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**From:** Paananen, Ron  
**Sent:** Monday, April 20, 2009 11:25 AM  
**To:** Paananen, Ron; Reilly, John; White, John  
**Subject:** RE: AWW Question  
**Attachments:** cost slide.pdf

Then again, maybe not. Attached is the table I was using. It adds up to \$1.9 billion with \$268 million for risk

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**From:** Paananen, Ron  
**Sent:** Monday, April 20, 2009 11:08 AM  
**To:** Paananen, Ron; Reilly, John; White, John  
**Subject:** RE: AWW Question

John I think you are right. In reviewing the table I was looking at from a presentation, it lists risk at \$268, but to add up to \$1.9 billion, it should be \$418 million for risk.

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**From:** Paananen, Ron  
**Sent:** Monday, April 20, 2009 11:02 AM  
**To:** Reilly, John; White, John  
**Subject:** RE: AWW Question

The table I have (that adds up to \$1.9 billion) shows \$268 million for risk. Coincidentally, or maybe not, 268+150 (contingency) equals \$418.

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**From:** John Reilly [mailto:jjreils@attglobal.net]  
**Sent:** Monday, April 20, 2009 10:53 AM  
**To:** Paananen, Ron; White, John  
**Subject:** Re: AWW Question

Ron - the sheet I have has the same base costs ( $\$944 + 118 + 118 + 150 = 1330$ ) but has \$418 for risk =  $418/1330 = 31.4\%$ . Originally it was 41% until some elements of risk were moved to base.

To get more specific and cross-check, need to work this with Harry, Fiorentio and Morrison.

Regards, John Reilly  
Web: [www.JohnReilly.us](http://www.JohnReilly.us)  
Cell: +1-508-904-3434

----- Original Message -----

**From:** [Paananen, Ron](#)  
**To:** [Reilly, John](#) ; [White, John](#)  
**Sent:** Monday, April 20, 2009 9:19 AM  
**Subject:** RE: AWW Question

I thought we lowered it, but I was thinking it was in the 25% range. Maybe I over simplified. If you take R/W out, it gets back to about 20%

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**From:** John Reilly [mailto:jjreils@attglobal.net]  
**Sent:** Monday, April 20, 2009 9:03 AM  
**To:** Paananen, Ron; White, John  
**Subject:** Re: AWV Question

Ron - a previous calc showed the tunnel risk at 31%. I'll dig that out and respond further.

Regards, John Reilly  
 Web: [www.JohnReilly.us](http://www.JohnReilly.us)  
 Cell: +1-508-904-3434

----- Original Message -----

**From:** [Paananen, Ron](#)  
**To:** [White, John](#) ; [Reilly, John](#)  
**Sent:** Monday, April 20, 2009 8:28 AM  
**Subject:** FW: AWV Question

Using the same logic I did answering Kathryn the first time, it looks to me like the tunnel risk would be estimated as  $268 / (944 + 118 + 118 + 150) = 18\%$ . (risk / base + design + admin + ROW). Escalation is \$116 million. It seems like I am missing something. I don't recall the risk percentage we plugged into the table.

My draft reply is as follows:

Kathryn,  
 The risk for the bored tunnel was set at 18%. We established this 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.

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

-----Original Message-----

**From:** Leathers, Kathryn [mailto:Leathers.Kathryn@leg.wa.gov]  
**Sent:** Saturday, April 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.

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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