been made to keep the structure open to the public, the Viaduct is susceptible to damage, closure, or catastrophic failure from additional earthquakes and tsunamis.

The Alaskan Way seawall holds the soil in place along Seattle's waterfront. The seawall also holds in place the Alaskan Way surface street and many utilities. The Viaduct's foundations are embedded in the soil held back by the seawall. Experts believe that if the seawall were to fail, sections of the Viaduct, the Alaskan Way surface street, and adjacent structures and utilities could collapse or become unsafe. Periodic investigations conducted to assess the seawall's condition have revealed that the seawall is in poor condition, continues to deteriorate, and needs to be replaced.

In the initial Viaduct replacement planning stages, 76 conceptual alternatives were evaluated. From these alternatives, five concepts were identified for further consideration and analyzed in a 2004 Draft Environmental Impact Statement. Two alternatives were carried forward in the 2006 Supplemental Draft Environmental Impact Statement: an elevated six-lane structure and a four-lane cut-and-cover tunnel with surface transit improvements.

In 2006 the Legislature appointed an expert review panel to review finance and project implementation planning processes and assumptions for the two Viaduct alternatives. Based on the results of that review, the Governor was asked to make a finding as to whether each finance plan was feasible and sufficient to complete the project. The expert review panel found that, overall, the design and finance plans for both plans were substantially sound, although the finance plan included some estimates that were overly optimistic. In December 2006 the Governor ultimately determined that the choice should be made by the Seattle voters. As a result, in March 2007, an advisory ballot was submitted to the Seattle voters, but both options were rejected.

In 2007 the Legislature directed the Governor to convene a collaborative process involving key leaders to determine the final project design for the Viaduct. The transportation budget provided that the state's expenditures would not exceed \$2.8 billion, and that a final design decision must be made by December 31, 2008. The WSDOT was directed to proceed with a series of projects on the Viaduct that are common to any design alternative. The state, county, and city departments of transportation convened an advisory stakeholder process spanning a 13-month period, resulting in several recommended alternatives, including a deep bore tunnel.

On January 13, 2009, the Governor, the City of Seattle, and King County agreed to replace the Viaduct with a deep bore tunnel design, with four general purpose lanes in a stacked formation. The deep bore tunnel construction is scheduled to begin in 2011. In the meantime, it is expected that construction and improvements will continue to be made on the north and south ends.

#### **Summary of Amended Bill:**

The Legislature finds that replacing the existing State Route 99 Alaskan Way Viaduct (Viaduct) is a matter of urgency, and that the state must expedite the environmental review and design processes to replace the structure with a deep bore tunnel. The tunnel must be located under First Avenue from the vicinity of the sports stadiums in Seattle to Aurora Avenue north of the Battery Street tunnel, and must include four general purpose lanes in a stacked formation.

The Viaduct replacement project finance plan must include state funding not to exceed \$2.4 billion and must also include no more than \$400 million in toll revenue. These funds must be used solely to build a replacement tunnel and to remove the existing Viaduct structure. State funding may not be used for any utility relocation costs, or for central seawall or waterfront promenade improvements. The City of Seattle must bear all city utility relocation costs associated with the state work on the Viaduct replacement project.

It is established that the state's maximum contribution to the Viaduct project is \$2.4 billion. If the state's costs exceed \$2.4 billion, no more than \$400 million must be financed with toll revenue. If the state's costs exceed \$2.8 billion, those excess costs must be borne by property owners in the Seattle area who benefit from replacing the existing Viaduct with a tunnel.

The state, city, and county departments of transportation are directed to establish a single source of accountability for the project, which must include, at minimum, a master schedule of all subprojects and a single point of contact for the public and others.

The WSDOT is directed to conduct a traffic and revenue study of the deep bore tunnel for the purpose of determining the facility's potential to generate toll revenue. The study must include an analysis of potential diversion from the Viaduct and potential mitigation measures to offset or reduce diversion. The WSDOT must regularly submit progress reports to the Washington State Transportation Commission, and final study results are due to the Governor and the Legislature by January 2010.

The state, city, and county departments of transportation are required to establish a single source of accountability for all elements of the Viaduct replacement project, which must include a master schedule of all subprojects and a single point of contact for the public and others. It is established that the state, city, and county departments of transportation are responsible for the costs, delivery, and risks associated with the project components for which each department is responsible.

The WSDOT is directed to provide updated cost estimates for construction of the deep bore tunnel and for the full Viaduct replacement project to the Legislature and Governor by January 1, 2010. The WSDOT may not enter into a design-build contract for construction of the tunnel until the updated cost estimate report has been submitted. In providing the updated cost estimates, the WSDOT must consult with independent tunnel engineering experts.

The WSDOT is required to include incentives and penalties in any contract entered into by the WSDOT for construction of the deep bore tunnel for the purpose of encouraging on-time completion of the tunnel and minimizing the potential for cost overruns.

Motor vehicles equipped with compression brakes are permitted to be operated in the deep bore tunnel.

An emergency clause is provided, which takes effect on July 1, 2009.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Amended Bill:** The bill contains an emergency clause and takes effect on July 1, 2009.

**Staff Summary of Public Testimony:**

(In support) The Viaduct is vulnerable and immediate action is needed to avoid collapse. Workers commute and use the facility on a daily basis, and it is an unsafe structure. Any solution for its replacement needs to maintain traffic flow in the Interstate 5 (I-5) and State Route (SR) 99 corridors for commuters and for the manufacturing and distribution centers in the city and region.

The project will benefit the state as a whole, not just Seattle and King County. Growers and manufacturers ship through the port and depend on the corridor. In 2006 the industrial companies in the corridor reported gross revenues of about \$65 billion, which was half of the state's output. Traffic study data shows that this is not just a downtown Seattle project: 55 percent of traffic was bypass traffic, and half of those vehicles were registered outside of Seattle.

In January the Governor recommended the deep bore tunnel option because it meets the project goals. It will have the least disruption to businesses, and it's affordable. The tunnel is a necessary next step and it allows the state to move forward. This bill is necessary to help expedite the project's preliminary engineering so that construction can begin in 2011 and the central portion can be completed by 2013. The tunnel cost is \$1.7 billion; the entire project cost is \$2.8 billion for the state's investments. The tunnel and improvements represents a comprehensive approach to a very difficult problem. The bored tunnel offers a once in a lifetime opportunity to reconnect the city to the waterfront. The project will create jobs, movement for people and goods, and a new front door for city. The deep bore tunnel option will allow the Viaduct to remain standing during construction. While the construction will not be painless, it will last for only about six months, as opposed to five years. The economic repercussions of a rebuild of the existing facility would be severe.

It is important to maintain capacity to promote economic growth. Connectivity and capacity north and south of Seattle is important. West Seattle is dependent on SR 99. This project is not just for downtown interests. Taxpayers need to see a benefit of reduced congestion. The tunnel solution meets all of these needs. The surface/transit option did not address capacity.

The partnership between the state, City of Seattle, and King County has led to a multi-modal solution, including transit. The city will continue to work with its partners to address issues that may come up. Seattle is committed to the partnership with over \$900 million in planned investments. Improvements to transit and city streets will allow the city to be less dependent on cars.

This project began in 2000, and then the earthquake hit. There has been a lot of public outreach, and years of debate, with over 2,000 meetings and resulting in 14 feet of files from meetings. Stakeholders included neighborhoods, environmentalists, transit, and businesses.

The tunnel boring machines are underground moving production lines. They are being used in other places in the world, increasing in size from 20 feet in 1990 to 50 feet now. Construction jobs are down 20 to 30 percent since 2007, and this project will create 10,000 jobs now and more jobs later. It is important to include apprenticeship programs in the construction work.

The project must be financially feasible, and therefore it is important to cap state funding and include reasonable tolling.

(With concerns) Queen Anne, Magnolia, Ballard, and Interbay neighborhoods are concerned about capacity and safety issues. Some are concerned about access and egress, and the loss of on- and off-ramps into the bored tunnel. It is important to make sure that businesses and residents have access to the corridor. Ballard industrial access and a more comprehensive approach to Mercer Street corridor project must also be addressed. There are also concerns about diversion to I-5 and the definition of who will be responsible for cost overruns.

There should not be a streetcar property tax. The property tax is currently proposed as a way of enhancing transit to increase throughput. Instead of a streetcar, it would be better to have more tunnels or more viaducts. A street car doesn't fit on First Avenue. The city is proposing a local improvement district, bandying about a rate of 2 percent of assessed value. That rate would be devastating, and would not enhance property values.

(Opposed) The marine and industrial businesses in the Ballard/Interbay neighborhood are one of the few elements left of the state economic machine, and there is concern about decreasing capacity from six to four lanes. The current system works great. By eliminating access, the bored tunnel will put 35,000 trips nowhere; they will end up on I-5. Access from the south will be routed through the historic Pioneer Square neighborhood. This is a downtown proposal. Polls don't show support from the public in Seattle. The stakeholder group was made up of 80 percent of people who were against the elevated structure.

The waterfront promenade will absorb 25,000 vehicle trips a day, which will be a poor environment for pedestrians. The current Viaduct provides north to south connectivity for 35,000 cars and freight. All of this traffic will be put on Alaskan Way, with 28 stop signs. The city will put an additional 12 stop signs on this corridor.

The proposal is also fiscally irresponsible. There have been no votes on any of the local revenue sources. Where is the commitment from these agencies? If the state thinks its commitment is limited to \$2.4 billion, it will find that it has the only money in the game.

A deep bore tunnel will increase risks to cost and safety due to multiple geographic hazards that will be encountered, including the Seattle fault rupture zone and tsunami area. Building over a rupture zone increases cost, and will require extra engineering.

After the San Francisco freeway pancaked, the WSDOT found that \$300 million would be required to retrofit the viaduct. Had the state spent the money then, the Viaduct would still be as strong as before the earthquake. The Viaduct can be retrofitted for less money than building a new facility, and it meets all the public criteria. A retrofit will not cause disruption during construction. The state should be spending its money on transportation

solutions, not an urban design solution for downtown Seattle. A retrofit can start immediately, and be done in three years and save money. The staging for the tunnel machine will cause disruption at either end of the project.

The March 2007 vote on the tunnel versus the elevated replacement rejected both options. If a single vote had been offered, the tunnel would have lost. If voters had known of the \$400 million in tolls, the Port of Seattle taxes, and other taxes, the vote against the tunnel would have been 90 percent.

**Persons Testifying:** (In support) Senator Kohl-Wells; Senator Jarrett; Paula Hammond and David Dye, Washington State Department of Transportation; Ron Posthuma, King County; Bob Powers, City of Seattle; Dave Gering, Manufacturing and Industrial Council; Richard Prust, Arup Associates; Don Newby; Jon Creighton, Port of Seattle; Nancy Stephens; Vlad Oustimovitch, VOKA Incorporated; Dave Johnson, Washington Building and Construction Trades Council; John Littel, Carpenter's Union; Bob Abbott, Laborer's District Council; Dave Overstreet, Automobile Association of America Washington; Duke Schuab, Associated General Contractor's of Washington and Masonry Contractors; Nancy Hiteshue, Washington Roundtable; Bob Donegan, Seattle Historic Workforce Association and Ivar's; Naki Stevens, People for Puget Sound; and John Worthington.

(With concerns) Chris Van Dyke, No Streetcars - Yes Busses.

(Opposed) Eugene Wasserman, North Seattle Industrial Association; Gene Hoglund, Working Families for an Elevated Solution; Art Skolnik; Victor O'Gray, Viaduct Preservation; and Craig Keller, [www.YesViaduct.com](http://www.YesViaduct.com).

**Persons Signed In To Testify But Not Testifying:** None.