From: Leathers, Kathryn [Leathers.Kathryn@leg.wa.gov]

Sent: Tuesday, April 21, 2009 10:58 AM **To:** Paananen, Ron; Dye, Dave

Subject: RE: AWV Question

This is great. Thank you, Ron. Kathryn

----Original Message-----

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]

Sent: Tuesday, April 21, 2009 10:54 AM To: Leathers, Kathryn; Dye, Dave

Subject: RE: AWV Question

Kathryn, you are close. The risk associated with the tunnel itself (\$1.9 billion) is about 31% or \$418 million. Escalation is estimated at \$166 million. Add this to the base cost of \$1329 million (which includes construction, design, right of way and administration) to get to the \$1.9 billion tunnel estimate.

The risk for the bored tunnel was established based on extensive input from worldwide tunneling experts and cost estimators.

Its important to recognize that the two projects have very different risk profiles. The bored tunnel avoids some the high risk issues on the waterfront such as seawall construction, extensive utility relocation, and resources issues working close to Elliot Bay. Additionally, business and traffic disruption increase the risk of construction on the waterfront. This was also true for the cut and cover tunnel. Building the new elevated structure itself is relatively straight forward, except for the fact that it is located on the waterfront and all the complications of doing the project around the existing viaduct.

The bored tunnel, while utilizing complicated construction methods, avoids most of the major risk items associated with a capacity replacement on the waterfront.

The following table summarizes the numbers. Remember that this excludes Moving forward and prior expenditures. For the elevated, this is \$1.067 billion. Because the bored tunnel does not rely on continued use of the Battery Street Tunnel, Moving Forward and Prior expenditures for the bored tunnel are \$900 million. We have also allocated \$290 million for surface street restoration, and \$30 million for further traffic mitigation.

Elevated Structure

Bored Tunnel

Base

\$1.157 billion

\$1.329 billion

Risk

\$289 million (25%)

\$418 million (31%)

Escalation

\$216 million

\$166 million

Total

\$1.662 billion

\$1.913 billion

Give me a call if you need further clarification.

From: Leathers, Kathryn [mailto:Leathers.Kathryn@leg.wa.gov]

Sent: Sat 4/18/2009 12:31 PM To: Paananen, Ron; Dye, Dave Subject: RE: AWV Question

Ron - Am I calculating the risk for tunnel correctly at about 29% (700M risk, using 2,400 for total state funds; if state total funding is 2,800, risk would be 25%, same as elevated)? Thanks. K

----Original Message----

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]

Sent: Friday, April 17, 2009 7:12 PM To: Leathers, Kathryn; Dye, Dave Subject: RE: AWV Question

Kathryn, Orlando

During the stakeholder process, we analyzed what was known as Scenario M, known as the Elevated Bypass option. The SR 99 component was a 4 lane elevated structure without midtown ramps at Columbia and Seneca. This allowed the elevated to function well with 4 lanes - as the Columbia / Seneca traffic is accommodated with the new south end ramps.

For the SR 99 portion of the estimate, scenario M included the following:

Prior expenditures and moving forward - \$1,067 million

Central Waterfront - \$1,662 million

Recall that the prior expenditures and moving forward includes the viaduct replacement from Holgate to King Street, or about 40% of the total viaduct length. Extensive reconstruction of the Battery Street Tunnel was also included, along with traffic mitigation projects.

The \$1,662 million central waterfront elevated estimate includes reconstruction of the seawall, public utility relocation, surface restoration including a new surface street (4 lanes from Pike to Columbia, and 6 lanes from Columbia to Atlantic). That estimate can be broken down as follows: Base \$1,157 million; Risk \$289 million and Escalation at \$216 million. The Risk represents about 25% of the base estimate.

Let me know if you need more information.

From: Leathers, Kathryn [mailto:Leathers.Kathryn@leg.wa.gov]

Sent: Thu 4/16/2009 10:36 AM

To: Dye, Dave Cc: Paananen, Ron Subject: AWV Question

Dave - I've been asked to find out the total amount of contingency/risk funds that were included in the replacement/rebuild

cost estimates. I looked back at my notes & files, but haven't been able to locate that information. In short, I need to know:

- * Total cost estimates for the rebuild; and
- * Total contingency/risk funding included in the total cost estimates.

Thank you, Kathryn