From: John Reilly [jjreils@attglobal.net]
Sent: Monday, April 20, 2009 4:38 PM
To: White, John; Paananen, Ron
Subject: Re: AWV Question - terms and interpretations

John - yes, need to work this with Harry, Mike M and others (e.g Rigsby, Fiorentino). Let's discuss - see also following (from the WSDOT CEVP Glossary). In CEVP Contingency is stripped out and replaced by risk events. Generically, in non-CEVP estimates, Contingency includes provision for unknowns but not Allowances - which are include provision for known but unquantified elements (and part of "base cost" in CEVP). None of this is clean or easily explained - depends on the process. e.g. risk consequences can be positive or negative - sometimes labeled "risk and opportunity".

Cheers

John Reilly
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Allowance	Additional resources included in an estimate to cover the cost of known but undefined requirements for an activity or work item. A Base Cost.
Design Allowance	Additional resources included in an estimate to cover the cost of known but undefined requirements for a *design element*.
Construction Allowance	Additional resources included in an estimate to cover the cost of known but undefined requirements for a *construction activity* or work item. *SOURCE: WSDOT CEVP® Definition*
Base Cost	The Base Cost represents the cost which can reasonably be expected if the project materializes as planned. There is typically relatively small uncertainty or variance. Base Costs are initially estimated by the Project Team and reviewed and validated during the Risk Workshop by the Cost Team and Subject Matter Experts.
Base Cost Estimate	The sum of Base Costs excluding Contingencies and Risk Events.
Base Cost Validation	A detailed examination of Base Costs for the particular project under consideration to assess validity, reasonableness, consistency and accuracy of these costs. *SOURCE: WSDOT CEVP® Working Definition*
Contingency (see also allowance, reserve)	A markup applied to account for substantial uncertainties in quantities, unit costs and the possibility of currently unforeseen risk events related to quantities, work elements or other project requirements. *SOURCE: WSDOT CEVP® Definition*

	A margin of resource or specification in excess of the base estimate (for example, of money available for the conduct of a project, or float with the initial project plan, or over specification of product characteristics) to enable the achievement of project objectives in the face of the impact of specific risk events. *SOURCE: Project Risk Analysis and Management Guide, 2004 APM Publishing*
Design Contingency	A markup applied to cover the cost of undefined and as-yet unknown design requirements – it is expected to be zero at completion of design. *SOURCE: WSDOT CEVP® Definition*
Construction Contingency	Additional applied to cover the cost of undefined and as-yet unknown construction requirements - expected to be zero at completion of construction. *SOURCE: WSDOT CEVP® Definition*
Risk Events	Uncertain events that affect the defined project resulting in impacts to cost, schedule, safety, performance or other characteristic but do not include the minor variance inherent in Base Costs. Examples include political, policy and/or management changes, changes in regulations and laws, earthquakes, fires, floods, unknown archeological sites, et al. (NOTE: Some may use the term "risk" to connote a negative event consequence and opportunity a positive event consequence.)
Risk	The combination of the probability of an uncertain event and its consequences. A positive consequence presents an *opportunity*; a negative consequence poses a *threat*. Exposure to the consequences of uncertainty. In a project context, it is the chance of something happening that will have an impact upon objectives. It includes the possibility of loss or gain, or variation from a desired or planned outcome, as a consequence of uncertainty associated with following a particular course of action. Risk thus has two elements: the likelihood or probability of something happening; and the consequences or impacts if it does. Source: "Project Risk Management Guidelines", 2005 by Cooper, Grey, Raymond, Walker Project risk - the exposure of stakeholders to the consequences of variations in outcome. The overall risk affecting the whole project, defined by components associate with risk events, other sources of uncertainty and associated dependencies, to be managed at the strategic level. *SOURCE: Project Risk Analysis and Management Guide, 2004 APM Publishing*

----- Original Message -----
From: White, John
To: Reilly, John ; Paananen, Ron
Sent: Monday, April 20, 2009 4:10 PM

Subject: Re: AWV Question

From here on out we clearly need to be consistent in how we use the words risk and contingency.

From: John Reilly
To: Paananen, Ron; White, John
Sent: Mon Apr 20 15:32:54 2009
Subject: Re: AWV Question

Ron - I concur.

Regards, John Reilly
Web: www.JohnReilly.us
Cell: +1-508-904-3434

----- Original Message -----
From: Paananen, Ron
To: Reilly, John ; White, John
Sent: Monday, April 20, 2009 3:19 PM
Subject: FW: AWV Question

Maybe this looks better

-----Original Message-----
From: Paananen, Ron
Sent: Monday, April 20, 2009 3:17 PM
To: Dye, Dave
Subject: FW: AWV Question

OK, here's a response

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.

-----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.

_____

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