Needs Indexing, Then Benchmarking, Now What?

By Matt Adams, P.E.

A little over 15 years ago APPA asked me to visit a number of campuses to discover the best practices within our industry associated with facility portfolio management. It was a great project and resulted in a publication from APPA that recognized a trend of ever-increasing sophistication within our professional peers. Then and now there are a large number of change agents among our peers who research and apply industry best practices wherever appropriate.

The knock-on effect of this is that many of the tools and practices that have been introduced allow for some wiggle room, or even require further interpretation. Take for instance key performance indicators or KPIs. The good news about the wide array of metrics included in the *Strategic Assessment Model* and other publications is that there are many, and they are complex. The bad news is also that there are many, and they are complex. What initially seems like a simple key performance indicator can really require a great detail of understanding for proper use or understanding. This is the case with the Needs Index or its component, the Facility Condition Index or FCI.

UNIFORMITY

First of all, let me say that the FCI has been very helpful to our industry, and has been the cause of increased renewal funding. It has created a discussion that might not have occurred otherwise. That being said, its use is commonplace and we now see the need for further refinement. Even before the APPA FPI reports, the FCI was used as a benchmarking tool.

In theory, the condition index of my campus is compared to that of my peer group and this gives me some indication of how our funding and spending actions compare to others. The problem has been that peer FCI data is typically not a nice and statistically tight pattern like we would prefer to see. The data points can vary dramatically, and this hurts the utility of the index.

Some of the causes for this can be resolved and should be. For example, the denominator of the FCI and Needs Index is the current replacement value or CRV of your campus facilities. If two peer campuses use significantly different methods for calculating this value the index benchmarking value is reduced.

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One might use the insured values and another the values extrapolated from a resource like RS Means. These two values can vary considerably. I suggest that for the case of APPA data collection future reporting cycles should provide some standard CRV factors for institutional facilities and that everyone be encouraged to use only these values. Ultimately, the importance is not the specific accuracy of one individual building CRV but the relative accuracy of all of them. Put another way, it is okay if APPA supplied values are slightly wrong, as long as they are uniformly wrong across the board.

The indexes do provide useful information and generally most consider them a starting point. John Hoogakker, associate vice president of university facilities at the University of Richmond, and his senior staff have evaluated and established the proper use of the FCI. This department is progressive and puts great care into thinking through and testing best practices before simply accepting them. To John and his staff, the FCI as an index clearly provides the empirical backdrop and confidence to enter into the master planning and long-term capital budgeting process. "As a simple measure it describes our current state and provides a snapshot of the beginning of a process," he says. John goes on to say that "the FCI is also useful for both medium and large campuses where an administration cannot be all-knowing any longer due to the sheer number of facilities and some measurement is required."

THE STARTING POINT

Consistent with the latter point, David Northcutt, the director of facilities management and planning for Covenant College, views the FCI-related indexes as starting points of a process. He states, "A properly calculated FCI takes away the politics of the planning process and provides the initial direction." Covenant College is also forward thinking and strives to be good stewards of their built assets. However, the use of the indexes after the "snapshot" can often prove problematic.

The natural life cycle of facilities combined with the varied ages since construction or renovation creates a "saw tooth" in funding requirements

each year that can render the indexes inaccurate or at least confusing if not properly accounted for. A period of measurement is required to allow for the law of averages to occur. Or put another way, the cycle time of FCI measurement from beginning to end point must at least span 50 percent of the life of all building assets.

EACH YEAR, WE NEED TO FURTHER DOCUMENT AND ADVANCE THE "OFFICIAL STANDARD" INTERPRETATION OF THE INDEX DEFINITIONS.

For example, if you determine that the average life cycle of all renewable components within your facilities is 12 years, then the FCI measurement cycle should be at least six years to capture the beginning and ending ebbs and flows of life cycle funding requirements. So a six year capital planning, measurement, and funding-cycle makes mathematical sense rather than using the FCI each year or two and adjusting each time.

At the July APPA 2010 conference in Boston, Harvey Kaiser and Eva Klein highlighted the content of their new book *Strategic Capital Development: A New Model for Campus Investment*. Included in the many good points presented was the emphasis of the importance of including a robust definition of programmatic capital "needs" in the formula for the Needs Index. Adding the functional and programmatic empirical scoring of facilities is clearly a valuable tool. Its answers the question characterized by the difference between building system performance versus facility serviceability. Already included in the APPA FPI surveys, this more complex KPI requires additional care in its creation and use. Recently trying to review some peer data for a university, it was clear to me that some submissions were calculated using more than one interpretation of the Needs Index KPI.

Our peers that are really thinking about stewardship and measurement of their facility portfolios are running into some limitations with our current performance indicators. Each year, we need to further document and advance the "official standard" interpretation of the index definitions. Some clearly think that we are ready to expand the body of knowledge associated with this set of performance indicator tools.

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