

Customer Case Study

# Lawrence Livermore National Laboratory

## Driving Reliability and Confidence for Management Reserve with Deltek Acumen Risk

The Lawrence Livermore National Laboratory (LLNL) is responsible for ensuring the safety, security, and reliability of the nation's nuclear deterrent. Yet, its mission is broader than stockpile stewardship, as dangers ranging from nuclear proliferation and terrorism to energy shortages and climate change threaten our nation's security and global stability. LLNL is known as the "new ideas" laboratory – aspiring to intellectual leadership, originality, and audacity to support an environment that encourages improved operations and new, better ways of doing business. This includes new ways of preparing federal program proposals in a manner that drives increased confidence and reliability in both the schedule and cost estimates.



**Agency:** Lawrence Livermore National Laboratory » **Founded:** 1952

**Products & Services:** Deltek Acumen Risk

**Industry:** National Security R&D Laboratory

[www.llnl.gov](http://www.llnl.gov)

# LLNL

## Challenges

- Lawrence Livermore National Laboratory was tasked with managing a \$1B+ life extension program for a major weapon system, but it had not led a project of this scope for over a decade, and the planning tools used to generate previous cost estimates were not commensurate with modern customer expectations.
- Assessing the quality and completeness of previous program estimates was done manually and without formal tools, requiring significant time and effort on behalf of members of the project team.
- Additionally, because of the lack of a modern toolset, prior management reserve estimates were based on rules of thumb rather than a rigorous quantitative analysis.

## Solution

- LLNL purchased an enterprise-wide license of the Deltek Acumen Suite – Fuse, Risk and 360 – as well as a customized, on-site consulting engagement to ensure proper implementation of the tool set. This ensured that the people, processes and tools were in alignment and helped drive success.
- Project teams are using Acumen Fuse to perform schedule analysis with a set of customized metrics that quickly check for missing logic, constraints, lags and leads. The tool is also being used to perform project comparisons – pinpointing changes in the schedule or estimate and then evaluating those changes against their potential impact on overall project execution.
- LLNL is also using Acumen Risk to quantify the amount of management reserve required for project delivery in the event of schedule duration or cost increases. This allows for more sophisticated project decision analysis by evaluating and quantifying potential changes (scope, risk events, etc.) *before* they take place.

## Benefits

- Deltek Acumen has allowed LLNL to not only streamline its overall schedule review process, but also provide deeper insight and analytics. The project team now has a modern toolset that satisfies customer expectations and provides more rigorous and defensible estimates.
- The team enjoys a wide variety of benefits, including but not limited to:
  - Consistent schedule quality.
  - The ability to quickly pinpoint non-desired schedule and cost estimate characteristics leading to better overall proposal submissions.
  - Confident delivery of reliable proposals.
  - Increased customer confidence in management reserve estimates and the ability to properly communicate the components that contribute to the estimates.

“The Deltek Acumen Suite has taken our project planning tools into a new era of analytic rigor.”

– T. Horrillo, Program Manager, LLNL