



You Just Received your Facilities Condition Assessment Report

Now What?


Joe Lalley
AVP for Facilities Operations



Why do an FCA?



The physical environment of a college campus provides the context for learning and social interactions. These interactions lead to involved students, which help build community, and vibrant communities on college campuses contribute to student persistence and academic success.*




*Kuh, Cruce, Shoup, Kircie & Coyne, 2008; Palmer, Mairanis & Dancy, 2011; Strange & Blanning, 2001; Tito & Goodsell - Love, 1993

Elements of an FCA


Facility Condition Assessments (FCAs) help owners understand and maintain the physical condition and value of their real estate portfolio, develop capital budgets, and prioritize resources.

- Routine and/or deferred maintenance
- Systemic deficiencies
- Remaining useful life (RUL) of all major building systems
- Capital replacement needs
- Overall system compliance with the original design/engineering intent
- Compatibility with contiguous systems
- Prioritized list of repairs
- Total building replacement cost



Getting Started

- Request for Proposals
 - established a selection team
 - sat through presentations,
 - selected a finalist and got them under contract
 - Someone(s) in your organization will spend hours getting them around campus and into spaces you did not know existed.





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Getting Started

Finally, after all these months and a just few dollars later, you now have your facility condition report. You are at the end.....


....the beginning and ready to start the process of incorporating this data into your deferred maintenance strategy and multi-year capital planning.

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You Have Data

A LOT of Data




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Processing the Data




Facilities Condition Assessment

- Northeastern University
 - >150 uniquely identified facilities either owned or occupied
 - Boston, MA
 - Burlington, MA
 - Dedham, MA
 - Nahant, MA
 - Responsible for maintenance in most leased facilities
 - ~8.2M GSF
- Planning to use Archibus modules for FCA and DM Capital Planning




Socialize Definitions Used in FCA

- Current Replacement Value (CRV)
- Facilities Condition Index (FCI)
- Facilities Condition Needs Index (FCNI)
- Localization Factor
 - Capital Renewal
 - Replacement
- Recurring and Nonrecurring Costs




CRV ≠ Replacement Cost

- Understand and be prepared to explain the difference between Current Replacement Value (CRV) as defined by your FCA consultant versus what others, e.g. CFO, believe is the total cost to replace the facility
 - Consultants vary in their definition (application)
- It is a key metric used to compute
 - The Facilities Condition Index (FCI)
 - Deferred Renewal/CRV*
 - The Facilities Condition Needs Index (FCNI)
 - 10 Year Renewal Needs/CRV*




Current Replacement Value

- The cost to replace an existing facility with a modern, appropriately-designed facility of equivalent size, which meets current and anticipated
 - Spatial
 - Technology
 - Comfort
 - Aesthetic requirements
 of the users and programs it houses.



<h3>What CRV is Not</h3> <hr/> <ul style="list-style-type: none"> Insured Value Fair Market Value of Real Estate Assessed Value Historic Value 	<h3>CRV</h3> <ul style="list-style-type: none"> Square foot estimate adjusted for <ul style="list-style-type: none"> Specific Structural type Aesthetic quality Heights Special equipment to support program needs Site Conditions Local Factors Demolition costs
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Localization Factor

- Applied to All Costs
- Reflective of Local Costs
- Includes Institutional Cost
- Ranges from 1.70 – 2.35 are common
 - Should be a constant for the institution
 - Is reflected in the numerator and the denominator
 - Does not have to be perfect



Recurring and Nonrecurring Costs

- Recurring
 - Cyclical and consist primarily of major repairs to or replacement/rebuilding of facility systems and components (e.g., roof or HVAC system replacement at or past the end of its normal useful life).
- Nonrecurring
 - Modifications or repairs necessary to comply with fire/life safety or accessibility code requirements or to address isolated, nonrecurring deficiencies that could negatively affect the structure of the facility or the systems and components within.



Processing the Data

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Processing the Data

- Many consultants offer an online tool to view, organize and manage capital renewal portfolios
 - Usually requires annual maintenance fee after first year
 - Often a stand alone system
 - Data duplication across systems



Processing the Data

- Recommend downloading data to familiarize yourself with it
 - Multiple worksheets in an Excel Workbook
 - Facilities Data
 - What the consultant used – e.g. Current Replacement Values, GSF
 - Data of Record for the institution
 - Deferred Maintenance entries
 - Recurring Costs items
 - Systems costs



Pivot Tables Are Your Friend


Category	2013	2014	2015	2016	2017
Total	\$23,262,710	\$27,003,827	\$19,309,500	\$15,228,035	\$12,216,636
ACQUISITION/ADDITION	\$11,213,101	\$12,317,267	\$4,292,000	\$0	\$0
REPAIRS	\$0	\$0	\$0	\$0	\$0
REPLACEMENT	\$12,049,609	\$14,686,560	\$15,017,500	\$15,228,035	\$12,216,636

Relate to other institution data
Condense large amounts of data into relevant chunks



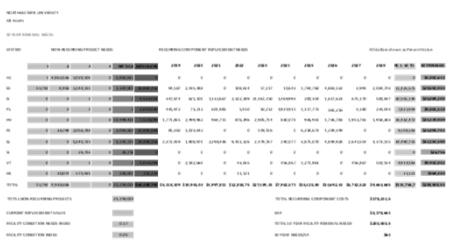

Processing the Data

- Validate FCI and FCNI Calculations
 - Start with one (1) building
 - Use same
 - Compute FCI
 - Compute FCNI
 - Compare against reports
 - Reconcile Difference
- Validate remaining facilities and the data set as a whole



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Develop Snapshots

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Using the Data

Buildings...The Gifts That Keep On Taking
 by Rodney Rose (Author), Ph.D David A. Cain (Author), James Dempsey (Author), Rich Schneider
 APPA 2007




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Advocating for Capital Renewal


- Understanding the Context of the Institutional Master Plan
- Define the Need
- Engage the Campus Communities
- Identify Funding Streams
- Integrated Campus Stewardship



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Refining the Need

- Develop or utilize deferred maintenance inventory to prioritize criticality and timing of projects
- Use CMMS to identify facilities with high corrective or emergency work orders
- Incorporate other data
- Engage facilities staff to tap their wealth of knowledge
- Devise method for prioritization of projects, e.g.
 - Must Do
 - Should Do
 - Nice To Do
 - Don't Do



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Define the Need

Peer comparisons

- APPA
- IFMA
- Sightlines

Key Metrics

- Renovation ages of buildings
- Current versus target deferred maintenance level of \$50/GSF
- Impact of level funding
- Funding required to "Keep Up"
- Funding required to "Catch Up"



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Engage the Campus Communities

Engage educational leadership to learn about facility "pain points"

- Learn what is important to them and their programs
 - What matters most to them will inform deferred maintenance capital planning
 - Program support
 - Aesthetics
 - Building environments
 - Operational impacts
- Enlist their help and support in capital plan prioritization and timing
 - Partnership is key



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Engage the Campus Communities

Seek or create opportunities with administration, faculty and staff:

- To test alignment of the plan with campus mission and strategic priorities
- Share potential impacts on campus operations if:
 - Implemented
 - Not implemented or postponed



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Identify Funding Streams

- Take advantage of visits by representatives, trustees, and influential persons to provide tours of campus infrastructure and facilities
- Engage Office of Philanthropy to identify fund raising opportunities
 - Bundle the cost of DM/CR inside the philanthropic opportunity



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Identify Funding Streams

- Effectively time projects with capital plan programmatic improvements
 - Identify/package/scope DM work to minimize administration costs
- Analyze costs of renewal/renovation versus building replacement
- Identify possible joint projects with municipalities



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Conversation



Northeastern
University

**LVX
VERITAS
VIRTUS**