2022 Benchmarking Review

By Robert Lambe

t the most recent IAMFA annual conference, we completed what I consider to be our first postpandemic benchmarking cycle. I consider it that because, although you have all been wrestling with lingering labor and supply-chain issues, most cultural facilities were again open to the public on a regular basis (if not under construction).

This year's program included quantitative benchmarking of a full range of metrics, qualitative benchmarking of practices, monthly shared-practice web meetings, and the annual benchmarking workshop (in-person once again at the annual IAMFA conference).

This year marked completion of the 22nd annual benchmarking program, and our tradition for the yearly post-conference issue of *Papyrus* is to recap the prior year's activity. We undertook a full historical review of the program in 2020, so I will not repeat that here; however, the start of the pandemic that year moved all of our benchmarking activity online, resulting in the monthly shared practice meetings, which we have continued.

Shared-Practice Meetings

Here is the list of the 2022 meetings, and associated shared-practice topic surveys, both of which have been open to anyone interested in participating:

- February—Environmental Leadership
- March—The 5 C's of Post Pandemic Management: How to Motivate, Engage and Retain Your Best People
- April—Cultural Facility: Pre-Project Checklist Workshop
- May—Cultural Facility: During Project Checklist Workshop
- June—Cultural Facility: Post-Project Checklist Workshop
- July—Metal Coatings for Asset Preservation, Cleanliness and Safety
- August—KPIs for 2022 Cultural Facility Benchmarking Reports
- September—How Zero Waste Can Benefit Your Facility
- November—What to Do When Your FM Systems Go Down



Attendees at the 2022 Benchmarking session.

Seven Metrics Cultural Facility Managers Should Know

Because facilities have a lot of dimensions (space, use, asset, cost, sustainability, etc.), there are a lot of metrics associated with the various aspects of their performance and operation. Here are seven key metrics we recommend you should know about your property and operations.

Gross Area (SF/SM): This is the total size of your facility (typically square feet or square meters), and you probably know this one by heart. There are some variations in how it can be measured, so we use the definition from the National Center for Educational Statistics in the IAMFA benchmarking program. Technically, this is a measure, not a metric, but it is the most common denominator used for comparison metrics, so it is important to know.

Facility Condition Index (FCI): This is the ratio of deferred maintenance to replacement value, and may be the best proxy available for summarizing your asset health. The higher the value, the worse your facility condition, with values of .05–.10 desirable for cultural facilities. (Note: some U.S. government definitions are the inverse of this to present desirable numbers as higher, rather than lower.)

Percentage of Maintenance That Is Planned (%): This is the percentage of your maintenance work that is planned and scheduled, versus reactive corrective maintenance commonly called break-fix. It is desirable to keep this in the range of 60–75% overall. Lower rates suggest a reactive maintenance model that may not provide suitable reliability, and higher rates suggest you might be overmaintaining some parts of your facility. (For critical equipment and systems, you want to be near 100% for reliability, while you may want to be near 0% for inexpensive and less-critical items, in order to conserve resources.)

Energy-Use Index (EUI): This ratio of all the energy used per gross area is the best single value to document your energy efficiency. For 2022, the median of our benchmarking group is 108, up slightly from the past two years. This obviously varies by type of cultural facility— from around 70 for science, military, and air and space museums, to around 120 for fine arts museums.

Direct O&M per area (O&M per SF/SM): This is the total of the direct, variable costs of annual property operations per gross area. These are the costs that are most manageable, and are traditionally in an FM budget. Not all of this is really "controllable," since you are subject to required maintenance and utility rates; however, you may have some leeway, depending on practices, service levels, and other organizational requirements. The 2022 median for the IAMFA benchmarking group is about \$12/SF (\$129/SM): more than twice that of "normal" buildings, as reported in the IFMA North American O&M benchmarking. **Carbon Footprint (MT C₂e):** A newer metric, and one that can be tricky to calculate, is your carbon footprint, typically expressed in metric tons of CO_2 -equivalent emissions (either total or per gross area). It is too soon for us to suggest specific metrics or desired ranges (other than that lower is better). We suggest that you focus on Scope 1 and 2 emissions related to the property and your department operations for now, and start to get comfortable with the topic.

SLA Compliance Rate: This is the rate of how well you are providing the service levels with which you are charged. Technically, there may be a metric for each service, which can be combined into an overall metric for simplicity. It can be measured based on inspections or reported deficiencies. Goals are often set high for life safety and regulatory items (such as 0 safety incidents, 100% compliance with temperature and RH standards, 100% of regulatory inspections, etc.), and lower for general operations (% PMs completed on time, cleaning levels, occupant satisfaction rating). The specific metric of value to you will depend upon your facility, its use, the culture of your users, and your organization's requirements.

Yes, there are many more metrics of value for different aspects of facility management (such as *Percent of Projects Completed On-Time, Work Order Backlog, TCO, Occupant Satisfaction,* etc.), but the ones above are the minimum needed to provide an adequate overview for leadership and stakeholders. But here are a couple others you might want to have handy, in order to be prepared for the uncertain times ahead.

Space Utilization: It is useful to have a metric that describes how efficient your facility is (spatially) and/or how well it is being used. The specific metric of value to you will depend upon your facility and your organization. Low space utilization may offer an opportunity to repurpose space, while high space utilization suggests a need to either manage use or plan for additional space. (If your usable-to-gross ratio is low, you want to be at the lower end of any "per area" metrics in benchmarking.)

Minimum Required O&M: This "metric" would be the amount needed to meet the facility's minimum legal and operational requirements. Even if not open to the public, there will be certain life safety inspections, some minimum required maintenance, a base level of physical security, and minimum utility use. The difference between this metric (for a given use scenario) and the total direct O&M represents the actual controllable costs. When preparing this, consider the potential impact of inflation, workforce, and supply-chain issues. Some of the shared-practice surveys are to guide the benchmarking program, some are to clarify emerging topics, and some are just to get a baseline for activity within the industry. The results of the shared-practice survey on environmental performance metrics is shown below.

This year, we also tried something new with these meetings, and had a series of three online "workshops" to draft a checklist of issues to consider in relation to projects in cultural facilities. Obviously, some of these are general projectmanagement issues, but some are specific to the industry. Replays of some of the meetings and the project checklist download are available at: https://facilityissues.com/articles/ *We welcome suggestions for 2023 topics from everyone.*

Changes in Benchmarking Metrics

This year's benchmarking program included changes and improvements, based on feedback and areas of interest.

- We updated the facility metric compendium that we publish on our website and use for the benchmarking program. This will continue as metrics for space and ESG evolve.
- We continue to expand sustainability metrics with collection of several CO₂ metrics. These are focused on Scope 1 (onsite combustion) and Scope 2 (purchased electricity) metrics for now, which seem to be challenging enough for everyone to assemble. We expect a lot of attention in this area in 2023.
- Results are provided in separate reports by topic for easier use (space and asset metrics, O&M cost metrics, sustainability metrics, and organizational metrics practices). Each report now includes a one-page scorecard (using metrics of most interest, identified in a shared-practice survey), the traditional quartile charts, and improved practices charts.

Scorecard Page with Metrics at a Glance









• We have drafted a "simple results calculator" report, intended to quickly show overall performance (by percentile) and allow order-of-magnitude estimates for potential opportunities and space increases. (Full disclosure: there are still some bugs in the opportunity calculations.) *Comments on metrics of value are always welcome.*

Benchmarking Trends

At the time of this writing, we do not have the final data in for the year, but two key trends have already become apparent:

- Direct operating costs have rebounded and are rising.
- Energy usage seems to be holding, but is still not very "green."



If you manage a cultural facility, neither of these trends is probably news to you.

We look forward to continued evolution of the benchmarking program in 2023, as the cultural industry and facilities management discipline address the important transformational issues facing society. mathematical states are addressed as the states of the states and the states of the states are addressed as the states are addressed as the states of the states are addressed as the states are a

Robert Lambe, CFM, ProFM is President of Facility Issues, which provides benchmarking services for museums and cultural institutions. We would love to hear your comments about this article and suggestions for future benchmarking related topics—please send them to Robert Lambe at RLambe@FacilityIssues.com.



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