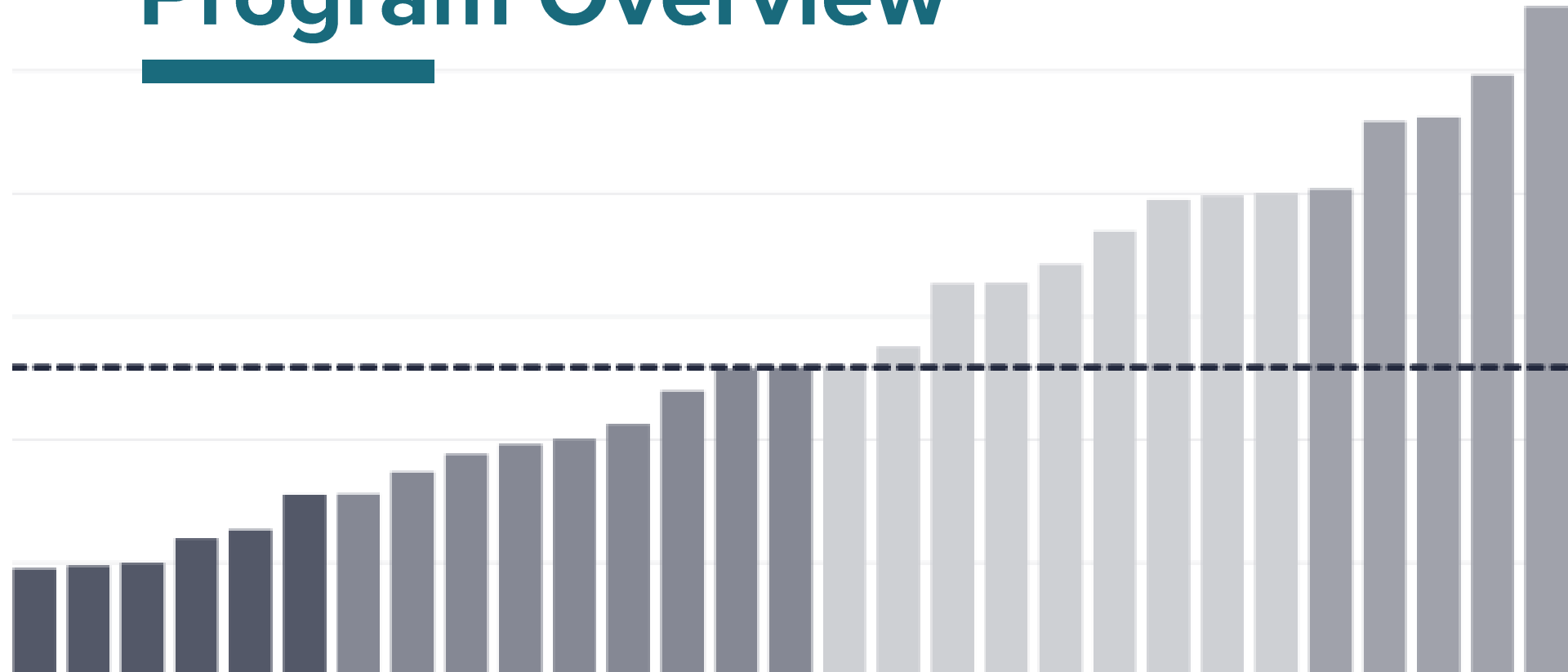
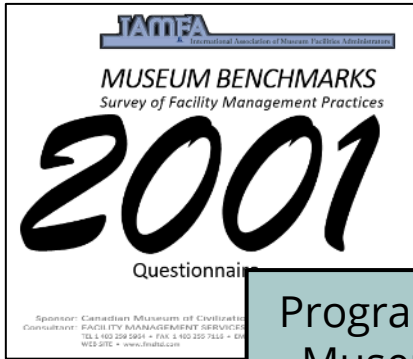


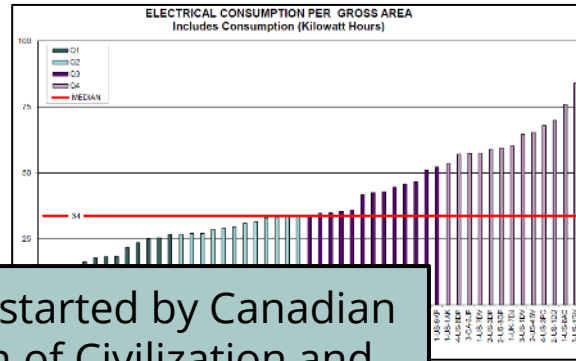
2024 Cultural Facility Benchmarking Program Overview



23 Years of Cultural Facility Benchmarking



2001



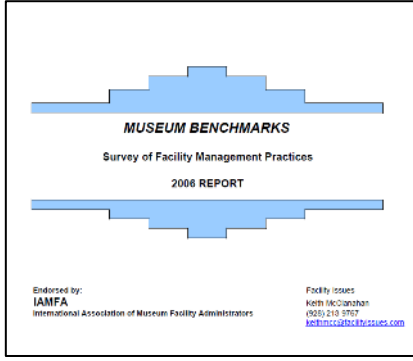
2015

Program started by Canadian Museum of Civilization and evolved from email/Word documents to Excel and now Power BI reporting.

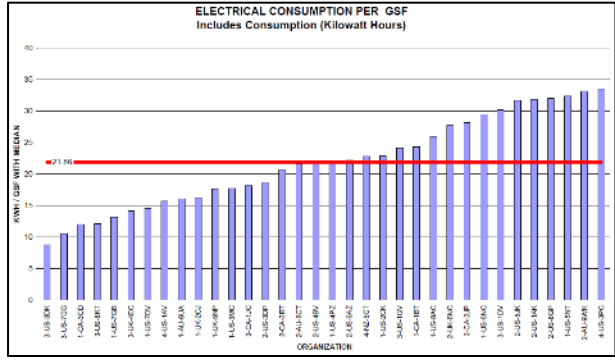


2020

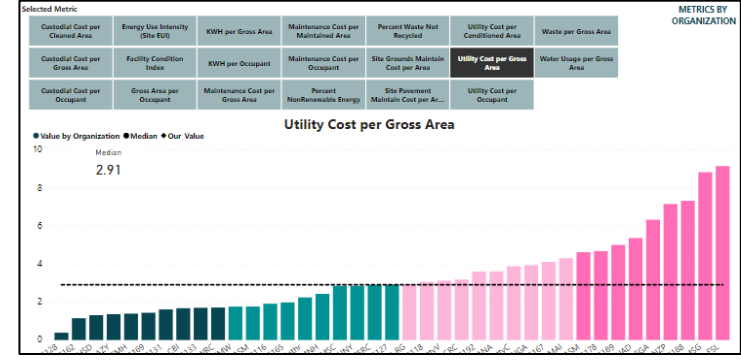
2005



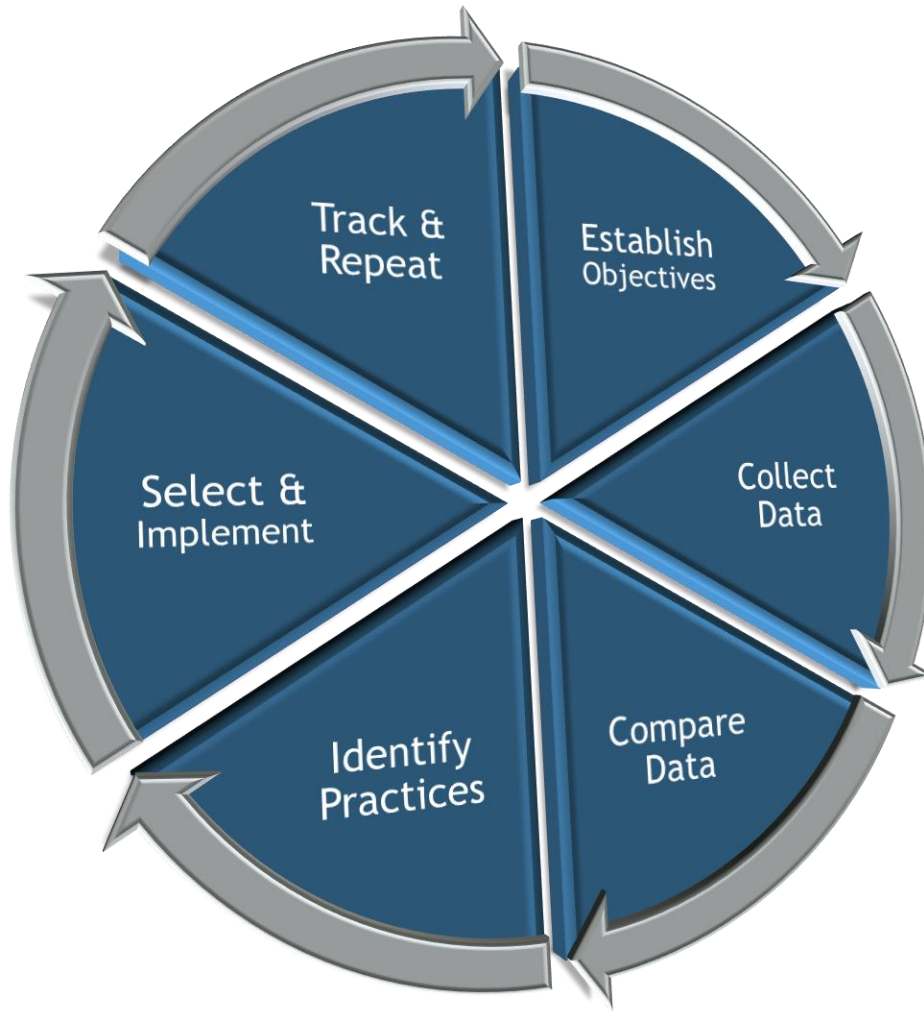
2011



2018



What Is Benchmarking – The Process



1. Establish/Clarify Your Objectives
2. Gather & Normalize Your Data
3. Compare with a Target or Peer Group
4. Identify Apparent “Best Practices”
5. Select Changes To Implement
6. Track Progress

Full presentation on this available: <https://facilityissues.com/facility-benchmarking-process/>

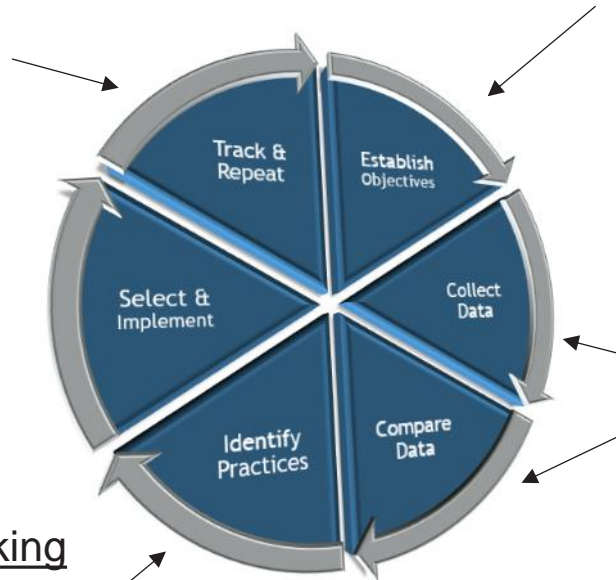
The Cultural Facility Benchmarking Activities

General Support

- Technical support
- Data / metrics whitepapers
- Ad-hoc questions
- Tips on how to use results
- Ongoing annual program with trend data

Shared Practices & Networking

- Benchmarking include practices and technology
- ~ Monthly Shared Practice Virtual Meetings on emerging issues, topics of interest, & networking
- Annual “Workshop”



Steering Committee

~ Monthly calls to identify:

- Metrics of interest
- Report changes
- Meeting topics

Data & Metrics

- 360° facility related metrics
- Templates to collect / enter data
- Interactive Power BI Reporting

Available:

- Custom Power Query templates to streamline data assembly from your sources
- Staff training options

More Info: <https://facilityissues.com/cultural/>

Monthly Shared Practices & Networking Meetings / Surveys

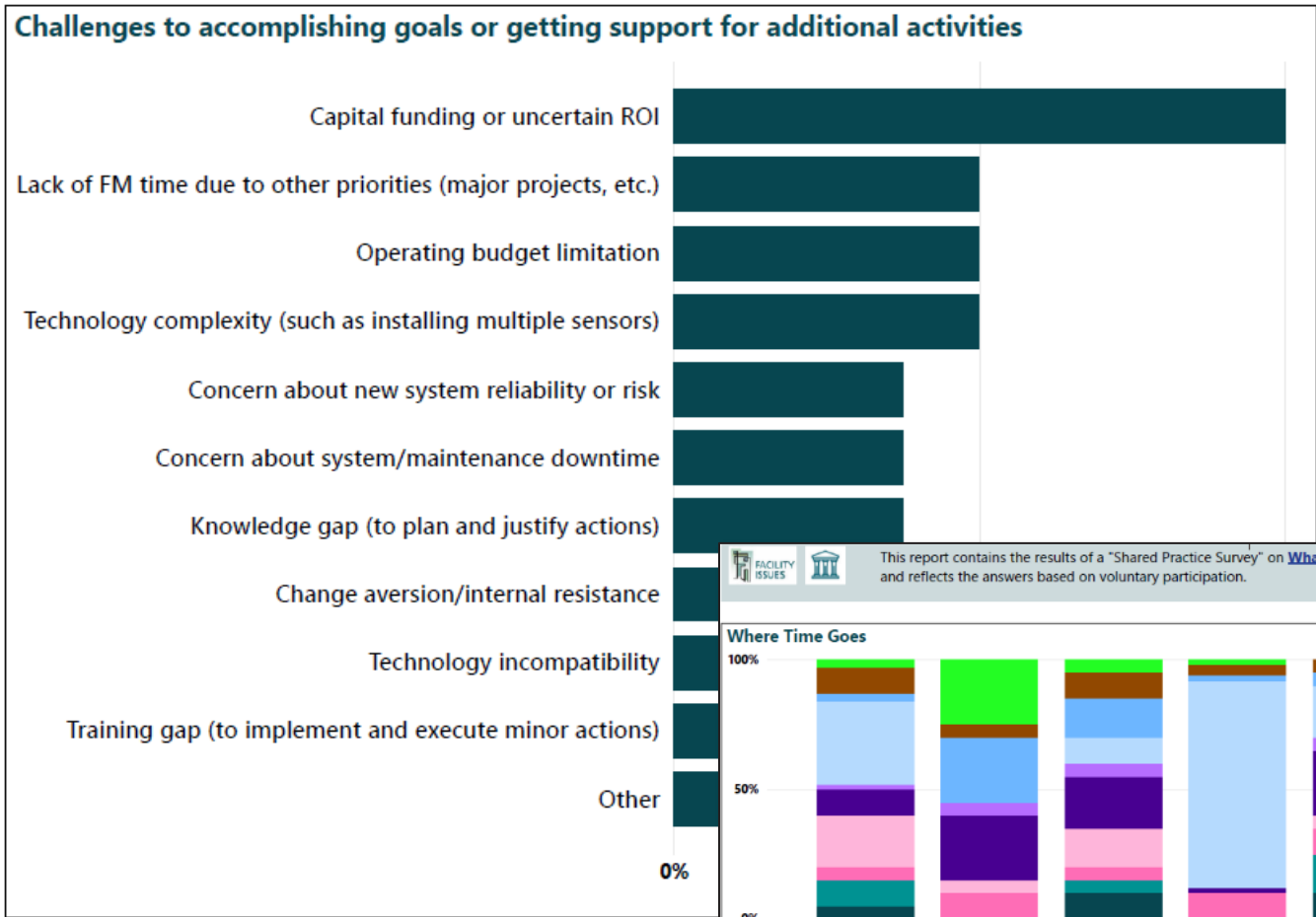
2024 Monthly Shared Practice & Networking Topics	
Jan	Emerging Topics of Interest
Feb	AI In Cultural Facility Management
Mar	Dealing With Your FM Data
Apr	Town Hall on current issues/topics of interest
May	FM Support for Special Events
Jun	Automating Equipment Inspections to Save Labor
Jul	What is Making You Crazy Busy
Aug	Energy Management
Sep	Challenges in Adopting and Using New FM Technology
Oct	Annual Workshop Town Hall Session
Nov /Dec	Emerging Issues for Cultural Facility Management

Example Shared Practice Survey Results



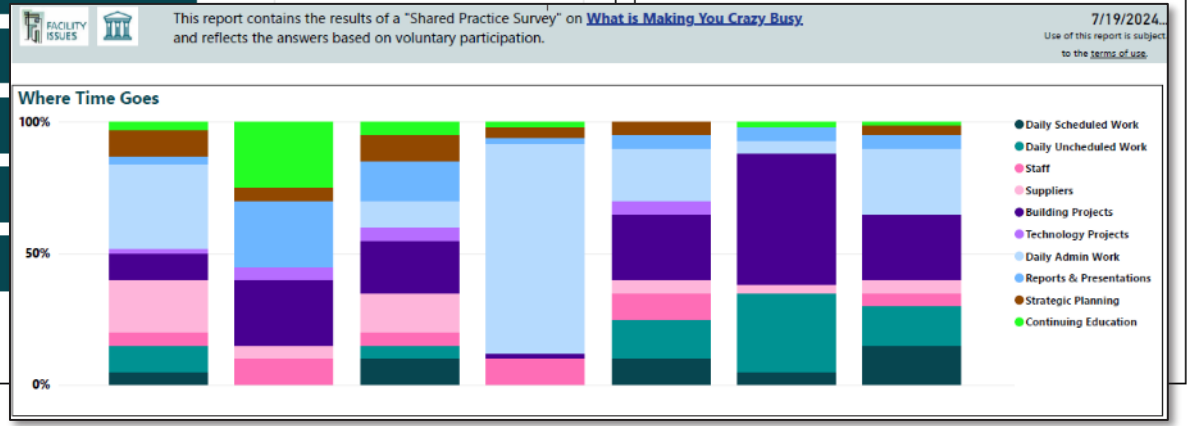
This report contains the results of a "Shared Practice Survey" on [Energy Management Activities](#) and reflects the answers based on voluntary participation.

8/20/2024...
Use of this report is subject to the [terms of use](#).



Specific Energy Conservation Measures you would like to hear more about

- ▲ Alternatives to gas in food and beverage settings.
- Anything on new water reduction technology
- How the migration to electric will be supported by the grid. And will relying entirely on electric make us vulnerable to system attack or failure?
- Implementing Demand Response in a museum setting, reducing HVAC energy usage, plug load reduction strategies (including office spaces)
- Is there anything to be gained by replacing old transformers?
- We try hard to follow the federal government goals and benchmarks.





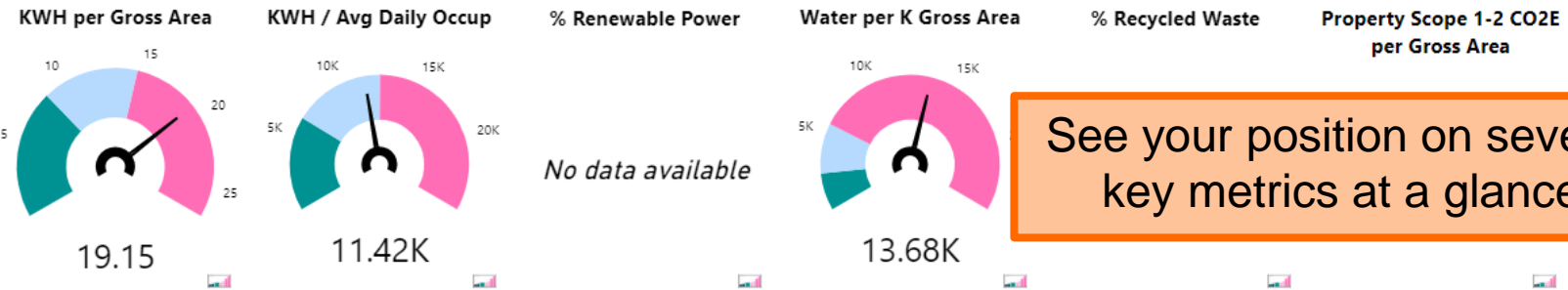
Metrics Reports & Categories

Reports	Metric Categories
<p>Property Assets & Space Metrics Reporting on the space and asset related metrics; gross areas, net areas, facility condition index, capital renewal, and some occupancy metrics.</p>	<p>Asset Management Space & Occupancy</p>
<p>Property O&M Cost Metrics Reporting on the traditional facility operating cost metrics, maintenance, cleaning, grounds, security, and utilities.</p>	<p>Cost: Custodial Cost: Maintenance Cost: Security Cost: Total O&M Cost: Utilities</p>
<p>Property Sustainability Metrics Reporting on energy, water, waste, and CO2E metrics (Scope 1 & 2 only).</p>	<p>Sustainability: Energy Sustainability: GHG Sustainability: Waste Sustainability: Water</p>
<p>FM Organization Metrics Reporting on staffing ratios, service levels, & work order metrics. (Also costs and GHG at the organization level)</p>	<p>Cost: Capital Cost: Total O&M Occupant Service Staffing Sustainability: GHG</p>
<p>Results Explorer – Quick review & explore data Our Data – Review your own data for errors/trends</p>	

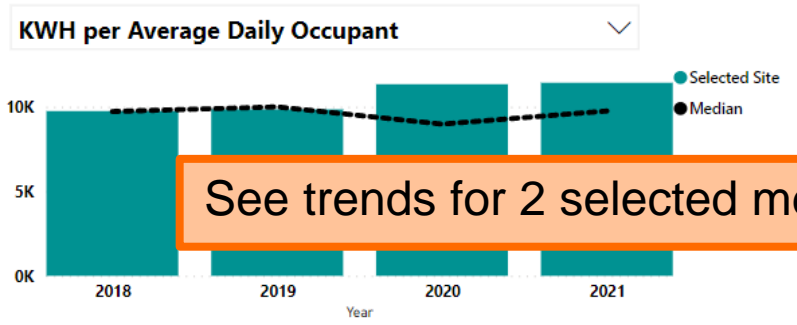
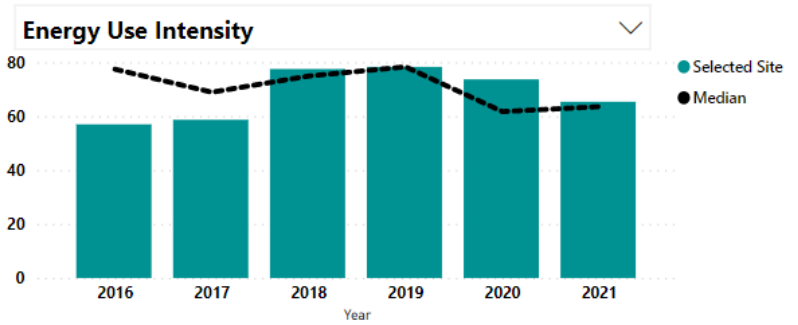
Scorecard Page with Metrics at a Glance

Goal is to provide one page summary of performance by category.

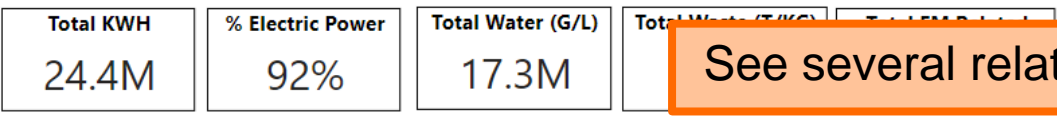
Facility Sustainability Metrics Summary



See your position on several key metrics at a glance



See trends for 2 selected metrics

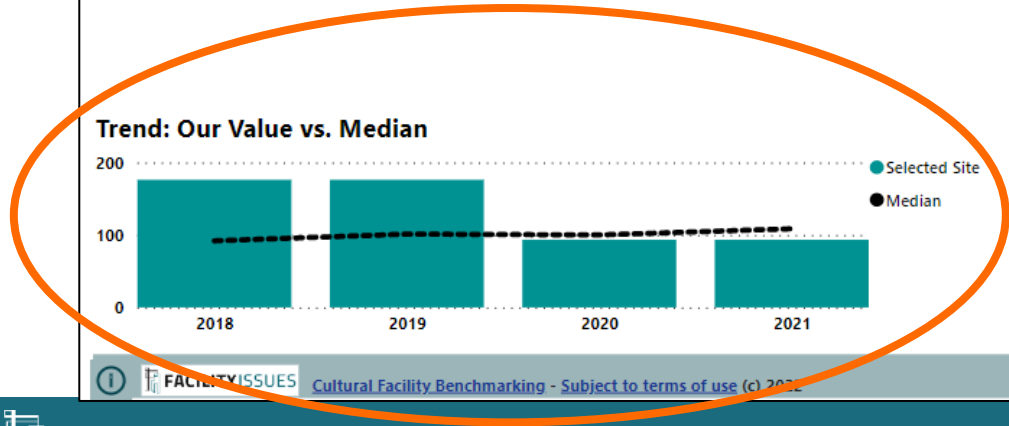
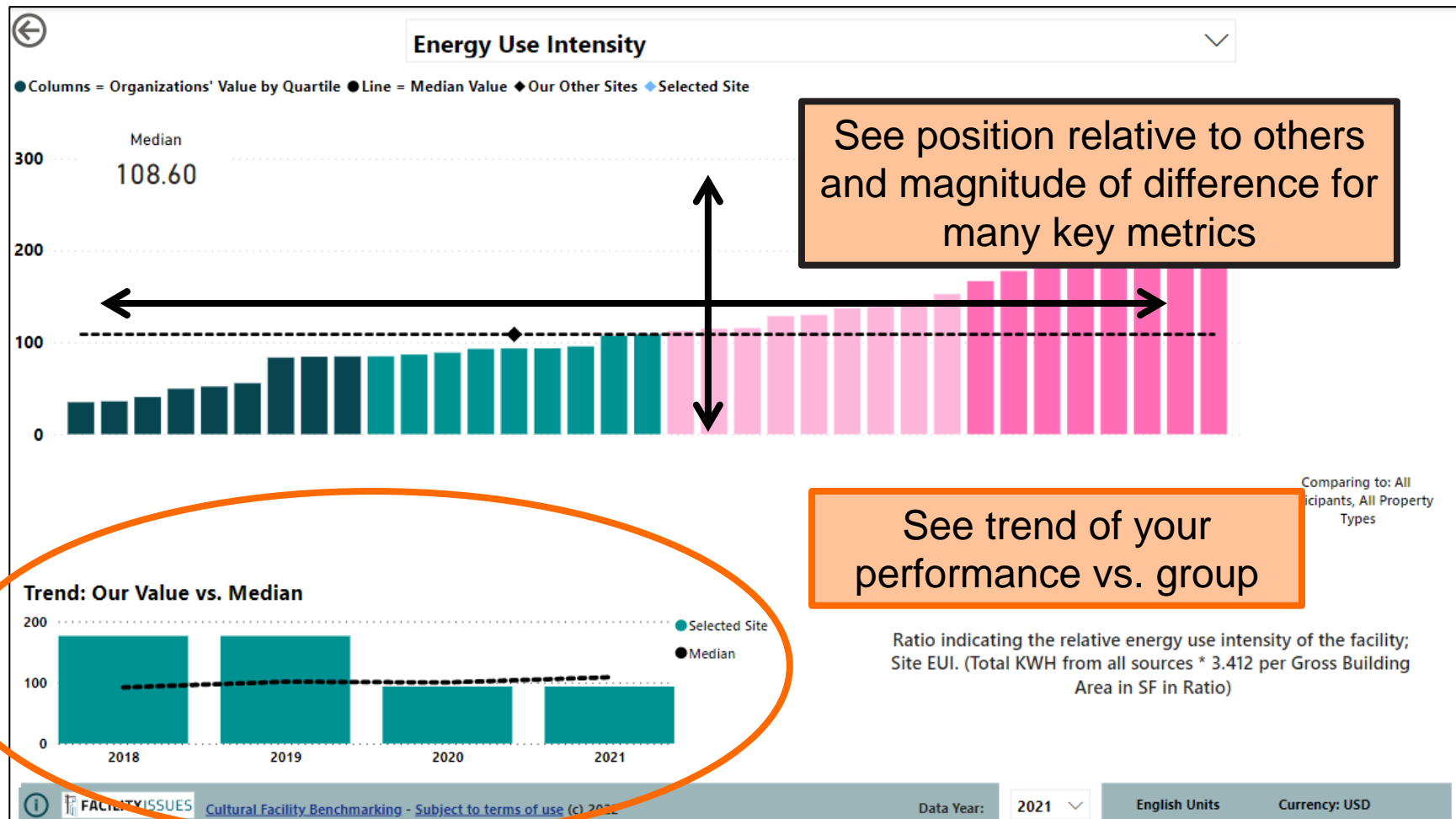


See several related facts

Comparing to: All Participants, All Property Types

Benchmarking Reporting provides Context & Trends

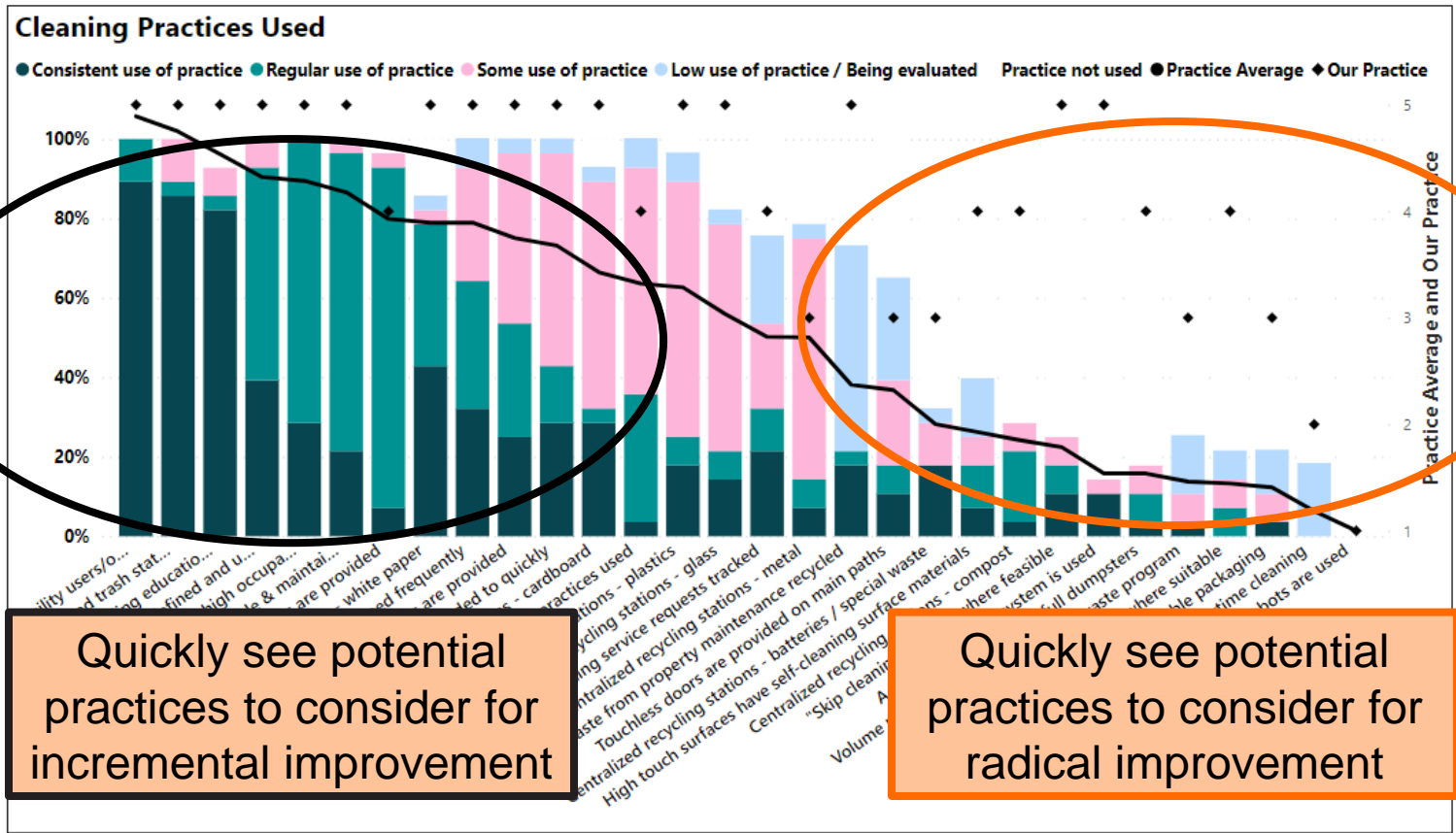
- Reporting: “Ready to share” with full range of facility-related metrics grouped on pages by topic.



Compare Practices & Technology → Desired Change

Charts show degree of use for FM practices & technology by functional areas to help identify desirable change

- Cleaning, Maintenance, Space Mgmt., Utility Use/Sustainability





New in 2022: GHG Metrics (Current Data still “Bumpy”)

Will evolve based on feedback.

FM BENCHMARKING SURVEY

WORKSHEET D: Organization Info >> Facility Related Greenhouse Gas

This worksheet is to calculate your non-property specific greenhouse gas for FM Operations. The two main categories here are department vehicles and furniture.

This section contains the calculated results to copy/paste values into the benchmarking template - DO NOT CUT.

Fleet and Equipment Emissions				
ORG_USE_MR	Department Road Vehicles Included?	No	List	Select Yes if the fuel use for this type of vehicle is included in the figures on this sheet. Department Road Vehicles include any cars and trucks licensed for public road use.
ORG_USE_MN	Department Non-Road Vehicles Included?	No	List	Select Yes if the fuel use for this type of vehicle is included in the figures on this sheet. Department Non-Road Vehicles include any planes, boats, trains.
ORG_USE_ME	Department Equipment Included?	No	List	Select Yes if the fuel use for this type of vehicle is included in the figures on this sheet. Department Equipment includes construction equipment, lawn and garden equipment, and utility vehicles not included in Road Vehicles.
ORG_USE_MCO2	Mobile Combustion - CO2	-	MT	This is the amount of CO2 emissions associated with vehicle use for FM operations, all types of vehicles.
ORG_USE_MCH4	Mobile Combustion - CH4	-	KG	This is the amount of CH4 emissions associated with vehicle use for FM operations, all types of vehicles.
ORG_USE_MN2O	Mobile Combustion - N2O	-	KG	This is the amount of N2O emissions associated with vehicle use for FM operations, all types of vehicles.
ORG_USE_MCO2E	Mobile Combustion - CO2e	-	MT	This is the amount of CO2e emissions associated with vehicle use for FM operations, all types of vehicles.
Furtive Emissions				
ORG_USE_R	Refrigerant Release Included?	No	List	Select Yes if you have included the release of refrigerants; else select No and skip the of this section.
ORG_USE_RCO2	Refrigerant - CO2	-	MT	This is the amount of CO2 emissions associated with release of refrigerants.
ORG_USE_RCH4	Refrigerant - CH4	-	KG	This is the amount of CH4 emissions associated with release of refrigerants.
ORG_USE_RN2O	Refrigerant - N2O	-	KG	This is the amount of N2O emissions associated with release of refrigerants.
ORG_USE_RCO2E	Refrigerant- CO2e	-	MT	This is the amount of CO2e emissions associated with release of refrigerants.

FM Department Operations Scope 1 (vehicle combustion) & refrigerants

Property Scope 1 (combustion) and scope 2 (purchased power)

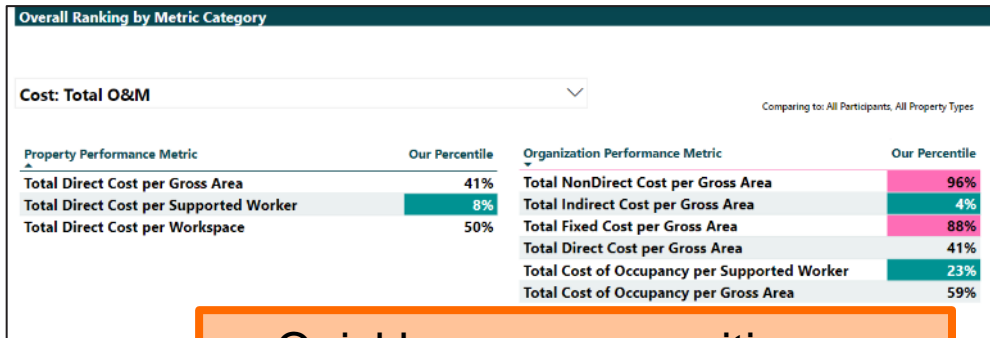
Purchased Electricity Consumption *	Purchased Natural Gas Consumption *	District Heating/ Cooling Energy Consumption	On-Site Renewable Energy Consumption	On-Site Generator Energy Consumption	Energy Consumption - All Other Fuels	Purchased (Green) RECs	Purchased Offset	Electric Grid for this Site	District Heating/ Cooling Fuel Source	On-site Generator Fuel Source	Other Fuel Source
USE_KWH_E	USE_KWH_G	USE_KWH_D	USE_KWH_R	USE_KWH_O	USE_KWH_F	USE_KWH_REC	USE_KWH_OFF	See Map	EDIT IF Fuel Source <> Nat'l Gas	Change as appropriate	List
KWH	KWH	KWH	KWH	KWH	KWH	KWH	MT	List	List	List	List
		2,000	2,000	2,000	2,000	2,000	2,000	US Average	Purchased Steam and Heat	Diesel	
								US Average	Purchased Steam and Heat	Diesel	



New in 2022: Simple Results Calculator

Intent is quick and easy use of benchmarking data for:

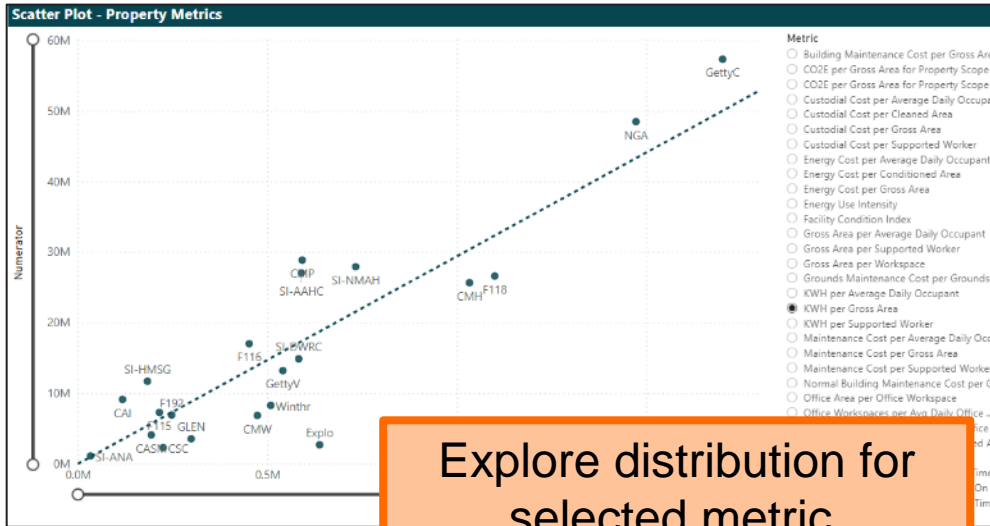
- How do we stand overall on key area of interest?
- What budget needed for additional space?



Quickly see your position on several metrics within topic area.

Also additional ways to use & explore the data:

- Scatter plots to review variances in data.
- Export key metrics for use in internal reporting.



Explore distribution for selected metric.

List of 2024 Participants

- Anacostia Community Museum
- Art Institute of Chicago
- Canadian Aviation and Space Museum
- Canadian Museum of History
- Canadian Museum of Science and Technology
- Canadian War Museum
- Carnegie Museums of Pittsburgh
- Carnegie Science Center
- Collection Conservation Centre
- Dumbarton Oaks
- Exploratorium Pier 15
- Glenstone Foundation
- Hirshhorn Museum and Sculpture Garden
- National Gallery of Art
- National Museum of African American History and Culture
- National Museum of American History Behring Center
- National Portrait Gallery Donald W. Reynolds Center
- San Francisco Museum of Modern Art
- The Getty Center
- The Getty Villa
- Winterthur Museum, Garden and Library

Suggested Process to Evaluate Benchmarking Results

1. Understand Your Organizational Objectives
2. Review Your Performance (*Particularly vs. Your Objectives*)
 - Scan all metrics of interest
 - Focus on metrics / trends for your priority areas
3. Identify Potential Actions To Consider
 - Triage and select actions to pursue
 - Discuss lessons learned with colleagues
4. Communicate Results of Your Review
 - Report overall performance and recommendations to leadership.
 - Communicate key metrics with staff & reasons for any initiatives
5. Track Progress on Initiatives, and Trends in General
 - Monitor trends of key metrics to measure & report progress
 - Perform ad-hoc queries/review to respond to emerging issues/questions
 - Share lessons learned from your initiatives & learn from others

Your Thoughts on 2024 (*Welcome Now or Later*)

How were shared practice meetings this year?

- Things you liked or did not like?
- What about the shared practice surveys?

How was benchmarking data process this year?

- Ease of process? Pain points?
- Usefulness of reporting? Gaps?
- Applicability of metrics? Metrics to clarify?

How is the (draft) benchmarking reporting this year?

- Ease of use?
- Usefulness?
- Alternative charts or formats to add to final?

Suggestions for 2025 (things to add or change)?

- Additional support needed on metrics/benchmarking?

More Information on Metrics



Presentations, handouts, and related downloads available at:

<https://facilityissues.com/articles/>



Robert Lambe, CFM, ProFM

Facility Issues

rlambe@facilityissues.com

(315) 601-6010

<https://www.linkedin.com/in/lambe/>