

sition, and it's often difficult to know how best to spend on deferred maintenance. Priorities for spending are almost always based on key organizational goals such as risk mitigation and business continuity. Therefore, having access to comprehensive and accurate condition data that can be used to identify areas of risk and to set objective priorities is critical in making informed facility capital planning decisions.

In 2010, the Maine DOE sought to establish a standard facility condition assessment process in order to calculate maintenance costs, forecast future capital renewal costs and

maintain facility data. The Maine DOE began deploying a Web-based guided facility selfassessment solution to empower its School Administrative Units (SAU) to gather the needed facility condition data. Now, the department estimates that updating its facility database takes 25 percent of the time and does so at 20 percent of the cost of its previous approach. The use of self-assessment gave the Maine DOE the ability to assess the overall condition of each building, determine repairs and replacement, and forecast financial needs. The guided self-assessment solution has provided the necessary flexibility for schools to leverage their existing staff, making it easier to obtain the necessary data to defend funding requests for deferred maintenance and capital improvement programs.

The high profile assets of a real estate portfolio often mandate a detailed periodic assessment by seasoned architectural and engineering professionals. However, what about geograph-

ically isolated or low-profile assets, or assets that may have undetected issues? In practice, more times than not, these facilities do not undergo detailed facility condition assessments (FCAs). The cost of a full FCA for an entire portfolio can prove to be a dilemma for facility and building managers needing to justify the necessary funds to adequately maintain facilities. Without validated data, cost justification is an elusive target.

In 2011, the University of Texas at Austin, one of the largest public universities in the United States with more than 24,000 faculty and staff, 17 colleges and schools, and more than 51,000 students, wanted to maintain the integrity of its facility condition database, while implementing a schedule of FCAs that are performed each year for 20 percent of the approximate 19 million square feet of facilities. The university has a large maintenance and facilities staff, making self-assessments a feasible solution to complement the five-year FCA cycle. Using a Web-based mobile self-assessment solution, the staff gathers current facility data for both critical and non-critical buildings within its portfolio. A reliable, updated database is vital to the university's ability to make accurate funding decisions.

Driven by professionally designed building system surveys, quided self-assessments deliver comprehensive facility condition information that includes remediation definition and estimated costs.

Technology and experience each play a pivotal role in how facility condition assessments are performed and what data will be collected. Guided selfassessments use Web-based mobile surveys to standardize data collection, reporting and analysis. Driven by professionally designed building system surveys, guided self-assessments deliver comprehensive facility condition information that includes remediation definition and estimated costs. Utilizing existing facility staff or with assistance from maintenance partners, guided self-assessments can be the means to expanded and more cost-effective collection of condition data.

In 2005, the Commonwealth of Virginia mandated that all institutions of higher education must perform FCAs of their facilities and maintain accurate up-to-date information or face a reduction in funding for deferred maintenance projects. James Madison University rose to the challenge by instituting an assessment policy that

includes conducting detailed FCAs on the entire JMU portfolio every five years, supplemented with annual guided self-assessments. This information is uploaded to the state's Facilities Inventory Condition Assessment System (FICAS) database. Using self-assessment surveys, JMU personnel developed a consistent repeatable data collection process that leveraged its existing facilities expertise.

A built-in workflow and approval process supports the various roles involved in the assessment process, including evaluators, approvers and administrators, and their activities.



Using this built-in workflow, facilities personnel at James Madison University can now track the effectiveness and benchmark the success of their various deferred maintenance projects. The data collected from the self-assessment

surveys have reduced the time needed to create annual budgets, improved the team's ability to accurately forecast facilities needs and provide up-to-the-minute comprehensive reporting.

Organizations adding self-assessment to its data collection toolkit quickly start the process with the use of standard survey question sets about major building systems. These surveys, created using the expertise of professional assessors and industry standard data, provide step-by-step support for users. In addition, these surveys incorporate detailed explanations of systems and related photographs, to help the user identify systems, deficiencies and accurately collect the necessary requirement data.

In addition, these Web-based mobile solutions scale to meet each organization's unique needs. Self-assessment surveys can be customized to focus on specific sites or campuses to meet an organization's objectives. The individual surveys can be tailored to support the collection of other specialized information about a particular site or about specific issues such as fire and life safety, regulatory code compliance, physical security, and energy efficiency. The Maine DOE, for example, as part of its facility condition assessment process, needed to assess energy usage and the adoption of green methods. The Maine DOE

configured a green/energy assessment survey to collect data on electricity, water and natural gas costs and usage, as well as assess the use of green building and cleaning products.

Guided facility self-assessment structures and integrates previously disconnected data collection methods, helping the organization to effectively manage the process by which condition requirements are identified, defined and approved as part of the capital budget.

In summary, there are several ways that educational institutions benefit from guided self-assessments:

- Quick, Cost-effective Budget Estimates. Facility managers are often faced with the dilemma of justifying budgetary requirements in order to obtain the necessary funds to adequately maintain assets. This can be especially an issue for large and/ or geographically dispersed portfolios. But how do you justify the budget without the facility condition data to validate the need? Guided self-assessment is invaluable for quick budgetary estimates. With more accurate data available, facility managers can secure the right funding, respond faster to budget inquiries and funding requests, and make smarter capital planning decisions.
- Identifying "Hot Spots." Guided self-assessments are a costeffective method for helping facility managers identify "hot spots" within an asset portfolio. They can then determine which facilities will require a professionally conducted FCA (which often constitutes approximately 15 to 20 percent of

the portfolio). This knowledge enables decisionmakers to focus on the most pressing needs.

• Data Maintenance to Avoid "Stale" Data. Given that facility condition is constantly changing, it is important to keep information on building assets up to date. Guided self-assessments enable organizations to easily reassess condition and update existing data. In addition, consistent data collection leads to less "stale" data, as well as the validation that previously captured deficiencies have been addressed.

A guided facility self-assessment solution enables an organization to reduce assessment costs, increase data collection and monitor the condition of mission-critical facilities. The solution provides facility management teams with the defensible data needed to justify budget requests and enables them to support the educational mission with facilities that are in good condition. (3)

Keith O'Leary is the director of product marketing at VFA, Inc., a Boston-based provider of end-to-end solutions for facilities capital planning and management. This is his first article for Facilities Manager, and he can be reached at koleary@vfa.com.

