

**Harness the Noise
Webinar Questions**

Webinar Question 1	McKinstry Responses
What is your costing methodology?	For MEP equipment and systems, we combine industry standard data with data from actual service and construction projects performed by McKinstry. Architectural, structural and site component replacement costs are based on regional industry standards. To ensure that we are reflecting the client's financial reality, we will also investigate their project history to understand the costs typically incurred for different project types (where available).
This all looks great. Are there any plans to adapt this system to the new APPA ANSI TCO 1000 standard on Total Cost of Ownership?	No plans in place but we closely track development of the Total Cost of Ownership (TCO) 1000 standard. We are committed to collaborating to deliver the most robust analysis possible.
Do you typically make use of Final Commissioning Reports (if available) to inform the FCA Reports?	Yes -- we insist on reviewing Cx reports. Additionally, we request all prior facility assessment reports and data; access to original drawings and most recent equipment lists; work order and maintenance management data; prior and current project (upgrade or replacement) information; and, vendor recommendations. We personally inspect and document every piece of equipment and system and building controls, but background information informs our analysis of current state.
Do your reports account for value of the building as a comparison to life cycle costs?	We are moving in this direction. Several owners are requesting that we use the FCA capital planning data to help make decisions about sale versus new construction. We integrate capital needs projections with available O&M data -- e.g., a Facilities Director used our data to determine that the cost of operating, maintaining, and upgrading an older facility is almost twice the cost/sf of building new. Our information can easily be used to generate an FCI (Facility Cost Index) as well.
What is the price range for FCA services like this? (ie: SF cost or fee per building/system)	Every project is priced according to total number of facilities, gross area, locational challenges, and other risks. For ROM budget purposes, use \$.20/sf for starters.
How do you/we address Utility usage creep that effects operational budget losses. RCx or CCx??!!	Correct (if understood correctly) -- we often use the FCA as a starting point for comprehensive capital planning and O&M planning. RCx is best suited to equipment that can and should be adjusted or recalibrated -- and often adds life to equipment. We often deploy Existing Building Cx (AKA Continuous Commissioning, which is a proprietary term, or ongoing Cx) to provide insight into facilities operations -- either following RCx or in tandem. EBCx provides enhanced facilities insight, utility monitoring, and predictive maintenance capabilities.
Is replacement cost standard for FCA?	For MEP equipment and systems, we combine industry standard data with data from actual service and construction projects performed by McKinstry. Architectural, structural and site component replacement costs are based on regional industry standards. To ensure that we are reflecting the client's financial reality, we will also investigate their project history to understand the costs typically incurred for different project types (where available).
How are you keeping the condition assessments up to date with regards to regular operations maintenance? Is there a link to operations software?	We provide an annual update service for the FCA data and capital planning visualization -- the service includes monthly information gathering based on replacements and maintenance, and annual update to the visualization. There is not a continuous link from our FCA assessment data visualization to CMMS or WMS platforms, except McKinstry's own CMMS (called InfoCentre). We are able to integrate FCA data with CMMS/WMS data and EBCx data to provide a holistic view of capital needs and ongoing performance management, but not in real-time, and operations and maintenance platforms are not typically designed to feed data to an external platform or visualization tool. As mentioned during the webinar, a pending update to our service is an Engineered Maintenance Plan that enables detailed maintenance planning, including staffing, based on preventative maintenance information generated during our FA process.
How does Tableau interface with my IWMS maintenance data?	The data can be batched loaded into just about any CMMS, Asset Mgt, or IWMS our there.
what resources are required to capture this level of data from an assesment... if it's not external, what's the ave. sqft. cost to hire out?	See previous response regarding ROM costs. Our service requires a facilities team to provide native/first-hand intelligence regarding facilities assets and O&M standards and concerns. The initial interview and information gathering process requires investment from a client team. Depending on access limitations, the client team may also be required to provide support to the assessment team. Finally, the client team is required to review the draft assessment and provide input regarding the final deliverables so they are actionable.
What level of project should you do a cost estimate on? A new roof may be worth it but new door hardware isn't - yes?	A basic FCA includes all MEP equipment and systems, and all architectural components that are accessible. We include almost any assets that will affect capital planning -- ROM costs for hardware are worth including but do not necessarily require unit inspection.
How do you incorporate envelope into systems evaluation?	We inspect roofs, visible walls and structural components, window glazing and weather sealing, and visible foundations. We will include IR scans where appropriate.

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Can you capture maintenance and repair costs in lifecycle?	Yes, we anticipate these costs over a 25 year cycle. The FCA is more narrowly defined than TCO or lifecycle cost -- focused on estimated life, remaining life, risk and performance KPIs, and replacement costs. As mentioned, we regularly bundle FCA with RCx (repair) and EBCx (operations optimization), but these are not included in the baseline FCA service. We do provide PM information and scheduling, but not O&M costs.
Should a facilities assessment include an official ADA transition plan?	We often provide ADA assessments for school districts and campus portfolios. Our FCA provides an evaluation of current state and cost of compliance with federal standards; transition planning is a separate issue often addressed through adequacy assessments and master planning.