



EXPLORING CONTINGENCYESTIMATOR

Using ContingencyEstimator (CE) underpins our straightforward approach to project risk management. There are two aspect to this: data entry and running simulations and deriving reports.

Import data to ContingencyEstimator

Project Name:

Company Name:

Type:

Description:

Choose import file: CE import from Roman.xlsx

Are you importing an exported ContingencyEstimator or RiskOrganizer file?

Does file contain Best and Worst Case values?

Select the appropriate column letter from your spreadsheet

Item #:

Description:

Unit:

Quantity:

Rate:

Note:

Estimates may be compiled in CE or more usually imported from an estimate spreadsheet.

This is undertaken quite easily using the import function, selecting the relevant columns in the spreadsheet and uploading the data.

Once a project is imported it may be opened and the various worksheets that comprise the project will be visible as tabs at the bottom of the page.

Click on the play pen Civil Engineering project and open one of the sheets.

Civil Engineering Project Total amount: \$6,189,884.50

Drainage Iterations: 1000 P Level: 90

Item #	Description	Unit	Q BC	Quantity ML	Q WC	R BC	Rate ML	R WC	Amount	Note
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	Remove Headway	Item	5.00	5.00	6.00	\$ 4,900.00	\$ 5,000.00	\$ 5,500.00	\$ 25,000.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	Install 48" RCP	Lin M	175.00	175.00	190.00	\$ 220.00	\$ 250.00	\$ 300.00	\$ 43,750.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	Install Concrete Headway	Item	5.00	5.00	6.00	\$ 12.00	\$ 15.00	\$ 18.00	\$ 75.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	Install Concrete Channel	Lin M	1,500.00	1,548.00	1,700.00	\$ 28.00	\$ 30.00	\$ 35.00	\$ 46,440.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	RCB Culver Extension at MP 239.74	Item	1.00	1.00	2.00	\$ 19,000.00	\$ 20,000.00	\$ 23,000.00	\$ 20,000.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	RCB Culver Extension at MP 239.95	Item	1.00	1.00	2.00	\$ 1,900.00	\$ 2,000.00	\$ 2,300.00	\$ 2,000.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	CIP Concrete Culvert Improvements	PQ	1.00	1.00	2.00	\$ 19,000.00	\$ 20,000.00	\$ 23,000.00	\$ 20,000.00	
<input style="float: left; margin-right: 5px;" type="button" value="+"/>	Install Rip Rap	Tonne	400.00	435.00	500.00	\$ 70.00	\$ 75.00	\$ 90.00	\$ 32,625.00	
									\$ 189,880.00	

Some suggestions:

Change some of the numbers. You will notice that if Best Case is not <= Most Likely <= Worst Case then the cell turns red indicating an error.

Insert a line by pressing the icon and add some data.

Run a simulation for the Group (ie the page you are on) using the blue icon at the top.

Review the three reports — Histogram, Inputs and Tornado diagram. The Tornado diagram shows you which items are driving the bottom line. Obtaining more information on those line items so as to reduce the bandwidth will help reduce the amount to be allowed for inherent contingency.

Go to the Add new group and enter a short estimate. As before run a group simulation. Note that you can change the number of iterations as well as the P value.

Run a simulation for the Project and note how easy updating data and running a Monte Carlo simulation is. With more projects you can select and run a simulation to include contingent data (exported from RiskOrganizer) as well as other projects that comprise (say) a programme of projects.

Consider how easy would it be to update contingency as data changes or as part of monthly end cost forecasting.