



### RISKTOOLS INFORMATION SHEET

### RISKVALUER

As Organisations are improving their risk management processes many are wanting to make an assessment of the cost of carrying these risks (normally referred to as Contingency). This may be undertaken quite simply using RiskOrganizer's inbuilt Monte Carlo modelling software called RiskValuer.

#### Benefits:

- ▶ RiskValuer is a simple-to-use process within RiskOrganizer.
- ▶ It helps a user to develop a realistic allowance for the cost of carrying risks.
- ▶ It helps to prioritise which risk(s) should be managed first in order to reduce the amount of Contingency.
- ▶ Contingency can be quickly updated and precious capital reserves promptly returned as risk levels reduce.

#### Process:

##### Inputs

- ▶ When a risk is entered into RiskOrganizer it can be tagged (with a tick box) to show that the risk has a direct cost impact.
- ▶ These risks can then be viewed in the RiskValuer window.
- ▶ The likelihood of the risk occurring may be assessed as a percentage probability. (1)
- ▶ The cost if the risk was to occur may be assessed in terms of best case, most likely and worse case values. (2, 3 and 4 respectively)

**Title: Sewer Main Rehabilitation (Gavin)**

RBS: Main Construction Contractor Questions(Project)    Manager:    Group:    Region:    Business:

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**Risk# 2**     Higher management attention?     Opportunity?     Cost Impact     Closed?

Area: Occupational Health & Safety    Category: Operating handtools

Question: please select

Risk Name: Unseasonal wet weather conditions preclude access for work on live sewers  
(There is a risk that)

Notes: Delayed project completion. Project management costs, site supervision and site restoration.

Likelihood (percentage) 60%    Best Case \$5,000    Most likely Case \$7,000    Worst Case \$30,000

Current Analysis: **High**

Likelihood: Unlikely    Impact: Severe    Urgency:    Current Processes:

Initial Analysis: **High**

Likelihood: Unlikely    Impact: Severe    Date: Wed Jun 27 2007

Treatment: Allow 6 weeks float in schedule.

Responsible: Gavin Halling    Due: 27/03/2008    Cost: \$0.00

Notes: Resource Notes

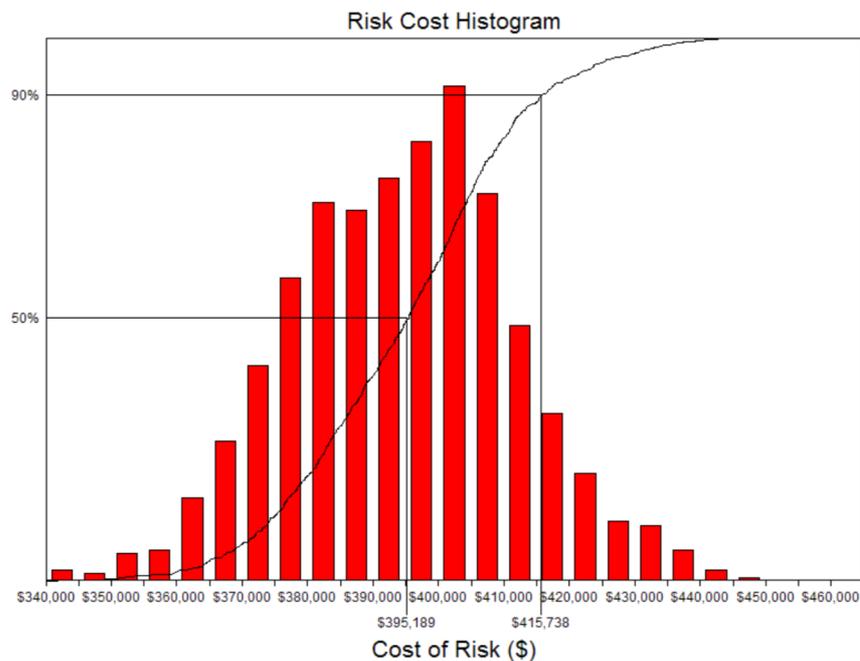
Completed    Spell Check

Number of Iteration: 1000

Run simulation

## The model

- ▶ Selects a risk based on likelihood (eg will call up risk 40% of the time but 60% of time it will not be applicable = 0).
- ▶ Takes a value at random between best case and worse case but weighted towards most likely.
- ▶ Totals the value for all risks.
- ▶ Repeats the process 1000 times and calculates the "bottom line" from each simulation.



## Outputs

- ▶ A histogram that shows the number of times a particular total risk value occurred.
- ▶ Based on the data inputs the 50% value is the most likely cost of the identified risks.
- ▶ A 90% value is also shown which would be a conservative value of the total cost of the risks.
- ▶ A second "Tornado" report highlights which risks have the biggest impact on the "bottom line". This can help prioritise which risks to address first.

The process is quick and very easy to update. As risk levels change re-running the simulation is a matter of adjusting a few inputs and pressing the simulation button. This enables Contingency requirements to be quickly updated for monthly reporting enabling cash reserves to be returned thereby assisting the management of capital reserves.

A similar process may be run to assess the "Inherent" contingency arising from the uncertainty associated with an estimate. Further details may be found in our brochures "ContingencyEstimator" and "Assessing Contingency" both of which are available from our website: [www.risktools.com.au](http://www.risktools.com.au).