Case Study: National Nuclear Security Agency (NNSA)

RSMeans data Configuration With BUILDER™ SMS

Key Project Objectives:
• Improve the NNSA's use of the BUILDER™ SMS tool
• Increase budget forecasting accuracy through RSMeans data
• Streamline NNSA's ability to track facility deficiencies and reinvestment needs

Challenge
The National Nuclear Security Agency (NNSA) works as a semi-autonomous agency within the U.S. Department of Energy (DOE) responsible for enhancing national security through the military application of nuclear science. In recent years, NNSA has embraced BUILDER™ Sustainment Management System (SMS) as a new tool for the management of the agency’s facilities infrastructure in support of its vital national security mission. Accurate costs are critical to success of the tool as NNSA’s enterprise is vast and complex, including unusual scientific, engineering and experimental facilities.

Like many agencies, NNSA struggles to obtain the funding required to keep pace with the growing need to modernize and replace aging, degrading facilities. It implemented BUILDER as a more efficient and accurate way to track facility deficiencies and reinvestment needs, to justify its budget requests and to inform the wisest deployment of limited funding. After a multi-year inventory effort, it became apparent the catalog and costs were not aligned with NNSA infrastructure assets. To fully leverage the predictive approach of BUILDER, NNSA needed more accurate and tailored costs than were available in the BUILDER catalog.

Solution
The agency partnered with Gordian to license and configure industry-standard RSMeans data from Gordian to drive its BUILDER system. RSMeans data is North America's leading construction cost database for material, labor, equipment and productivity rates, and the database can be referenced at the unit, assembly or square foot level of detail. Relying on Gordian engineers to map RSMeans data to the BUILDER Catalog and develop custom data where required, NNSA aimed to quantify component replacement costs and calculate more accurate Replacement Plant Values (RPVs) through an innovative Cost Engine that intersects parametric and granular asset data.

Results
The new system leveraged both common assembly costs and ones customized for NNSA's unique facilities and infrastructure. Parametric models of typical DOE facilities, which had been developed over a decade ago, were updated and now integrate with
inventoried assets in the Cost Engine to provide the most accurate, asset-specific RPV possible. Costs are updated annually through an automated process, ensuring budgets are up-to-date before reporting to Congress. Design life in BUILDER has also been reviewed and adjusted along with costs to ensure optimal timing of repair and replacement activities.

With BUILDER and the accurate construction costs from RSMeans data, NNSA is transforming its decision making, ensuring a viable, safe and effective nuclear security enterprise.

About Gordian

Gordian is the world’s leading provider of facility and construction cost data, software and services for all phases of the building lifecycle. A pioneer of Job Order Contracting (JOC), Gordian's solutions also include our proprietary RSMeans data and Sightlines facility benchmarking and analysis. From planning to design, procurement, construction and operations, Gordian's solutions help clients maximize efficiency, optimize cost savings and increase building quality. For more information, visit gordian.com