



## Collaborations and T2 drive use of USACE facilities management software at NNSA and beyond

Enabling cost savings, objective assessments, and improved planning, the BUILDER™ Sustainment Management System is an asset-management gamechanger for government, municipalities, and industry.

Created by the Construction Engineering Research Laboratory (CERL) within the U.S. Army Corps of Engineers' (USACE) Engineering Research and Development Center (ERDC), BUILDER is a web-based asset management software tool that helps civil engineers, technicians, and facilities managers decide when, where, and how to best maintain building infrastructure.

Strongly collaborative relationships among numerous federal agencies have helped these individuals take advantage of BUILDER. What began as an essential tool for the military to assess facility needs while keeping assessment costs down and maintaining military readiness is now making facility management more efficient for multiple non-military agencies, municipalities, and even the commercial sector, to the point that many organizations now often require BUILDER to be included in any proposal they will consider.

Because building assets are so vast and diverse, a "knowledge-based" philosophy drives the BUILDER process. Using real property data and life-cycle attributes, BUILDER provides a comprehensive picture of the overall performance of building assets and their key components. Instead of being forced to react to unexpected component breakdowns and system failures at the most inopportune times, building managers can now develop short- and long-range work plans based on sound investment strategies, prioritization criteria, and budget constraints.

In supporting the use of BUILDER throughout the federal government, the CERL has been developing strategic partnerships, which are in various stages of adoption, with numerous agencies: Defense Health Agency, National Nuclear Security Administration (NNSA), National Oceanic and Atmospheric Administration, National Institute of Standards and Technology, Department of Veterans Affairs, Coast Guard, Agricultural Research Services, and Office of the Director of National Intelligence. CERL's collaborations with industry have included patent license agreements (PLAs) with AECOM, Atkins Global, Calibre Systems, Cardno, DIGON Systems, FM Projects, GoldenWolf, North Pacific Support Services, and Tetra Tech.



Above: BUILDER Summits are an essential technology transfer tool in engaging numerous federal agencies, as well as other partners.

In addition to familiar tech transfer mechanisms such as cooperative research and development agreements, patent license agreements, and interagency partnerships, the CERL team's collaborative approach has included informal alliances with groups such as the National Academy of Sciences and hosting "user summits" to showcase BUILDER's capabilities.

One example of impact is CERL's collaboration with the NNSA, where an unprecedented 60,000 asset records were moved in approximately three months. Implemented in 2016, BUILDER software is now used for management of all NNSA assets.

"Traditionally, infrastructure management was done by looking in the rearview mirror," said Tyson Deschamp, Deputy Director, Office of Infrastructure Planning & Analysis at NNSA. "With our new strategy, we are turning that around to look out the front windshield. We see obstacles coming our way and proactively adjust to meet and overcome them."

In 2019, the Office of Management and Budget (OMB) cited BUILDER as an important tool for implementing the capital-planning requirements that OMB sees as vital to future federal budgeting. BUILDER is already being employed to assess the ongoing condition of over one billion square feet of federal real-property space, and with the imprimatur of the OMB, the CERL is poised to continue developing strong, lasting interagency partnerships at a remarkable pace. ☺