

*Below are a summary and key takeaways from the subject presentation given at the 2017 Large Facilities Workshop.*

## Modern Methods of Schedule Risk Analysis

**Speaker:** David Hulett, Hulett & Associates, LLC

**Description:** Early methods of quantifying risk analysis using Monte Carlo simulation placed probability distributions directly on activity durations. Developments in the last 10 years have allowed us to model risks much more specifically and intelligently. New methods for analyzing the impact of risk on a project's schedule were introduced, including (1) distinguish uncertainty and project-specific risks, (2) apply risks to multiple activities (or categories of activities), (3) apply risks in series and in parallel, (4) model how duration correlation occurs, and (5) prioritize risks for focused risk mitigation.

### *Best Practices:*

- When performing risk analysis, consider whether there exists an inter-relationship between project risks. For example, a risk of in climate weather has a correlated risk of workplace accidents if ice or muddy conditions result.
- When performing risk identification, perform one on one, confidential interviews to ensure Unknown Knowns (Known but unspoken) risks are not left out of the risk register due to reluctance for staff to speak freely.
- Look for “common causes” of uncertainty that exist in multiple risks and try to mitigate those separately.