



Making the case for living, breathing, digital facility-condition assessments

BY DAVID CALLAN, JULIA INGERSOLL, KURT HOLLOWAY AND MIKE LODGE | JUNE 2021

Whether you are a developer looking to acquire a property or an existing building owner considering upgrading or flipping an asset, the facility-condition assessment (FCA) can be the keystone to your success.

Completed prior to the facility's purchase, sale, or upgrade, the results from a well-done FCA can be used to help lower operating costs, facilitate prioritization in decision-making, increase productivity of occupants, and mitigate risk.

But not all FCAs are created equal.

So-called "drive-by" FCAs regurgitate building vitals – like age and estimated timeframe for equipment replacement – but they don't actually evaluate the building for less obvious or chronic problems, assess their significance, or provide innovative infrastructure solutions. When done "drive-by,"

the FCA simply captures a superficial snapshot in time of a facility and memorializes it into a static report to sit on your shelf.

It's time for a change.

Changing buildings, changing the FCA

There is a growing expectation in nearly every industry that decision-making should be data-driven and widely integrated and that it should account for changes over time. Now that so many building functions are controlled by interconnected "smart" devices and other monitoring technologies, building systems can be manipulated to respond to scenarios in real time. Buildings have officially joined the Internet of Things (IoT) age.

FCAs need to follow suit.

FCA providers who use cloud-based computing and database tools for their data-gathering and analysis have transformed the static FCA into a living, breathing online registry, replete with IoT data taken directly from the building throughout its lifecycle. This means that your FCA can change in real time as your building conditions evolve.

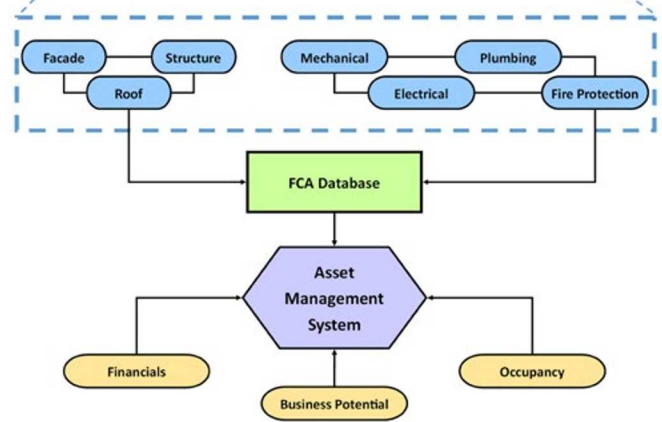
Allocating time and money to an ever-changing set of building assets requires piecing together a meaningful tapestry of data, opportunities, and owner/operator goals. When scaling this idea up to a large portfolio of buildings or a campus, the digital FCA becomes even more critical.

Elements of a good FCA

A “drive-by” FCA is, simply put, a missed opportunity. While a thorough FCA doesn’t take more time, it does take more thought to meaningfully evaluate existing MEP systems, technology, fire protection, structural systems, and facades, and how they all interact.

These elements are often overlooked in the “drive-by” FCA, but are key to truly assessing the building, understanding the story it is telling, and making informed decisions on whether it’s worth investing in. The most effective FCA includes the following pillars:

- **Timelessness.** When the FCA deliverable is a living document, the online database will compound the value of the assessment. It will include a compilation of all the technical information collected over time and enable the end user to analyze and create a plan for renovation or upgrades from all the possible angles. In this way, the FCA becomes timeless and foundational to the building’s master plan. It incorporates operationally important factors like revenue with the technical building data and information from outside sources. The resulting assessment provides a more complete picture of the total asset, which can inform real estate longevity and operational priorities over the life of the facility – well beyond the moment the FCA was captured.
- **Cost accuracy.** Utilizing cost management and estimating, the FCA can serve as key information for a stronger negotiation strategy. Lenders and other investors often rely on the FCA to understand the state



of the building’s infrastructure before they commit to investing. While it’s possible to present them with a list of aging infrastructure and replacement dates, making a case for a master plan that reveals real value and the different ways the asset can be marketable will prove more compelling. This is especially true in today’s real estate market where the number of distressed assets has increased, and developers and investors are looking to snap them up.

- **Depth of the information and technical quality.** The better you can visualize and see inside your portfolio of assets, the more informed your decisions – and the more profitable your assets – will be. An online FCA database allows the building owner/operator to take a deep dive into specific systems and overlay other data and systems to determine optimal initiatives from feasible options. For example, energy models, visualizations, heat mapping, or geographical spatial data (GIS) can all be introduced into the FCA database to help owners/operators make real-time decisions.

■ **Operations.** When the FCA provides a searchable, customizable tool summarizing identified conditions and the risk for every building system, it can inform building maintenance and operations decisions on an ongoing basis before they cause problems and additional headaches. Twenty-first-century building occupants expect their surroundings to be healthy, sustainable, and comfortable. The FCA can be leveraged to determine the best ways to achieve this and identify realistic time frames and costs of specific initiatives.

Gain a window into your assets with an FCA

If you purchase a 1975-model car today, you wouldn't expect it to run the same as it did when new. With buildings, we assume everything stays the same over the years. Design thinking evolves over time, and it's clear that the way we construct and renovate buildings today isn't the way we did it 50 years ago.

Real estate appreciates over time, but it is chock full of depreciating equipment and infrastructure. Make sure you're doing FCAs in a way that gives you a real window into the value – and potential – of your assets.

3 questions to ask your FCA provider

You don't want to hire an FCA provider that's a jack of all trades, master of none. Instead, you want your FCA provider to have the expertise necessary to provide you with an in-depth, data-driven resource. Ask the following questions of an FCA provider before getting started:

1. Can the FCA provider integrate technical findings across disciplines (e.g., electrical and plumbing infrastructure, building enclosure, HVAC systems, and structure)?
2. What information is sourced in the FCA? Ask for a detailed list of the systems reviewed and how they review them to evaluate the depth of knowledge you can gain from the study.
3. How will findings be delivered? In a report or an interactive digital document with data to be updated over the life cycle of the building.



David P. Callan, PE, CEM, QCxP, HBDP, LEED AP, is president and CEO at Callan Consulting Engineers, Inc.



Kurt Holloway is a senior associate at Wiss, Janney, Elstner Associates.



Julia Ingersoll is associate principal at Callan Consulting Engineers, Inc.



Mike Lodge is director, technical services at The Concord Group in Atlanta.

Published by CoreNet Global. Articles may not be re-printed without written permission from the Editor. For reprint permission, please contact Tim Venable at tvenable@corenetglobal.org.

CoreNet Global is an opinion leader in corporate real estate, workplace and infrastructure management. Enhance your knowledge with resources like research papers, exclusive member survey reports and presentations from top speakers on hot industry topics. Members of CoreNet Global benefit from a wealth of research knowledge and resources – find out more at www.corenetglobal.org.