

BUILDER™ Support Services

RESULTS

- >> *BUILDER™ SMS enables facility managers to effectively budget facility repairs and improvements.*
- >> *BUILDER™ SMS provides 10-year funding scenario impacts for various budget level exercises.*
- >> *BUILDER™ SMS is a U.S. Army developed software available free to federal agencies.*
- >> *CALIBRE is an approved BUILDER™ SMS software vendor for state and local governments and the private sector.*
- >> *CALIBRE BUILDER™ SMS services address the full spectrum of BUILDER™ SMS program implementation and training.*

BUILDER™ Sustainment Management System (SMS) is a web-based software application developed by the U.S. Army Corps of Engineers, Engineer Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL) to help facility managers efficiently maintain building infrastructure. SMS provides automated procedures and tools to support the planning, programming, and budgeting of infrastructure facilities maintenance and repair that improves sustainment, including timely repair or replacement of system components, to meet the design or expected service life, and to avoid untimely and excessive recapitalization costs.

The knowledge-based SMS philosophy drives the BUILDER™ SMS process. The process starts with real property data. Then, a more detailed system inventory is modeled and/or collected that identifies components and their key life cycle attributes such as the age, current condition, and material. From this inventory, BUILDER™ SMS predicts Condition Index (CI) measures for each component based on its current stage in the projected life cycle. The facility manager then conducts inspections on various components to verify their condition with respect to the expected life cycle deterioration.

The U.S. Army ERDC-CERL tracked and modeled 3,100 degradation curves for facility components for over 25 years. CALIBRE has been involved in supporting CERL in the development and beta testing of BUILDER™ SMS versions for over nine years. The knowledge-based inspection focuses attention on the most critical components at the time. In addition to these condition assessments, functionality assessments can be performed to evaluate user requirement changes, compliance, and obsolescence issues. This provides a comprehensive picture of the overall performance of building assets and their key components. Figure 1 provides a typical degradation curve. The level of detail

and frequency of these inspections are not fixed like other processes. These processes are dependent on knowledge of component criticality, the expected and measured condition and rate of deterioration, and remaining maintenance and service life.

BUILDER™ SMS projects 10-year capital planning requirements based on tested engineering algorithms that adjust facility condition indices based on funding scenarios and elapsed time without the requirement to fully re-inspect facilities, and it provides an objective list of requirements based on observations rather than subjective engineering judgment.

The BUILDER™ SMS program includes the IMPACT tool that recommends long-term prioritized annual repair plans based on available resources to optimize facility performance. BUILDER™ SMS allows numerous budget “what-if” drills, and the program continually updates facility conditions based on modeled degradation data. BUILDER™ SMS saves users re-inspection efforts by projecting conditions and developing inspection plans for only those facility components that are flagged to have degraded below desired condition standards. The BUILDER™ SMS program was developed for military installations, but it can aid any organization with facility management responsibilities. As a U.S. Army-owned program, BUILDER™ SMS software is available at no charge to all federal agencies. The BUILDER™ SMS process is currently being used by the U.S. Marine Corps and the U.S. Navy. The U.S. Army has successfully completed several trials for various building components, and the U.S. Air Force has recently field-tested BUILDER™ SMS Ver. 3.1.

BUILDER™ SMS provides a comprehensive unbiased picture of building asset performance allowing the most effective investment of scarce critical resources.

>> CALIBRE BUILDER™ SMS Services

CALIBRE provides BUILDER™ SMS program setup, training, and data collection services to the Department of Defense (DoD), federal, and state agencies, and the private sector. We work with organizations to tailor the BUILDER™ SMS program to best fit their requirements and to meet the proper level of data collection. We provide any level of support from training your assessment team, working alongside your own facilities assessment team, or providing full turnkey assessment and data hosting services. CALIBRE has expert-level experience with BUILDER™ SMS. CALIBRE also has an existing Cooperative Research and Development Agreement (CRADA), with CERL. CALIBRE provided CERL beta-testing input for BUILDER™ SMS Ver. 3.1.

CALIBRE is an approved CERL BUILDER™ SMS license provider to the private sector. In addition, CALIBRE has established BUILDER™ SMS programs and assessed over 10 million square feet of facilities. This includes the U.S. Marine Corps, the Federal Bureau of Investigation, the University of Massachusetts Medical School, and a BUILDER™ SMS pilot program for the U.S. Army Medical Command (MEDCOM).

>> BUILDER™ SMS Program Set-up

CALIBRE works closely with our customers to develop tailored BUILDER™ SMS programs that meet their requirements. Customers are guided through the establishment of specified standards and policies and policy sequences to create work plans and knowledge-based inspection (KBI) schedules. These policies, policy sequences, and rules are then incorporated into the BUILDER™ SMS program to provide inventory tracking and asset management details.

>> CALIBRE BUILDER™ SMS Training

CALIBRE provides two BUILDER™ SMS training courses for organizations to train managers or assessors. Both courses provide a basic overview of the BUILDER™ SMS program, its capabilities, and the options available to tailor the program’s data management to best-fit the organization’s intended use of BUILDER™ SMS. These three - four-day courses are available at a location of the customer’s choosing.

>> BUILDER™ SMS Management Course

The CALIBRE BUILDER™ SMS Management Course addresses portfolio management and provides installation and facility managers with the knowledge to utilize and update the program. In addition to a BUILDER™ SMS overview, the course covers how to establish inventories and data conventions, Quality Assurance / Quality Control (QA/QC) procedures, data collection and update methods, and how to develop and run various funding scenarios to forecast impacts on system

condition indices using BUILDER™ SMS’s IMPACT Tool. This course provides managers the ability to generate realistic maintenance and repair policies that can be implemented and used to support their organization’s goals and objectives.

>> BUILDER™ SMS Assessment Course

The CALIBRE BUILDER™ SMS Assessment Course trains personnel to utilize the BUILDER™ Rapid Entry Database (BRED) tool to conduct valid field assessments that collect the data needed to initiate and later update the program. This includes how to develop and refine facility inventories and the basics of BUILDER™ SMS inventory hierarchy, component sections, and sectioning conventions. The course covers the different BUILDER™ SMS field assessment inspection types, and includes both classroom and hands-on field training using the BUILDER™ SMS BRED tool for gathering field assessment data.

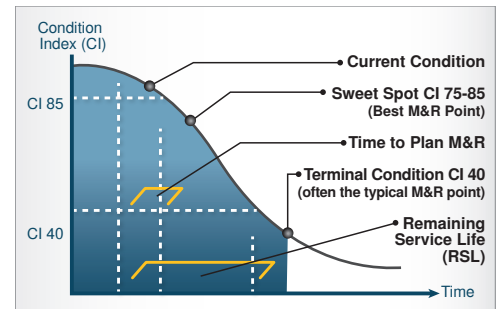


Figure 1. Generic BUILDER™ SMS Degradation Curve –Illustrates Condition Index (CI) values compared to the best times to take various maintenance, repair, and replacement actions. (Source- U.S. Army CERL)

ABOUT CALIBRE

CALIBRE Systems, Inc. is an employee-owned management consulting and information technology solutions company supporting government and industry. CALIBRE is committed to the success of our clients and delivers enduring solutions that solve management, technology, and program challenges.

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