

COMPENDIUM OF FACILITY METRICS & MEASURES

A compilation of definitions for quantitative measurements associated with buildings and grounds, and their operation by facility managers.

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ABOUT THE AUTHOR

Robert Lambe, CFM, ProFM, is President of Facility Issues and author of this document. He has 30 years of facility planning and facility data analysis experience.

His work with Facility Issues includes benchmarking programs and facility metric scorecard services for facility managers of cultural facilities, utility operations, research facilities, critical facilities, government, and general industry. Over the years the participants in these programs have reviewed, discussed, and refined many of the definitions contained in this document to allow easier and more useful facility benchmarking.

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INTRODUCTION

This document is intended as a general reference for facility managers, analysts, and others working in the facility management area, to help them organize the metrics and measures (data) commonly used to describe facilities and their operation. Vast amounts of data are becoming available. Our philosophy is that better use of data will help us better understand and manage out facility assets and operations. A key step is to have decent definitions of the data.

Many of these terms are included in other publications and we endeavored to use the most common version of the terms to promote clear and consistent communication among facility managers.

I understand that this is not the most exciting document on a not-so exciting topic. It was prepared to be a reference for those who are doing facility benchmarking, preparing facility-related dashboards and scorecards, and those generally using facility metrics in various analyses.

The publication does not include discussion of how to develop and select metrics for your situation, or how to best use them. We have a range of articles on those topics freely available on our website and other topic-specific publications such as **Facility Management Metrics That Matter**:
<https://facilityissues.com/facility-metrics-that-matter/>

UPDATES

This is the second edition of this document and we will continue to update it with items that invariably have been missed, suggestions from users, and changes as the industry evolves. If you register, we will send you updated versions. Please suggest measure or metrics that you find useful that are NOT included here, to include in an updated edition. **Register for updates and submit additional measures**:
<https://facilityissues.com/link/compendium/>

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KEY CONCEPTS USED IN THIS DOCUMENT

There are two key concepts used to organize the content of this document: facility dimensions and measures vs. metrics.

FACILITY “DIMENSIONS”

One of the challenges associated with facility data is that facilities have multiple “dimensions.” They can be measured by size, occupancy, cost, value, etc. For many organizations, the data for different dimensions is contained in different systems, and maybe even the responsibility of different departments.

We use eight dimensions, plus demographics, to organize the metrics in this document. Only some of these dimensions may be of interest to a particular user or for a particular purpose. A complete listing of all the terms defined in the document is contained in the Index to help you find any specific items of interest.

Each section starts with a description of the range of the facility dimension and a very brief overview of the type of data associated with it.

“METRICS” VS. “MEASURES”

We distinguish between measures and metrics.

A “**measure**” is a single dimension data value, or measurement, such as area, cost, KWH, etc.

A “**metric**” is a combination of measures, typically one divided by another, such as “gross area per occupant” or “cost per gross area.”

Many metrics cross dimensions and the convention used here is to include the metric in the category where the numerator belongs - except for those associated with staffing. The common unit of measurement for each measure or metric is also identified (using English units of measure).

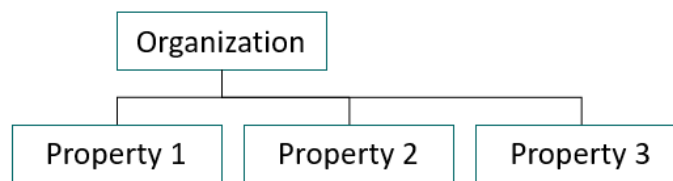
Each section of this document (except Demographics) contains four lists:

- **Core Metrics** – these are the metrics that most facility managers want to know about their facility assets and operations, those that are most common and standard, and those that use the most readily available data.
- **Additional Metrics** – these are additional metrics that can be used, some of which are only relevant in certain industries.
- **Core Measures** – these measures are the data items needed to develop the core metrics, so the ones to focus on first if you are just starting or have limited resources.
- **Additional Measures** – these measures are additional data items used by some organizations, some of which are only relevant in certain industries.

DEMOGRAPHICS

For lack of a better term, we will use “demographics” for data that comprises descriptive categories of your organization and property(s). There are no demographic “metrics,” just measures for either the organization or property.

The demographics include descriptive categories for your organization and property(s) that help compare it with like organizations and properties when benchmarking or doing data analysis. The demographics are different for organization and property when there is more than one property per organization.



CORE DEMOGRAPHIC MEASURES (ORGANIZATION)

Measure	Units	Description
Organization Type	List	The category that best describes the primary industry/focus of your organization from a standard list of categories.
Organization Size by Employees	List	Size Range: Specific to purpose, example categories such as: (1) <100 FTE, (2) 100-500 FTE, (3) 500-1,000 FTE, (4) > 1,000 FTE
Organization Size by Gross Area	List	Size Range: Specific to purpose, example categories such as: (1) <5,000 SF/500 SM, (2) 5-50k SF/.5-5k SM, (3) 50-500k SF/5-46k SM, (4) > 500k SF/ > 46k SM,

CORE DEMOGRAPHIC MEASURES (PROPERTY)

Measure	Units	Description
Property Type	List	The category that best describes the type of property (majority > 50% if mixed), based on how you track your property data. Use "Mixed, multiple properties" where data is combined for multiple properties. See lists below for specific industries.
Property Climate Zone	List	For US locations: http://www.iagsource.com/article.php/ashrae-climate-zone-map/?id=194 ; others need to ask your engineering consultant.
Property Location: Country	List	The Country where the property is located.
Property Location: State/Prov	List	The State or Province where the property is located.
Property Size by Gross Area	List	Size Range categories.

Measure	Units	Description
Property Size by Occupants	List	Size Range categories.
Property Type (Cultural Facilities)	List	<ul style="list-style-type: none"> • Central Plant/Campus Support – Standalone facilities of a utilitarian nature providing utilities and/or physical plan support to a campus of group of properties. • Education/Training – Specialized facilities for education and training functions, may include office space for educational staff, often include amenity space such as meeting rooms and café. • Event/Visitor Center – Facility for large group conference, meeting, and performance, including convention centers, performing arts centers, and theaters. • Gallery/Exhibit Hall – Specialized facilities for display of art or artifacts including museums, libraries, and similar facilities, typically have special environmental and security requirements. • Housing/Hospitality – All facilities where people reside on a permanent or temporary basis. • Mixed Use/Multiple Facilities – Grouping of facilities of multiple types of facility with such mixed uses that there is no predominate type. • Office/General Admin – Campuses or single buildings that are primarily office space, including administration, engineering, customer service financial back office, project management, and other support staff. • Storage (Climate Controlled) – Storage facilities with special climate control requirement such as for art storage. • Other – any type of facility that does not fit in one of the other categories.

Measure	Units	Description
Property Type (Utilities)	List	<ul style="list-style-type: none"> • Critical Facility (24x7) – Specialized mission critical facilities with high level of redundancy/reliability required such as data centers, network control centers, and essential call centers. Typically include NREC-CIP space, emergency generation, UPS backup power, and highly controlled/secured access. • Fleet Garage – Stand-alone facilities where the primary purpose is to repair vehicles and heavy equipment. Include central or regional facilities of this type; include local fleet garages that are part of a Service Center with Service Center. • Headquarters - Location of organization's headquarters, including such facilities for subsidiary companies. Typical headquarters represents company image so is of high quality and includes administrative offices and amenities such as cafe, auditorium, and various support functions. If your headquarters includes other function (and you have separate data for all categories, report those as separate properties.) • Mixed Use/Multiple Facilities - Groupings of facilities of multiple types or facility with such mixed uses that there is no predominate type. • Office/General Admin - Campuses or single buildings that are primarily office space, typically maintained to a lower standard than Headquarters, including administration, engineering, customer service financial back office, project management, and other support staff. • Service Center - Regional facilities that serve as the base for field operations, and typically consist of a mix of administrative, shop, warehouse, vehicle repair, parking, storage, and maybe a small co-located retail operation. (If you normally track distinct functions that are co-located with a service center, such as central warehouse, data center, or major shop complex as separate facilities, then you can report those as separate properties.) • Training Center - Specialized facilities for education and training functions, may include office space for educational staff, often include amenity space such as meeting rooms and café. • Warehouse - Stand-alone facilities where the primary purpose is to store materials and equipment. Include central or regional facilities of this type; include local storage that is part of a Service Center with the Service Center. • Other- any type of facility that does not fit in one of the other categories.

ADDITIONAL DEMOGRAPHIC MEASURES (ORGANIZATION)

Measure	Units	Description
Business Measures	Unit	Any specific unit that is of interest to an organization with respect to activities supported by their facilities such as annual visitors, customers, size of collection service area, number of research projects, sales volume, or units of production.
FM Craft Workers Union	List	The category that best describes whether or not craft workers are unionized; "Union" if more than 50 percent of the workforce is governed by contracts requiring published labor rates specified in a collective bargaining agreement. (Can track by internal staff and contractors)
FM Organization Executive	List	The category that best describes where the facilities management group reports - the top-level executive whose organization includes it.
FM Staffing Approach	List	The category that best describes the approach for how you staff your facility maintenance and operations group.
Grounds Support Mission	List	Identify if your landscaped grounds provide a significant part of the venue for your organization's mission.

Measure	Units	Description
Organization Payroll	Currency	Enter the approximate total payroll for workers supported by the properties (used for metric of FM cost as % payroll).

ADDITIONAL DEMOGRAPHIC MEASURES (PROPERTY)

Measure	Units	Description
Number of Buildings	Number	The number of buildings included in this property. A building is a fully roofed structure greater than 1,000 sq. ft./93 sq. m.
Number of Sites	Number	The number of sites included in this property. A site is a generally contiguous property (can be multiple parcels) with one or more buildings that function as a physical or functional group; a campus = 1 site.
Property "Green" Certification	List	The category that best describes the "Green building" registration or certification for this property. (Includes any established program such as: USGBC - LEED, the Australia Greenhouse Building Rating (AGBR), the UK - Building Research Environment Assessment Method Consultancy (BREAM), Green Globes, etc.)
Property Age	Years	Years since building first occupied, rounded to nearest year. Use the weighted average based on the area of all buildings included in this property.
Property Business Division	Text	OPTIONAL category to select/group properties by one of your organization's classifications.
Property Location: Postal code	Text	The postal code for the property. (Other geographic attributes can also be used such as country, state/province, etc.)
Property Nature	List	<p>Category for the property in terms of its physical arrangement:</p> <ul style="list-style-type: none"> • Stand alone or single building – Really property (not building) commonly used for separate sites that operated independently and may include more than one building and/or more than one parcel. • A space within a building – most commonly used for leased portion of a facility, or if you are splitting a function out of a property for tracking (e.g., Data Center portion of an office building). • Campus or Complex – should be used where there are multiple buildings of different uses/types on a large property. Use Stand alone if you just have a few buildings on a site that are a single functional operation. • Multiple Buildings grouped together for data reporting – use this when you have multiple properties that you wish to group because that is how you track the data, or you do not want to separate them for various reasons.
Property Setting	List	Category for the general location urban-rural of the property (or majority of properties if multiple sites).
Property System Redundancy	List	The category that best describes the level of redundancy for facility systems (recommend scale parallel to that used for data centers).
Property Tenure	List	The tenure (ownership) for the majority of the property; "Net Lease" if landlord operates and pays taxes, "Mixed" for owned buildings on land lease.
Service Level: Cleaning	List	The category that best describes the property cleaning service level (recommend using APPA categories).
Service Level: Grounds	List	The category that best describes the grounds and pavement maintenance service level.
Service Level: Indoor Climate	List	The category that best describes the property's environmental control service level; select narrow or wide tolerance if significant portions of the property are other than office-type settings.

Measure	Units	Description
Service Level: Maintenance	List	The category that best describes the property maintenance service level.

SPACE

The fundamental purpose of any facility is to provide physical space for some type of activity. Physical space is the core benefit provided by a building, structure, or property. Space has attributes of size, location, quality, condition, micro-climate, availability, and duration. Comparison to your strategic facility plan or external benchmarks will also be of interest.

This first category of measures and metrics is about the physical space provided by your facility. A facility can be comprised of both buildings (fully or partially enclosed structures) and site (exterior ground area). By default, we will talk as if a facility is a single building on a single site, but you can define a facility as a portion of a building (say leased suite) to multiple buildings on multiple parcels of land that operate or are managed as a unit (campus). You will need to be consistent with how you allocate site and common services among your facilities as you define them - “facilities” are often defined based on how your data about them is structured.

The figure below illustrates how we define and measure overall space within a building – in particular, how “gross area,” “rentable area,” and “usable area” are typically defined.

OUTLINE OF SPACE HIERARCHY FROM GROSS TO USABLE AREA

Gross-Rentable-Usable Building Area Overview	Definitions
Total Constructed Gross Area / Exterior Gross Area	The total area built and enclosed, as measured to the outside face of the exterior wall.
Exterior to Dominant	The difference between the outside face of exterior wall and "dominant" surface (BOMA) or the difference between the outside face of exterior wall and inside face of the exterior wall (IFMA).
Excluded Area	Areas such as courtyards, covered walkways, covered exterior docks, equipment pads, utility tunnels, and unheated penthouses
Interstitial Area	Areas located above or below occupied building floors that are not available for general occupancy containing building mechanical or electrical systems; includes equipment penthouses.
Restricted Headroom	Significant portions of a floor without sufficient clear, unobstructed headroom (typically 6.5 to 7.5 ft.) conforming to local building codes or required for occupancy.
Interior Parking	Totally or partially enclosed area within the building that is normally used to circulate and station vehicles. EXCEPTION: Garages used for company vehicle storage where that is a designated function of the facility such as a service center is considered Assignable Area.
Total Gross Area	
Major Vertical Penetrations	Includes openings in a floor that serve a building and system circulation function such as stairs, elevator shafts, flues, pipe shafts, vertical ducts and their enclosing walls and floor area at the lowest level at which they originate.
Void Areas	Common areas without a floor where a floor might otherwise be expected or measured, such as upper floors of multi-story atria or lobbies, light wells, auditoria or the area adjacent to a partial-floor mezzanine.
Rentable Area / Gross Leasable Area	
Service Areas	Areas that provide services to enable occupancy of a building, such as mechanical and utility rooms, custodial closets, and rest rooms.
Base Building / Primary Circulation	The path for access to egress stairs, elevator lobbies, toilet rooms, refuge areas, building lobbies and entrances (per code = base circulation, actual fit-out = primary circulation).
Usable Area	
Amenity / Common Area	Common space and amenities shared by occupant groups such as meeting rooms, copy areas, pantries, or building amenities.
Assignable Area	Areas assigned to occupant groups or functions.

The next figure illustrates examples of the types of usable space that may be in a facility. The specific types are defined based upon the purpose/application (or consensus for benchmarking)

OUTLINE OF BUILDING SPACE TYPES

Building Area Types Overview	Space Types
Interior Parking	Structured Parking With Mechanical Ventilation (supporting Office & Retail space)
Total Gross Area	
Major Vertical Penetrations	
Void Areas	
Rentable Area / Gross Leasable Area	
Service Areas	Building Services
Base Building / Primary Circulation	Common Area
Usable Area	
Amenity / Common Area	Support Space Area
	Food Service
	Auditoriums / Theaters
Assignable Area	Office Space:
	Office Area - Individuals
	Office Area - Collaborative
	Office Area - Special
	Spaces with Special Requirements:
	Computer Rooms / Raised Floor Areas
	Laboratory / Testing Area
	Auxiliary Spaces:
	Shops
	Storage Area
	Storage Area - Climate Controlled
	Storage Area - Vehicles
	Cultural Facility Spaces:
	Exhibition Areas - Permanent
	Exhibition Areas - Temporary
	Library
	Retail / Gift Shops
	Special Event Areas
	Research / Industrial Spaces:
	Fabrication Area - Type A
	Fabrication Area - Type B
	Fabrication Area - Type C
	Radiation Control Area
	Other Type of Space (does not fit any category above)

This figure shows how we can define and measure the property (site) area for outdoor space areas.

OUTLINE OF SITE AREAS

Summary of Site Area Calculation	Definitions
Total Site Area	Total land area that is part of this property
Site Area - Buildings	Land area occupied by building footprints.
Site Area - Pavement	Land area with maintained pavement such as roads, parking, walks, plazas and active storage areas. May include canopy or open-sided structures.
Site Area - Storage	Land area used for outdoor storage yard, minimally maintained pavement or gravel, with site lighting and fencing, limited maintenance.
Site Area - Maintained Landscaped	
Site Area - Irrigated Landscaped	The portion of the maintained landscaped area with active irrigation system; exclude areas with irrigation system not normally used.
Site Area - Non-irrigated	The remaining portion of the maintained landscaped area.
Site Area - Unused/Unmaintained Area	"Wild areas / portions of property left in natural state.

CORE SPACE METRICS

Metric	Units	Description / Calculation
Gross Area per Business Measure (varies)	FT2/M2 per Unit	Ratio of "Gross Area" per any key business measure such as # Customers, # Visitors, Sales Volume, Units of Production, # Research Projects, # Collection Items, etc.
Gross Area per Occupant	FT2/M2 per FTE	"Gross Area" per "Average Daily Occupancy", reflects the average density of use.
Gross Area per Worker	FT2/M2 per FTE	"Gross Area" per "Average Daily Workers", reflects the average density of use.
Gross Area per Worker Benchmark	FT2/M2 per FTE	Target value for "Gross Area per Worker", from organizational goal or benchmarking program.
Gross Area per Supported Worker	FT2/M2 per FTE	"Gross Area" per "Total Supported Workers" (includes remote and hybrid workers)
Gross Area per Workspace	FT2/M2 per Each	"Gross Area" per "Total Workstations", reflects the average density of capacity.
Percent Usable Area	Percent	Ratio of "Usable Area" per "Gross Area" for the property, reflects the efficiency of the property for providing usable area.
Percent Utilized Area	Percent	Ratio of "Usable Area" minus "Vacant Area" per "Usable Area", reflects the usable capacity used (and inverse of potential growth area).

ADDITIONAL SPACE METRICS

Metric	Units	Description / Calculation
Office Area per Office Worker	FT2/M2 per FTE	Office area per "Average Daily Workers: Office", reflects the average density of use of the office space.
Office Area per Supported Worker	FT2/M2 per FTE	Office area per supported office FTE, includes average daily occupants on site and remote workers supported by this property.
Office Area per Workspace	FT2/M2 per Each	Office area per office workstation on property, reflects the average density of use.
Percent Site Utilization	Percent	Ratio of total site area used for buildings, pavements, and maintained grounds, reflects the density of development. (Not the same as Floor Area Ratio or Lot Coverage metrics used by development regulations)
Percent of Space by Type (varies)	Percent	Portion of Gross or Usable Space by Space Type (see Additional Measures for different Space Types).
Percent Workspaces Meeting Standard	Percent	The percent of workspace at this property that are consistent with the organization's adopted space standards.
Space Complexity Factor	Ratio	Ratio of the assessed complexity of the space, calculated by assigning a weighting factor (typically office space = 1) to each type of space and then calculating a weighted average for the facility.
Usable Area per Worker	FT2/M2 per FTE	Usable facility area per average daily occupants on site, reflects the average density of use.
Usable Area per Supported Worker	FT2/M2 per FTE	Usable facility area per supported FTE, includes average daily occupants on site and remote workers supported by this property, reflects the average density of use.
Usable Area per Workspace	FT2/M2 per Each	Usable facility area per workstation on property, reflects the average density of use.

CORE SPACE MEASURES

Measure	Units	Description
Cleaned Area	FT2/M2	Include the "Usable Area" that is part of your active cleaning program for the cleaning SLA noted for this property.
Gross Area (Cultural Institutions, Education, Healthcare)	FT2/M2	Total area on all floors of a building included within the outside faces of its exterior walls, including all vertical penetration areas, for circulation and shaft areas that connect one floor to another. Use Gross Area as defined by National Center for Educational Statistics: https://nces.ed.gov/pubs2006/ficm/content.asp?ContentType=Section&chapter=3&section=2&subsection=1 . Generally equals GSF/GSM in APPA Facilities Performance Indicators (FPI) Survey.
Gross Area (All Others)	FT2/M2	Total area of building measured to the outside of walls for enclosed space with more utilities than lighting. Do not include courtyards, covered walkways, covered exterior docks, equipment pads, interstitial space, utility, tunnels, unheated penthouses, and support equipment mezzanines. The sum of the floor areas on all levels of a building that are totally enclosed within the building envelope including below grade (basement) floor areas and interior parking. Do not include spaces that do not have sufficient clear headroom to conform to local building codes or that have headroom less than that required for occupancy (typically 6.5 to 7.5 ft (2.0 to 2.3 m). Generally, equals BOMA Exterior Gross Area.
Usable Area	FT2/M2	The actual occupiable area = tenant areas and amenity areas for property occupants including secondary circulation; Excludes major vertical penetrations, primary circulation halls, lobbies, mechanical rooms, toilet rooms and custodial areas. Consistent with ANSI/BOMA Usable Area, IFMA Plannable Area.
Site Area: Maintained Landscaped	A/HA	Portion of "Site Area" that has maintained landscape such as gardens and lawns. Do not include "wild" areas with minimal effort to maintain.

ADDITIONAL SPACE MEASURES

Measure	Units	Description
Building Area: (by Type)	FT2/M2	Building area by type of space based on categories useful for the organization. (See "Outline of Space Types" in the diagram above.
Conditioned Area	FT2/M2	Include the portion of your "Gross Area" that has air conditioning and/or special humidity/climate control beyond basic heat.
Maintained Area	FT2/M2	If you maintain all of the facility at the maintenance SLA noted for this property, report the "Gross Area", exclude gross lease areas maintained by landlord and "Surplus Area" that has little or no maintenance activity.
Floor Area Ratio	Ratio	The ratio of gross building area per total site area, most commonly used in urban settings.
Rentable Area	FT2/M2	Rentable areas using BOMA, IFMA or other accepted standard of calculation.
Surplus Area	FT2/M2	"Gross Area" that is awaiting disposition or considered "surplus" and may be referred to as "mothballed," "cheap to keep," or lighted with "stumble lighting."
Site Area	A/HA	Total land area that is part of this property, can be one or more parcels, contiguous or not, developed or not, that function as a unit.
Site Area: (by Type)	A/HA	Site area by type of space based on categories useful for the organization. (See "Outline of Space Types" in the diagram above.
Vacant Area	FT2/M2	"Usable Area" that is unoccupied and available for usage, unfinished area that would require the equivalent of tenant improvements, or space currently under renovation and not available for occupancy. Does NOT include "Surplus Area."

OCCUPANCY AND USE

Understanding how the physical space is occupied and used is an important aspect of identifying space needs or determining surplus space. Occupancy has attributes of persons (FTE), workspaces, hours of use, and business unit/function. Comparison to your internal space standard or external benchmarks will also be of interest.

For office space, occupancy has traditionally been based on assigned workspaces. We expect more interesting measures going forward such as occupied-hours to evaluate use of free-address workspaces and support for remote workers. (There are many new applications becoming available to manage space like this.)

Non-office facilities use other measures for occupancy and use intensity that reflect their purpose. These include things such as inventory /CF (storage), production units /SF (manufacturing), or research /SF (labs). While of great interest to leadership, our experience is that some of these measures may be difficult to obtain.

CORE OCCUPANCY METRICS

Metric	Units	Description / Calculation
Facility Operating Hours/Week	Hours/Week	The average occupied operating hours per week of the primary facility functions. Enter the normal (non-holiday) weekly hours of operation for the business using the property. For example, a museum would enter the total hours for regular staff work hours plus regular times open to the public outside those hours.
Workers per Workspace	Ratio	Ratio of "Average Daily Workers " vs. "Total Workstations" for this property.
Workers per Workspace Benchmark	Percent	Target value for Workers per Workspace, from organizational goal or benchmarking program.
Workers per Area per Occupied Hour	Number	One of the potential new ways of measuring facility occupancy with more dynamic environments – average persons per area during normal operating hours.

ADDITIONAL OCCUPANCY METRICS

Metric	Units	Description / Calculation
Percent Occupants by Type	Percent	Percent of "Average Daily Occupancy" that are Workers or Visitors.
Percent Workers by Type	Percent	Percent of Key Occupant Types (specific to your industry) vs. "Average Daily Workers" for this property.
Percent Remote Workers	Percent	Percent of "Workers: Remote" vs. "Total Supported Workers" for this property.
Percent Available Workspaces	Percent	Percent of unassigned workspaces (legacy measure where workspaces are assigned to individuals or departments) to identify vacancy rate or capacity for growth. (Can also track by business unit, function, or facility sub-area)
Percent Workers by Business Unit	Percent	Percent of Key Occupant Types (specific to your industry) vs. "Average Daily Workers" by business unit for this property.

CORE OCCUPANCY MEASURES

Measure	Units	Description
Average Daily Occupancy	Number	Average of daily occupancy based on number of persons who entered the facility. Data typically based on combination of badge-in data, sensors, sign-ins, and space reservation system; can be based on estimates if better data is not available. Includes Average Daily Workers and Average Daily Visitors.
Average Daily Visitors	Number	Report the average daily number of visitors at the facility, including customers, guests, meeting visitors, employees assigned to other locations who visit your staff on the site, customers, and visitors who come to the site for Retail or Public areas that are provided as part of the site function.
Average Daily Workers	Number	Total number of workers using the facility who show up on a regular basis (include permanent employees, temporary personnel, contract employees, tenants, and on-site consultants). Average the daily numbers of workers who enter the facility (if tracked) or use the number of workers assigned to the facility who regularly show up. Do not include remote workers.
Total Workstations	Number	All workstations configured for a single worker at a time, office or non-office, assigned, free-address, or rotating such as shared multi-shift workstations, reception/security posts, etc.

ADDITIONAL OCCUPANCY MEASURES

Measure	Units	Description
Average Daily Workers: 1st shift	FTE	Number of "Average Daily Workers" on the first or main shift of a multi-shift operation. (Subset of Average Daily Workers)
Average Daily Workers: Non-Office	FTE	Number of "Average Daily Workers" who are NOT office workers. (Subset of Average Daily Workers)
Average Daily Workers: Office	FTE	Number of "Average Daily Workers" who work in office workspace whether space is assigned or free address. (Subset of Average Daily Workers)
Average Daily Workers: Office 1st shift	FTE	Number of "Average Daily Workers" on the first or main shift of a multi-shift operation. (Subset of Average Daily Workers: Office)
Remote Workers Supported	FTE	Report all workers who do not have an assigned workspace but are supported or associated with this facility (Home-based, telework, telecommuting, and virtual work all refer to performing work on a regular basis in a location other than the principal office, such as the employee's home, a nearby telework hoteling center, or home-based reporting field workers).
Total Supported Workers	FTE	Total number of "Average Daily Workers" and "Remote Workers Supported" for this facility.
Workers by Business Unit	FTE	You may wish to track worked by business unit for metrics. (Subset of Average Daily Workers)
Workers by Type	FTE	Based on your industry there may be key occupant types (e.g., Researcher) that are tracked separately for metrics (Subset of Average Daily Workers)
Workstations: Unassigned	Number	Number of "Total Workstations" that not assigned (legacy measure where workspaces are assigned to individuals - Subset of Total Workstations)
Workstations: Non-Office	Number	Number of "Total Workstations" that are non-office workstations configured for a single worker at a time, such as lab or work benches, shared multi-shift control workstations, reception/security posts, etc. (Subset of Total Workstations)

Measure	Units	Description
Workstations: Open Office	Number	Number of "Total Workstations" that are open office environment; include assigned and unassigned cubicles, touch-down spaces, and individual workspaces in project/team areas. Exclude individual offices with a door. (Subset of Total Workstations)
Workstations: Private Offices	Number	Number of "Total Workstations" that enclosed office environment (with a door) configured for a single worker at a time; include assigned and unassigned offices. (Subset of Total Workstations)

OPERATING COSTS

Annual (monthly) operating costs may be the primary metrics for many executives. These costs for facilities include rent, maintenance, cleaning, utilities, physical security, groundskeeping, real estate taxes, and minor renovations. Some, but not all, of these costs are typically the responsibility of a facilities group and others may be included in other budgets and therefore less visible. Comparison to your annual budget and external benchmarks will also be of interest.

Our perspective on operating costs is that of “managerial activity-based accounting” vs. GAAP or IFRS, so we will be most interested in the attributes of location, activity, and cost type. NOTE: Our classification of costs is for the purpose of managing organization-used facilities and associated operations, not income properties, and not for financial statements.

The measures in this section can be used to identify the total cost of occupying or operating the facility (~ TCO), which is not something all organizations consider. They include the operating cost types outlined in the diagram below.

OUTLINE OF TOTAL FACILITY-RELATED COSTS

TCO - "Total Cost of Ownership" includes these cost categories associated with having a facility.

Operating Costs	Annual costs for property operation
Fixed Costs	Costs associated with having control of the property (own or lease).
Direct Operating Costs	Direct costs associated with maintaining and operating the property(s).
Indirect Operating Costs (Overhead)	Indirect costs associated with managing, planning, and supporting the property operations.
Capital / Project Costs	One-time spending that restores or improves the condition or function of the property.
Facility Related Services	Direct annual costs of services often performed by facility group, but which support the property occupants and not the property asset(s).

The first type of costs are the **Fixed Operating Costs**, those associated with having control of the property that are generally set once the facility is owned or leased. These costs are often of most interest to the real estate group, although rents may be some of the larger line items in the annual facility budget.

OUTLINE OF FACILITY FIXED COSTS

Fixed Costs	Definitions
Rent / Lease	The annual costs associated with owning or leasing the property. Any rent paid to third party for the facility (not internal allocation for cost of space).
Debt Service / Depreciation	Depreciation of building and improvement (fixed facility plant); include facility depreciation for leasehold improvements; do not include furniture and equipment.
Property Taxes	Real estate property taxes on the facility.
General Property Insurance	Property and casualty insurance costs for your property; only include amounts paid or charged to budget.
Other Fixed Costs	Any other facility-related fixed costs for the organization not included elsewhere.

Related to fixed costs are capital/project costs, the next facility dimension along with asset value and condition.

The most commonly considered costs associated with facilities are the **Direct Operating Costs** - those associated with maintaining and operating the property(s).

OUTLINE OF DIRECT OPERATING COSTS

Direct Operating Costs	Definitions
	The direct annual costs associated with maintaining and operating the property(s).
Custodial Costs	All janitorial services for cleaning ceilings, windows, walls, floors, carpets, and removal of trash from work areas. Include costs of labor, cleaning supplies, materials, tools, equipment, uniforms, supervision, administration.
Maintenance Costs	Building maintenance costs include HVAC, Electrical, Plumbing, Energy Mgmt / Security Systems, Mechanical, Waste Water Treatment, Reverse Osmosis De-Ionized Water (non production only), Elevators, Carpentry, Painting, Roofing, Flooring, General Labor, Miscellaneous Maintenance, Maintenance Support assistance from Plant Engineering, Supervision & Management, direct Clerical Support, Building Operators, Trouble Call Dispatcher and Equipment, Work Order Administration, Vehicles - Operation and Maintenance (direct support building maintenance only), Parts Ordering/Buyer. Exclude work on process equipment or manufacturing equipment.
Maintenance Costs - Exceptional	"Exceptional" maintenance costs are those that were incurred in the maintenance budget during the reporting period, but not typical annual O&M costs. For example, normal roof maintenance and repair would be included in "Standard Costs." However, replacement of a substantial portion of the roof (non-capital) would be included in "Exceptional Costs." Report those costs (here and not above).
Site Maintenance Costs	
Grounds Maintenance Costs	Include all costs for ground upkeep such as mowing, landscaping, maintenance of equipment and related costs.
Pavement Maintenance Costs	Pavement maintenance costs include service contracts, expenses, employee compensation and benefits associated with routine maintenance of hardscape; Include minor repairs, coating/resealing, and parking lot lighting. Include items done at least once a year such as sweeping and patching.
Snow Removal Costs	Cost of snow plowing, salting, removal, if applicable.
Security Costs	Costs for physical security including labor of those providing security services such as officers, receptionists, alarm Monitoring and access control staff, patrols and non-labor of security services such as uniforms, vehicles, access control systems, alarm and CCTV systems. Exclude costs of executive protection, investigations, and special events.
Utility Costs - Power	
Purchased Electricity Costs	Costs of electricity purchased from your utility, include any demand charges, penalties, or credits imposed by your utility company.
Purchased Natural Gas Costs	Costs of natural gas purchased from your utility, include any demand charges, penalties, or credits imposed by your utility company.
District Heating / Cooling Costs	District heating/cooling is a system for distributing hot water, steam, or chilled water produced in a centralized location for heating and cooling requirements such as space heating/cooling and water heating. (The district can be campus or public - any that is external to the building. Include all energy costs in the most appropriate category.)
On-Site Renewable Energy Costs	On Site Renewable Energy includes solar, wind, hydro, geothermal power generated on-site or at location dedicated to this property; include all cost associated with this power source.
On-Site Generators Costs	On Site Generators include power generated on-site from any non-renewable energy source such as gas generators or CHP.
All Other Energy/Fuels Costs	Include the cost for any energy or fuel not included above.
Utility Costs - Water	
Domestic Water Costs	Costs for public water service or treated well water service for the property. Include any district fees along with usage.
Landscaping Water Costs	That portion of your water cost associated with grounds irrigation.; if you cannot separate costs for your grounds / landscaping water, include them in domestic water costs.
Mechanical Systems Water Costs	That portion of your water costs associated with mechanical systems/make-up such as cooling towers, steam plants, etc.; if you cannot separate these costs, include them in domestic water costs.
Sewer Costs	If you cannot separate your sewer costs, include them in domestic water costs.
Any Other Water Costs	Include the cost for any water conservation program/fees not included above, any costs of gray-water systems not part of normal plumbing maintenance, and any storm water district fees.
Waste & Recycling	
Off-Site Trash Disposal Costs	Include pickup, hauling, and tipping fees for all domestic and non-hazardous waste. Exclude all waste associated with production and construction.
Recycling Costs	Include pickup, hauling, and disposal of all recycled materials; include compost operations if applicable.
All Other Operating Costs	Include any direct facility-specific operating costs not included above.

Related to direct operating costs (associated with the facility asset) are the soft costs of facility related services (food service, mail operations, chemical management, special EH&S services, copy/reproduction, room setups, and other "tenant services" or amenities). These are not included in this document even though they are important parts of your facility operation.

The last set of operating costs are **Indirect Operating Costs**. Indirect costs are those associated with managing, planning, and supporting the property operations. This is the facility group overhead that is not specific to any facility but required whether the facility operations are internal or contracted.

OUTLINE OF INDIRECT OPERATING COSTS

Indirect Operating Costs (Overhead)	Definitions
	The indirect annual costs associated with managing, planning, and supporting the property operations.
Facility Management Administration	
Admin & Mgmt Staff	All levels of internal/external management above FM Supervisors such as Account Manager/Facility Director (pro-rate if responsibilities include non-facility functions such as Fleet management). Include Lease administration and representation as landlord or tenant for property rented or sublet.
FM Contract Fees	Management fees and fixed costs associated with contracted operations that should be distributed across all properties.
Facility Support Function Costs	All non-property specific, non-project specific, support functions such as clerical, accounting, FM call staff, that support the ongoing facilities operation that should be distributed across all properties.
Facility Planning and Assessment	Non-project specific planning, analysis, and assessment of facilities to develop long range plans and capital renewal/investment programs.
Property Technology Costs	Subscriptions, license fees, use fees, technical support and other costs for use/maintenance of all property-specific systems such as CMMS, CAFM, IWMS, BAS, BMS, EMS, mass notification, smart tracking system.

CORE COST METRICS

Metric	Units	Description / Calculation
Cost per Area Benchmarks	Currency per Unit	Target value for any cost metrics, from organizational goal or benchmarking program
Custodial Cost per Cleaned Area	Currency per FT ² /M ²	"Custodial Cost" per "Cleaned Area"
Custodial Cost per Gross Area	Currency per FT ² /M ²	"Custodial Cost" per "Gross Area"
Custodial Cost per Occupant	Currency per FTE	"Custodial Cost" per "Average Daily Occupancy"
Direct Operating Cost per Business Measure	Currency per Unit	Ratio of "Direct Operating Cost" per any key business measure such as # Customers, # Visitors, Sales Volume, Units of Production, # Research Projects, # Collection Items, etc.
Direct Operating Cost per Gross Area	Currency per FT ² /M ²	"Direct Operating Cost" per "Gross Area"
Direct Operating Cost per Occupant	Currency per FTE	"Direct Operating Cost" per "Average Daily Occupancy"
Maintenance Cost per Gross Area	Currency per FT ² /M ²	"Maintenance Cost" per "Gross Area"
Maintenance Cost per Occupant	Currency per FTE	"Custodial Cost" per "Average Daily Occupancy"
Utility Cost per Gross Area	Cost / GSF	"Utility Cost" per "Gross Area"
Utility Cost per Occupant	Currency per FTE	"Utility Cost" per "Average Daily Occupancy"
YTD Budget Variance	Percent	Percent variance of any cost measure vs budget for that measure (listed as YTD but can be annual or monthly).
YTD Cost vs. Prior Year	Percent	Percent variance of any cost measure vs prior year actual for that measure.

ADDITIONAL COST METRICS

Metric	Units	Description / Calculation
Building Maintenance Cost per Gross Area	Currency per FT ² /M ²	"Custodial Cost" per "Gross Area"
Building Maintenance Cost per Maintained Area	Currency per FT ² /M ²	"Maintenance Cost" per "Maintained Area"
Building Maintenance Cost per Occupant	Currency per FTE	"Custodial Cost" per "Average Daily Occupancy"
Energy Cost per Conditioned Area	Currency per FT ² /M ²	"Energy Cost" per "Conditioned Area"
Energy Cost per Gross Area	Currency per FT ² /M ²	"Energy Cost" per "Gross Area"
Energy Cost per Occupant	Currency per FTE	"Energy Cost" per "Average Daily Occupancy"
Fixed Cost per Gross Area	Currency per FT ² /M ²	"Fixed Cost" per "Gross Area"
FM Cost as % Organization Cost	Percent	"Total FM Operating Cost" vs. "Total Organization Operating Cost"
Grounds Cost per Gross Area	Currency per FT ² /M ²	"Grounds Cost" per "Gross Area"
Grounds Cost per Grounds Area	Currency per A/HA	"Grounds Cost" per "Site Area: Maintained Landscaped"
Overhead Cost per Gross Area	Currency per FT ² /M ²	"Indirect Operating Cost" per "Gross Area"
Pavement Cost per Gross Area	Currency per FT ² /M ²	"Pavement Cost" per "Gross Area"
Pavement Cost per Paved Area	Currency per A/HA	"Pavement Cost" per "Site Area: Pavement"
Percent Cost Internal	Percent	Percent of any cost measure that is internal Cost vs. contracted.
Security Cost per Gross Area	Currency per FT ² /M ²	"Security Cost" per "Gross Area"
Security Cost per Post	Currency per Post	"Security Cost" per "Security Post"
Snow Removal Cost per Gross Area	Currency per FT ² /M ²	"Snow Removal Cost" per "Gross Area"
Snow Removal Cost per Paved Area	Currency per A/HA	"Snow Removal Cost" per "Site Area: Pavement"
Total Facility Cost per Business Measure	Currency per Unit	Ratio of "Total Facility Operating Cost" per any key business measure such as # Customers, # Visitors, Sales Volume, Units of Production, etc.
Total Facility Cost per Gross Area	Currency per FT ² /M ²	"Total Facility Operating Cost" per "Gross Area"
Total Facility Cost per Gross Area Benchmark	Currency per FT ² /M ²	Target value for "Total Facility Operating Cost per Gross Area", from organizational goal or benchmarking program
Total Facility Cost per Occupant	Currency per FTE	"Total Facility Operating Cost" per "Average Daily Occupancy"

Metric	Units	Description / Calculation
Total Facility Cost per Occupant Benchmark	Currency per FTE	Target value for "Total Facility Operating Cost per Occupant", from organizational goal or benchmarking program
Utility Cost per Conditioned Area	Currency per FT2/M2	"Utility Cost" per "Conditioned Area"
Water Cost per Gross Area	Currency per FT2/M2	"Water Cost" per "Gross Area"
Water Cost per Occupant	Currency per FTE	"Water Cost" per "Average Daily Occupancy"
Waste Cost per Gross Area	Currency per FT2/M2	"Waste Cost" per "Gross Area"
Waste Cost per Occupant	Currency per FTE	"Waste Cost" per "Average Daily Occupancy"

CORE COST MEASURES

Measure	Units	Description
Direct Operating Cost	Currency	"Custodial Cost" plus "Maintenance Cost" plus "Security Cost" plus "Utility Cost" plus "Waste Cost"
Facility Operating Budget		Current year budget by cost measure (by property if multiple properties).
Custodial Cost	Currency	Include all internal and contracted janitorial services for cleaning ceilings, windows, walls, floors, carpets, and removal of trash from work areas. Include loaded costs of labor, cleaning supplies, materials, tools, equipment, uniforms, supervision, administration. Do not include day porter services.
Energy Cost	Currency	Include all types of energy costs "Energy: Purchased Electricity Cost" plus "Energy: Purchased Natural Gas Cost" plus "Energy: District Heating / Cooling Cost" plus "Energy: On-Site Generators Cost" plus "Energy: On-Site Renewable Energy Cost" plus "Energy: Other Fuels Cost"
Indirect: FM Administrative Cost	Currency	Include all levels of internal/external management above FM Supervisors such as Account Manager/Facility Director (pro-rate if responsibilities include non-facility functions such as Fleet management). Include management fees and fixed costs associated with contracted operations that should be distributed across all properties.
Maintenance Cost	Currency	Include all internal and contracted building maintenance costs ("Building Maintenance Cost" and "Grounds Maintenance Costs" and "Pavement Maintenance Costs" and "Snow Removal Costs" described in Additional Cost Measures below).
Rent / Lease Cost	Currency	Include net rent paid to and received from third parties for the facility (rent paid including any direct operating costs not listed separately less any rent received including direct operating costs not listed separately).
Security Cost	Currency	Include all internal and contracted costs for physical security including fully loaded labor of those providing security services such as officers, receptionists, alarm monitoring and access control staff, patrols and non-labor of security services such as uniforms, vehicles, access control systems, alarm and CCTV systems. Exclude costs of executive protection, investigations, and special events.
Utility Cost	Currency	"Energy Cost" plus "Water Cost"

Measure	Units	Description
Waste Cost	Currency	Include all waste and recycling costs except those in custodial (“Waste: Domestic Trash Disposal Cost” plus “Waste: Recycling Cost” in Additional Cost Measures below).
Water Cost	Currency	Include all water supply and management costs (“Water Cost: Domestic” plus “Water Cost: Grounds” plus “Water Cost: Mechanical” plus “Water Cost: Sewer” plus “Water Cost: Other” in Additional Cost Measures below).

ADDITIONAL COST MEASURES

Measure	Units	Description
Cost by Internal / External	Currency	All of the cost types can be separately tracked by internal (internal labor, direct purchase of material, internal overheads) vs external (contract/external labor and materials included in contracts) if that distinction is of interest or easier to track.
Cost by Type	Currency	All of the cost types can be separately tracked by labor, material, contract, direct payment (government fees and utilities) if that distinction is of interest or easier to track.
Building Maintenance Cost	Currency	“Building Maintenance Cost: Exceptional” and “Building Maintenance Cost: Regular”
Building Maintenance Cost: Exceptional	Currency	"Exceptional" maintenance costs are those that were incurred in the maintenance budget during the reporting period, but not typical annual O&M costs. For example, normal roof maintenance and repair would be included in "Standard Costs." However, replacement of a substantial portion of the roof (non-capital) would be considered an Exceptional Cost. Report those costs here and not as part of “Building Maintenance Cost” (to allow for variations in capital accounting rules.)
Building Maintenance Cost: Regular	Currency	Building maintenance costs include HVAC, Electrical, Plumbing, Energy Mgmt. / Security Systems, Mechanical, Waste Water Treatment, Reverse Osmosis De-Ionized Water (non-production only), Elevators, Carpentry, Painting, Roofing, Flooring, General Labor, Miscellaneous Maintenance, Maintenance Support assistance from Plant Engineering, Supervision & Management, direct Clerical Support, Help Desk, Building Operators, Trouble Call Dispatcher and Equipment, Work Order Administration, Vehicles - Operation and Maintenance (direct support building maintenance only), Parts Ordering/Buyer. Exclude work on process equipment or manufacturing equipment. Internal costs include full loaded internal labor and direct purchase materials. Contracted costs include contracted services and materials.
Energy: Purchased Electricity Cost	Currency	Costs of electricity purchased from your utility, include any demand charges, penalties, or credits imposed by your utility company.
Energy: Purchased Natural Gas Cost	Currency	Costs of natural gas purchased from your utility, include any demand charges, penalties, or credits imposed by your utility company.
Energy: District Heating / Cooling Cost	Currency	District heating/cooling is a system for distributing hot water, steam, or chilled water produced in a centralized location for heating and cooling requirements such as space heating/cooling and water heating.
Energy: On-Site Generators Cost	Currency	On Site Generators include power generated on-site from any non-renewable energy source such as gas generators or CHP.
Energy: On-Site Renewable Energy Cost	Currency	On Site Renewable Energy includes solar, wind, hydro, geothermal power generated on-site or at location dedicated to this property; include all cost associated with this power source.

Measure	Units	Description
Energy: Other Fuels Cost	Currency	Include the cost for any energy or fuel not included above.
Grounds Maintenance Cost	Currency	Include all costs for ground upkeep such as mowing, landscaping, maintenance of equipment and related costs; include contracted services, materials, and full loaded internal costs.
Pavement Maintenance Cost	Currency	Pavement maintenance costs include service contracts, expenses, employee compensation and benefits associated with routine maintenance of hardscape; Include minor repairs, coating/resealing, and parking lot lighting. Include items done at least once a year such as sweeping and patching. Include contracted services, materials, and full loaded internal costs.
Snow Removal Cost	Currency	Snow removal, salting, clean-up around doors, and repairs at end of year; include contracted services, materials, and full loaded internal costs.
Waste: Domestic Trash Disposal Cost	Currency	Include pickup, hauling, and tipping fees for all domestic and non-hazardous waste. Exclude all waste associated with production and construction.
Waste: Recycling Cost	Currency	Include pickup, hauling, and disposal of all recycled materials; include compost operations if applicable. If net profit made from sale of materials enter 0.
Water Cost: Domestic	Currency	Include cost of potable water and sewer service from municipal system, wells, or on-site treatment along with district fees associated with usage.
Water Cost: Grounds	Currency	That portion of your water cost associated with grounds irrigation if tracked separately.
Water Cost: Mechanical	Currency	That portion of your water costs associated with mechanical systems/make-up such as cooling towers, steam plants, etc. if tracked separately.
Water Cost: Other	Currency	Include the cost for any water conservation program/fees not included in the domestic water cost, any costs of gray-water systems not part of normal plumbing maintenance, and any storm water district fees.
Other Operating Cost	Currency	Include any direct facility-specific operating costs not included above.
Fixed Operating Cost	Currency	“Fixed: Debt Service / Depreciation” plus “Fixed: Property Insurance” plus “Fixed: Property Taxes” plus “Rent / Lease Cost” plus “Fixed: Other Cost”
Fixed: Debt Service / Depreciation	Currency	Include depreciation of fixed facility plant; include facility depreciation for leasehold improvements; do not include furniture and equipment (FFE) or IT equipment.
Fixed: Property Insurance	Currency	Include property and casualty insurance costs for your property portfolio; only include amounts paid or charged to budget.
Fixed: Property Taxes	Currency	Include real estate property taxes on the facility and land.
Fixed: Other Cost	Currency	Any other facility-related fixed costs for the organization not included elsewhere.
Indirect Operating Cost	Currency	“Indirect: Facility Planning and Assessment” plus “Indirect: Facility Support Function Cost” plus “Indirect: FM Administrative Cost” plus “Indirect: Property Technology & Systems” plus “Indirect: Other Operating Cost”
Indirect: Facility Planning and Assessment	Currency	Include non-project specific planning, analysis, and assessment of facilities to develop long range plans and capital renewal/investment programs.
Indirect: Facility Support Function Cost	Currency	Include all non-property specific, non-project specific, support functions such as clerical, accounting, FM call staff, facility-specific environment, health, & safety support for the ongoing facilities operation that should be distributed across all properties.

Measure	Units	Description
Indirect: Property Technology & Systems	Currency	Include subscriptions, license fees, use fees, technical support and other costs for use/maintenance of all property-specific systems such as CMMS, CAFM, IWMS, BAS, BMS, EMS, mass notification, smart tracking system, sensors. Include ongoing data acquisition, user training, staff, and contractor/consultant fees. Do not report this cost in other sections of the survey such as maintenance or facility support.
Total Facility Operating Cost	Currency	“Direct Operating Cost” plus “Fixed Cost” plus “Indirect Operating Cost”
Total Organization Operating Cost	Currency	Total operating cost for the organization for comparable time period.

ASSET VALUE AND CAPITAL COSTS

Major capital costs are usually separate from the operating costs and capital projects are often the responsibility of a real estate or major projects group. The associated annual debt service or depreciation is usually a below-the-line expense reported by the finance group. Two categories of capital investments are of interest:

- Capital maintenance - replacing facility systems as they reach the end of their lifespan.
- Capital improvements - creating or changing a facility’s purpose or function including property acquisition, new development, and major renovations / expansion projects.

Our interest in capital costs is related to the asset condition, value, and investment, especially by system and location. Asset values may not be reviewed on a regular basis and can be calculated in different ways making metrics complicated. Organizations may also have different rules for capital expenses at different facilities and in different jurisdictions so adjustment may be required for atypical situations. Comparison to your annual budget and external benchmarks will also be of interest. (Note: project management systems will have additional, more granular measures and metrics for project management purposes.)

COMMON BUILDING SYSTEM (ELEMENT) CATEGORIES **

Major Systems	SubSystems	Systems *	Definitions	
SUBSTRUCTURE & SUPERSTRUCTURE	Foundations	STRUCTURE	Include key seismic and weather protection elements in OTHER system. Include any physical security barriers in SECURITY System.	
	Structure			
	Exterior Closure			
INTERIORS	Roofing		Include any key egress elements not included in LIFE SAFETY or SECURITY in OTHER system.	
	Interior			
	Staircases			
SERVICES	Interior Finishes			
	Conveying Systems		Include mission critical equipment in OTHER system.	
	Plumbing	WATER	Include all key potable, mechanical, and process water supply and wastewater systems supplying facility systems and operations. Include systems from point of utility service to point of discharge.	
	HVAC	HVAC	Include all HVAC systems required for facility operations and to provide code-compliant conditions for building occupants.	
	Fire Protection	LIFE SAFETY	Include fire detection/suppression, egress lighting, and any health safety sensors (CO2).	
	Electrical		ELECTRICAL	Includes all power generation, storage, supply, and distribution dedicated to this facility’s operations. Include systems from point of generation or utility service.
			COMMUNICATIONS	Include physical communication and data systems and components that are part of the facility infrastructure including components that are part of smart building systems. Exclude internal data equipment under the responsibility of IT/IS group.
		SECURITY	Include all physical security systems and components including locks, alarms, sensors, cameras, and access control system. Exclude equipment on this site that serves other facilities (e.g. central monitoring station).	
EQUIPMENT & FURNISHINGS	Equipment Furnishings		Include mission critical equipment in OTHER system.	
SPECIAL CONSTRUCTION	Special Construction, Facilities, Controls		Include mission critical facilities or controls in OTHER system.	
SITWORK	Site Civil / Mechanical		Include with related building system.	
	Site Electrical			
	Site Improvements			
		OTHER	Anything not included in a listed system.	

NOTES FOR OUTLINE ABOVE:

* The listed "Systems" are those typically of most concern for facility reliability.

** There is some variation between different system schemes (ASTM UNIFORMAT II, Uniformat, CSI, GSA, CIQS, RICS, CEEC, AIQC, etc.). The ASTM E1557 "Standard Classification for Building Elements and Related Sitework - UNIFORMAT II" provides a common structure linking the building program, specifications, and estimates.

<http://www.uniformat.com/index.php/unifrmt-ii/astm-standards/95-building-elemental-cost-summary-based-on-uniformat-ii-standard>

CORE CAPITAL METRICS

Metric	Units	Description / Calculation
Capital Maintenance per Business Measure	Currency per Unit	"Capital Maintenance" per business measure.
Capital Maintenance per Gross Area	Currency per FT2/M2	"Capital Maintenance" per "Gross Area"
Capital Maintenance per Gross Area Benchmark	Currency per FT2/M2	Target value for "Capital Maintenance per Gross Area", from organizational goal or benchmarking program
Capital Maintenance per Occupant	Currency per FTE	"Capital Maintenance" per "Average Daily Occupancy"
Capital Maintenance as Percent of RAV	Percent	"Capital Maintenance" per "Replacement Asset Value"
Facility Condition Index (FCI)	Ratio	Current year FCI as "Deferred Facility Maintenance Expense" per "Replacement Asset Value" Enter as whole number from 0-99. (Note: This is the inverse of the US Government's Condition Index rating.)
Facility Condition Index (FCI) Benchmark	Ratio	Target value for "Facility Condition Index", from organizational goal or benchmarking program
YTD Capital Budget Variance	Percent	Percent variance of any cost measure vs budget for that measure (listed as YTD but can be annual or monthly). Typically tracked by major project or project category.

ADDITIONAL CAPITAL METRICS

Metric	Units	Description / Calculation
Asset Value Market to Book	Ratio	"Asset Market Value" divided by "Asset Book Value"
Asset Value Market to RAV	Ratio	"Asset Market Value" divided by "Replacement Asset Value"
FM Capital as % of Organization Capital	Percent	"Total Facility Capital Cost" divided by "Total Organization Capital Cost"
YTD Project Schedule Variance	Percent	Percent variance of capital projects on schedule (listed as YTD but can be annual or monthly). Typically tracked by major project or project category.

CORE CAPITAL MEASURES

Measure	Units	Description
Capital Renewal	Currency	All expenditures over and above those in your maintenance operating budget that are required to keep the facilities in reliable operating condition for the present use. This includes all 1-for-1 replacements. Includes "Building Capital Renewal" and "Site Capital Renewal"
Deferred Facility Maintenance Expense	Currency	Estimated expenditures required to return facility to near-new condition, typically based on replacement of components at end of their useful life.
Replacement Asset Value (RAV)	Currency	Current year estimated construction cost to replace the facility with a new one of same configuration; also called Current Replacement Value (CRV). Do not include soft costs for design, permitting, or temporary operations. Can be broken down by facility system.
Facility Capital Budget By Category	Currency	Current year capital budget by renewal vs. improvement (by building vs site, by property if multiple properties).
Facility Capital Cost	Currency	Include the total capital expenditures of your facility management projects, plus any other facility-related project costs that were expended by other organizational groups; includes "Capital Maintenance," "Capital Improvements," "Site Capital Renewal," and "Site Capital Improvements" (some of these in Additional Capital Measures below).

ADDITIONAL CAPITAL MEASURES

Measure	Units	Description
Capital Cost by Type or System	Currency	All of the measures can be broken down by type of cost or facility system. Common systems of concern include structure, electrical, HVAC, with systems as defined by your organization based on scheme such as Unifomat.
Asset Book Value	Currency	Current year remaining book value for the building and land after depreciation to date.
Asset Market Value	Currency	Current year estimated market value for the building and land as-is.
Building Capital Renewal	Currency	All capital expenditures required to keep the buildings and building services in reliable operating condition for the present use.
Building Capital Improvements	Currency	All expenditures that change the size or function of the facilities included in this benchmarking survey; include additions, complete renovations, major re-stacks/densification projects, and changes of use.
Critical Equipment	Number	Equipment that is vital to continued operations, will significantly impact facility operations, or have inherent risks to personnel safety or the environment should it fail (if there was no N+1 redundancy). Can be broken down by facility system.
Tracked Equipment	Number	Equipment important enough to be individually tracked in asset inventory and/or on work orders. (In addition to any critical equipment counted above.) Can be broken down by facility system.
RAV by System	Currency	"Replacement Asset Value" broken down by facility system. (Also called Current Replacement Value - CRV)

Measure	Units	Description
Site Capital Improvements	Currency	All expenditures that change the arrangement or function of the site (pavements, grounds, utility mains); include reconfiguration, parking expansions, and other new site development.
Site Capital Renewal	Currency	All capital expenditures required to keep the site (pavements, grounds, fencing, utility mains) in reliable operating condition for the present use.
Total Organization Capital Cost	Currency	Total capital cost for the organization for comparable time period.
The setup cost of all your property-specific information systems.	Currency	Include all "one-time" costs associated with new or migrated property-specific systems above. Include cost of initial data acquisition or migration and initial user training. Do not report this cost in other sections of the survey such as ongoing cost or capital improvements.

CONSUMPTION AND SUSTAINABILITY

Consumption includes energy and water use, along with waste generation and carbon footprint. There are both sustainability and operational efficiency implications for the quantity of utility usage. The costs for these are considered in the operating costs and typically are the responsibility of the facility group. Usage metrics may be tracked by others. Demand for utilities is driven by the facility design (capital investment) and space usage. Other sustainability measures such as waste reduction/recycling and carbon footprint are driven by organizational criteria and programs. This section only includes measures directly related to the facility – those broader community measures are considered business metrics and are included in the Ratings section.

Consumption attributes are primarily volume by resource type. Comparison to your strategic facility plan or external benchmarks will also be of interest. (Note: Energy Management Systems will have additional, more granular measures and metrics for energy management purposes.)

CORE CONSUMPTION METRICS

Metric	Units	Description / Calculation
Energy Use Intensity (EUI)	Ratio	The Site EUI is calculated by kBTU / GSF and identifies the amount of heat and electricity consumed by a facility for comparison with like facility types.
Energy Use Intensity (EUI) Benchmark	Ratio	Target value for “Energy Use Intensity”, from organizational goal or benchmarking program
KWH per Business Measure	KWH per Unit	Ratio of “Total Power Usage” per any key business measure such as # Customers, # Visitors, Sales Volume, Units of Production, # Research Projects, # Collection Items, etc.
KWH per Gross Area	KWH per FT ² /M ²	“Power Usage” per “Gross Area”
KWH per Occupant	KWH per FTE	“Power Usage” per “Average Daily Occupancy”
Water Usage per Gross Area	Gal/L per FT ² /M ²	“Water Usage” per “Gross Area”
Water Usage per Occupant	Gal/L per FTE	“Water Usage” per “Average Daily Occupancy”

ADDITIONAL CONSUMPTION METRICS

Metric	Units	Description / Calculation
Scope 1 Greenhouse Gas - CO ₂ e per Gross Area	KG per FT ² /M ²	CO ₂ e (CO ₂ equivalent) is calculated based on rates of CO ₂ , CH ₄ , and N ₂ O generated by burning fossil fuel to heat the facilities. (Production use not included in facility metrics.)
Scope 2 Greenhouse Gas - CO ₂ e per Gross Area	KG per FT ² /M ²	CO ₂ e (CO ₂ equivalent) is calculated based on rates of CO ₂ , CH ₄ , and N ₂ O generated to create the electricity purchased for use at the facilities. (Production use not included in facility metrics.)
Scope 3 Greenhouse Gas - CO ₂ e per Gross Area	KG per FT ² /M ²	CO ₂ e (CO ₂ equivalent) is calculated based on the various activities associated with service providers, commuting, and other activities associated with the facilities operations. (Not tracked in benchmarking)

Metric	Units	Description / Calculation
Percent of Renewable Energy	Percent	“Energy Consumption: On-Site Renewable” plus “Energy Consumption: Purchased Renewable” divided by “Power Usage”
Percent of Waste Recycled: Weight	Percent	“Recycled Materials: Weight” divided by “Trash and Recycled Waste: Weight”
Percent Water: Domestic Use	Percent	“Water Consumption: Domestic Water” divided by “Water Usage”
Waste per Gross Area: Weight	Tons/Kg per FT ² /M ²	“Power Usage” per “Gross Area”

CORE CONSUMPTION MEASURES

Measure	Units	Description
Electricity Consumption	KWH	Include facility-related usage of electricity from all sources, but exclude process use and electric vehicle charging if metered separately.
Natural Gas Consumption	KWH	Include facility-related usage of natural gas but exclude process use.
Other Energy Consumption	KWH	Include facility-related usage of steam, fuel, propane, etc., but exclude process use.
Power Usage	KWH	Total power usage including “Electricity Consumption” plus “Natural Gas Consumption”.
Water Usage	Gal/L	Total water usage but exclude process use.

ADDITIONAL CONSUMPTION MEASURES

Measure	Units	Description
Energy Consumption: All Other Fuels	KWH	Portion of “Other Energy Consumption”
Energy Consumption: Heating/Cooling District	KWH	Portion of “Other Energy Consumption”
Energy Consumption: On-Site Generator	KWH	Portion of “Other Energy Consumption” or “Natural Gas Consumption” used as fuel, less the portion of “Electricity Consumption” that is generated.
Energy Consumption: On-Site Renewable	KWH	Portion of “Electricity Consumption”
Energy Consumption: Purchased Electricity	KWH	Portion of “Electricity Consumption”
Energy Consumption: Purchased Natural Gas	KWH	Portion of “Natural Gas Consumption”
Energy Consumption: Purchased Offset	MT	Amount of CO ₂ offsets purchased.
Energy Consumption: Purchased Renewable	KWH	Portion of “Electricity Consumption”
Recycled Materials: Volume	CF/CM	If single waste stream, and your hauler separates recycled materials, use the percentage of material recycled times the total volume.
Recycled Materials: Weight	Tons/Kg	If single waste stream, and your hauler separates recycled materials, use the percentage of material recycled times the total weight.

Measure	Units	Description
Scope 1 Greenhouse Gas - CO2	KG	GHG based on on-site combustion (property heating/cooling).
Scope 1 Greenhouse Gas - CH4	KG	GHG based on on-site combustion (property heating/cooling).
Scope 1 Greenhouse Gas - N2O	KG	GHG based on on-site combustion (property heating/cooling).
Scope 2 Greenhouse Gas - CO2	KG	GHG based on purchased electric and district heating/cooling. Look up your site by zip code and provider: https://www.epa.gov/egrid/power-profiler/
Scope 2 Greenhouse Gas - CH4	KG	GHG based on purchased electric and district heating/cooling. Look up your site by zip code and provider: https://www.epa.gov/egrid/power-profiler/
Scope 2 Greenhouse Gas - N2O	KG	GHG based on purchased electric and district heating/cooling. Look up your site by zip code and provider: https://www.epa.gov/egrid/power-profiler/
Trash and Recycled Waste: Volume	CF/CM	"Waste: Volume" plus "Recycled Materials: Volume"
Trash and Recycled Waste: Weight	Tons/Kg	"Waste: Weight" plus "Recycled Materials: Weight"
Waste: Volume	CF/CM	Volume of Non-Hazardous Waste in whole numbers
Waste: Weight	Tons/Kg	Weight of Non-Hazardous Waste in whole numbers
Water Consumption: Domestic Water	Gal/L	Portion of "Water Usage" for domestic purposes or not separately tracked for other use.
Water Consumption: Grounds/Landscaping	Gal/L	Portion of "Water Usage" for landscaping including once-thru usage, if tracked separately.
Water Consumption: Mechanical Systems	Gal/L	Portion of "Water Usage" for mechanical systems including once-thru usage, if tracked separately.

FACILITY OPERATIONS

This category is about the facility operations team: resources, technologies, practices employed, and even some tangential business objectives.

Measures include staffing levels (internal and contract), service levels, procedure and practice standards, and the system tools available (BAS, EMS, CAFM, CMMS, IWMS, etc.). The outline below lists definitions we use for staff positions by category (a key measure).

Comparison to your strategic facility plan or external benchmarks will also be of interest as this is a primary area where external benchmarking can add value.

FM OPERATIONS STAFF POSITIONS BY CATEGORY

Facility Operations Staff	Definitions
	Staff and contractors associated with day to day facility operations and maintenance.
Facility Operations Manager	All levels above FM Supervisors including Account Manager/Facility Director with > 50% of their time related to FM Operations
Facility Operations Supervisor	First level non-working supervision, facility managers and/or property managers supervising internal and/or contracted services. Include internal staff, contract staff, and committed personnel from service providers. Reduce FTE based upon proportion of time dedicated to any non-facility operation functions such as fleet management. (Enter Full Time Equivalent based on nominal 40-hour week.)
Facility Scheduler / Planner	Scheduling of crew activities, job planning, prioritization of work assignments, and preventive maintenance program management if not done by individual Supervisors. or working leaders. This includes trained maintenance professional who identifies labor, materials, tools and safety requirements and assembles this information into a job plan package prior to the start of the work.
Maintenance Workers / Craft	Include all physical trades and craft workers such as working leader, multi-skilled mechanic, building engineer, carpenter, electrician, instrument & controls technician, control room operation, stationary engineer, mobile engineer, HVAC mechanic, plumber, repairman, general mechanic, elevator/crane/hoist mechanic, painter, general laborer, and helper. Do not include persons who perform delivery, move, custodial and landscaping work. Include any employees from operations or IT that perform craft work maintenance on any facility systems. (Enter Full Time Equiv based on 40 hour week.)
Grounds Worker	Landscaper / Gardener / Groundskeeper workers dedicated to facilities in benchmarking.
Custodial Worker	All cleaning staff dedicated to facilities. Do not include day porters. Include internal staff, contract staff, and committed personnel from service providers. (Enter Full Time Equivalent based on nominal 40-hour week.)
Day Porter	Workers at these facilities who perform room setups and other general services for facility occupants; may do supplemental cleaning but that is not primary function.
FM Support Staff / Facility Indirect Staff	Total all other FM operation support staff required to support the overall maintenance operation, but not directly performing maintenance work. This includes FM call desk staff, accounting, clerical, analysts, contract/procurement, human resource, safety, business liaison or any other personnel (prorate # FTE based on time dedicated to FM support).
Physical Security Manager	All supervisors and managers of physical security staff.
Physical Security Guard	Security guards or agents who staff posts, patrol, investigate, or monitor cameras.
Physical Security Support Staff	Any other staff who provide support for the physical security services.

Facility Services Staff	Definitions
	Staff and contractors associated with projects and facility-related services.
Mail Operations	All staff who manage or provide internal (to organization) mail delivery within and between company facilities.
Lease Administration	All staff who provide lease administration for facilities in the benchmarking; do not include lease support for other business operations such as ROW.
Food Service/Hospitality Staff	Any staff who provide manage or provide food service, catering, conference center management, or other hospitality type functions.
Copy & Reprographics	All staff who manage or provide copier and/or central reprographic services.

FM PROJECT STAFF POSITIONS BY CATEGORY

Facility Project Staff	Definitions
	Staff and contractors associated with projects and facility-related services.
Capital Projects / Assets Manager	All levels above Project staff including Account Manager/Project Director with > 50% of their time related to PM/asset management.
Project Manager	Project managers overseeing capital facility projects. Include internal staff, contract staff, and committed personnel from service providers. (Enter Full Time Equivalent based on nominal 40-hour week.)
Capital Asset / Program Coordinator	Person(s) responsible for capital program development, asset condition program, or similar function. Includes Facility Asset Specialist / Capital Program Coordinator.
Architect / Engineer / Designer	Subject matter expert (licensed or not) performing technical design for ongoing, smaller projects, do not include contracted design teams associated with capital projects. (Enter Full Time Equivalent based on nominal 40-hour week.)
Mac Coordinator /Space Planner	Person(s) responsible for space management and/or planning/coordinates and executing moves for ongoing, smaller projects, do not include contractors used for large projects, IT, or Telecom FTEs. (MAC = Move, Add, Change) Planning
Move Worker	Person(s) responsible for executing moves for ongoing, smaller projects, do not include contractors used for large projects, IT, or Telecom FTEs.
Project Support Staff	All Other Capital/Project support staff including accounting, clerical/admin, analysts, contract/procurement, inspectors, human resource, safety, any other personnel (prorate # FTE based on time dedicated to PM support)

CORE OPERATIONS METRICS

Metric	Units	Description / Calculation
Capital Cost per Project Manager	Currency	"Facility Capital Cost" per "Project Manager"
Cleaned Area per Custodian	FT2/M2	"Cleaned Area" per "Custodial Worker"
Gross Area per Custodian	FT2/M2	"Gross Area" per "Custodial Workers"
Gross Area per Craft Worker	FT2/M2	"Gross Area" per "Craft / Maintenance Worker"; additional metrics can include area weightings based on facility complexity and worker adjustments for travel time.
Gross Area per Supervisor	FT2/M2	"Gross Area" per "Facility Operations Supervisor"; additional metrics can include gross area weightings based on facility complexity and worker adjustments.
Percent Annual Objectives Completed	Percent	Percent completion of the FM Operations group's annual improvement initiatives, such as implementation of new technology, rollout of new practices, and operational policy (success plan, resiliency plan, etc.) updates.
RAV per Craft Worker	Currency	"Replacement Asset Value" per "Craft / Maintenance Worker"
RAV per Supervisor	Currency	"Replacement Asset Value" per "Facility Operations Supervisor"
Staffing Benchmarks (by Type)	Units	Target values for staffing metrics from organizational goal or benchmarking program

ADDITIONAL OPERATIONS METRICS

Metric	Units	Description / Calculation
Best Practices Implemented	Percent	Degree to which best practices/technology are used.
CO2e - Mobile Combustion	KG	CO2e (CO2 equivalent) is calculated based on rates of CO2, CH4, and N2O generated by burning fossil fuel to operate department vehicles and equipment. (Other department use not included in facility metrics.)
CO2e – Furtive Emissions	KG	CO2e (CO2 equivalent) is calculated based on rates of CO2, CH4, and N2O generated by releases of refrigerants associated with facility equipment.
Craft Workers per Planner	Ratio	“Craft / Maintenance Worker” per “Facility Scheduler / Planner”
Craft Worker per Supervisor	Ratio	“Craft / Maintenance Worker” per “Facility Operations Supervisor”
Gross Area per Security Guard	FT2/M2	“Gross Area” per “Security Guard”
Maintained Area per Craft Worker	FT2/M2	“Maintained Area” per “Craft / Maintenance Worker”
Maintained Grounds per Worker	FT2/M2	“Site Area: Maintained Landscaped” per “Grounds Worker”
Overtime Hours per Craft Worker	Ratio	“Overtime Hours” per “Craft / Maintenance Worker”
Percent of Best Practices Used	Percent	Percent of best practices in regular use; by function/category.
Percent FM Systems Employed	Percent	Percent of targeted FM system functions implemented and in regular use; by function/category.
Percent Internal Staff	Percent	Percent of internal staff vs. contacted staff; by function/category.
Percent Staff Training Completed	Percent	Percent of training goal completed, including currently active professional and technical certifications; can be by function.
Staff Engagement	Ratio	Staff engagement rating based on assessment for this purpose.
Training Hours per Craft Worker	Hours	“Training Hours” per “Craft / Maintenance Worker”
Percent Supply Chain Objectives Completed	Percent	Percent completion of the FM Operations group’s with respect to supply chain, such as rebid/cost competitiveness, safety/qualification objectives, resiliency, and diversity objectives.

CORE OPERATIONS MEASURES

Measure	Units	Description
Key Staff Types	FTE	<ul style="list-style-type: none"> • Craft / Maintenance Worker • Custodial Worker • Facility Operations Supervisor • Project Manager
Annual Objectives	Units	List of the FM Operations group’s annual improvement initiatives, and completion status.

ADDITIONAL OPERATIONS MEASURES

Measure	Units	Description
Best Practices / Technology	List	List of the best practices identified by functional area (space management, custodial, maintenance, etc.) and those in regular use for daily FM operations.
Mobile Combustion - CO2	KG	This is the amount of CO2 emissions associated with vehicle use for FM operations, all types of vehicles
Mobile Combustion - CH4	KG	This is the amount of CH4 emissions associated with vehicle use for FM operations, all types of vehicles
Mobile Combustion - N2O	KG	This is the amount of N2O emissions associated with vehicle use for FM operations, all types of vehicles
Refrigerant - CO2	KG	This is the amount of CO2 emissions associated with release of refrigerants.
Refrigerant - CH4	KG	This is the amount of CH4 emissions associated with release of refrigerants.
Refrigerant - N2O	KG	This is the amount of N2O emissions associated with release of refrigerants.
FM Systems	List	List of the FM systems generally available and those functions in regular use for daily FM operations.
Staffing by Internal / Contract	FTE	All of the following staffing types can be separately tracked by internal (employees) vs contracted if that distinction is of interest or easier to track.
FM Operations Staff Types	FTE	<ul style="list-style-type: none"> • Facility Operations Managers • Facility Scheduler / Planner • FM Support Staff / Facility Indirect Staff • Grounds Worker • Day Porter
Physical Security Staff Types	FTE	<ul style="list-style-type: none"> • Physical Security Manager • Physical Security Guards • Physical Security Support Staff
FM Project Staff Types	FTE	<ul style="list-style-type: none"> • Projects or Asset Manager/Director • Capital Project / Asset Manager • Architect / Engineer / Designer • Mac Coordinator / Space Planner • Move Worker • Project Support Staff
Staff Development and Engagement	Varies	Progress on various department objectives for staff development, engagement, and any inclusion, diversity, equity measures.
Supply Chain Objectives	Units	List of the FM Operations group's sourcing initiatives, and completion status.
Craft / Maintenance Worker: Overtime	Hours	Enter total paid overtime hours for "Craft / Maintenance Worker"
Craft / Maintenance Worker: Training	Hours	Total paid hours for "Craft / Maintenance Worker" on technical skills training, development, and learning new systems/technology
Adjusted FM Operations Staff	FTE	"Craft / Maintenance Worker" and "Facility Operations Supervisor" (separately) adjusted to factor lost time such as travel between facilities if applicable.

Measure	Units	Description
FM Operations Staff Mileage	Mi/Km	“Craft / Maintenance Worker” and “Facility Operations Supervisor” (separately) mileage traveled between sites during their work shift, used to adjust FTE for non-wrench time
Temperature Setpoints	Degrees	Target temperature setting
Temperature Dead Band	Degrees	Total # degrees allowed up or down from setpoint (example: plus or minus 2 = dead band of 4) If you allow the setpoint to drift, enter the maximum range you allow.
RH Setpoint	Number	Target humidity setting (enter percent as whole number)
RH Dead Bane	Number	Total percent humidity allowed up or down from setpoint (example: plus or minus 5% = dead band of 10) If you allow the setpoint to drift, enter the maximum range you allow.
Cleaning Service Level	Text	Definition of frequency of activity or performance standard for cleaning operations.
Maintenance Service Level	Text	Definition of frequency of activity or performance standard for maintenance operations.

FACILITY WORK ORDERS

This section is about facility work execution, and work orders are the most common way that organizations plan and manage their facility work. They are typically used to track repair and service requests, schedule preventive and predictive maintenance work, and manage project work. They may be used for all activities by the facility maintenance staff, and for some activities by other staff. Work orders show the day-to-day activity associated with the facility operation and maintenance.

The facilities group is typically responsible for percent on-time completion and backlog rates. Work orders have attributes of location, type, system, quantity, duration, hours and cost. The measures and metrics below are based on **number** of work orders as the most available measure. (Use of hours or costs provide better insight if those are logged by work order).

Comparison to your adopted service levels and facility asset management plan will also be of interest. (Note: work order systems will have additional, more granular measures and metrics for work order management purposes.)

The diagram below outlines a standard set of **Work Order Types**.

WORK ORDER TYPES

Work Order Types	Definitions
Unscheduled Maintenance Work	
Corrective Maintenance	Work done to restore the function of an asset after failure or when failure is imminent; includes all unscheduled or reactive work whether equipment is on run-to-fail program or fails unexpectedly. Work identified and completed immediately as part of a PM or CbM should be included with those.
Scheduled Maintenance Work	
Preventive Maintenance	Work done as part of fixed interval maintenance (days, run-hours, etc.) regardless of the equipment condition at the time.
Condition Based Maintenance	Work done to measure the condition of equipment against known standards in order to assess whether it will fail during some future period and taking appropriate action to avoid the consequences of that failure. The condition of the equipment could be measured using condition monitoring, statistical process control, equipment performance or through the use of human senses. Includes work considered Condition Based Maintenance (CbM), On-Condition Maintenance and Predictive Maintenance (PdM), and all scheduled inspections (daily rounds, thermal scans, etc.) in this category.
Proactive Maintenance	Work done to restore the function of an asset to avoid failures; include any follow-up work identified by PM and PDM that is scheduled 1 week or more in advance. Proactive work identified and completed immediately as part of a PM or CbM should be included with those.
Non-Maintenance Work	
Standing Work Orders	Non "wrench time" work such as administration, safety meetings, training, and other company activities; includes time not captured on any Work Orders.
Capital Work	Work on capital projects, or non-capital project work directly related to end-of-life equipment replacement (1-for-1).
Demand Services	Non-maintenance activities such as providing occupant services or any other tracked work that does not fit one of the other work types. Exclude standing work orders.

NOTES FOR OUTLINE ABOVE:

* The work order types consider 100% of the maintenance staff activity is logged on work orders. Some organizations may only use work orders for some of these work types. These maintenance work orders types are based on those in: <https://www.wbdg.org/resources/reliability-centered-maintenance-rcm>

CORE WORK ORDER METRICS

Metric	Units	Description / Calculation
Overtime Completion Rate: Benchmark	Percent	Target value for "Overtime Completion Rates", from organizational goal or benchmarking program; can be by type of WO.
Overtime Completion Rate: Scheduled Work	Percent	Number of "Scheduled Maintenance" WO completed on schedule vs. total "Scheduled Maintenance" WO
Overtime Completion Rate: Unscheduled Work	Percent	Number of "Unscheduled Maintenance" WO completed on schedule vs. total "Unscheduled Maintenance" WO
Percent Planned Work	Percent	"Scheduled Maintenance" WO vs. "Scheduled Maintenance" and "Unscheduled Maintenance" WO
Percent Wrench Time	Percent	All work minus "Standing Work Orders" divided by all work

ADDITIONAL WORK ORDER METRICS

Metric	Units	Description / Calculation
Overtime Completion Rate by WO Type and/or System	Percent	Work Orders by type and/or system completed within the expected response and completion duration.
CM Incidence: Critical Systems	Ratio	Times that any critical system (A or B side) is unavailable due to "Corrective Maintenance" on critical equipment. Facility may still be operational.
Percent Planned Work: Critical Systems	Percent	"Scheduled Maintenance" WO vs. "Scheduled Maintenance" and "Unscheduled Maintenance" WO for "Critical Equipment"
PM Compliance Rate	Percent	Number of "Preventive Maintenance" WO completed on schedule vs. total "Preventive Maintenance" WO
Maintenance WO per Craft Worker	Ratio	"Unscheduled Maintenance" plus "Scheduled Maintenance" WO divided by
Maintenance WO per RAV	Ratio	"Unscheduled Maintenance" plus "Scheduled Maintenance" WO divided by
Demand Services per Occupant	Ratio	"Demand Services" WO divide by "Average Daily Occupancy"

CORE WORK ORDER MEASURES

Measure	Units	Description
Corrective Maintenance (CM)	WO	Work done to restore the function of an asset after failure or when failure is imminent; includes all unscheduled or reactive work whether equipment is on run-to-fail program or fails unexpectedly. Corrective work identified and completed concurrent with a PM or CbM WO should be included with those.
Preventive Maintenance (PM)	WO	Work done as part of fixed interval maintenance (days, run hours, etc.) regardless of the equipment condition at the time. Includes scheduled inspections.
Condition Based Maintenance (CbM)	WO	Work done to measure the condition of equipment against known standards in order to assess whether it will fail during some future period and taking appropriate action to avoid the consequences of that failure. The condition of the equipment could be measured using condition monitoring, statistical process control, equipment performance or through the use of human senses. Includes work considered On-Condition Maintenance and Predictive Maintenance (PdM), and all scheduled inspections (daily rounds, thermal scans, etc.) in this category.
Proactive Maintenance	WO	Work done to restore the function of an asset to avoid failures; include any corrective work identified by PM and PDM in this category that is scheduled 1 week or more in advance. Proactive work identified and completed concurrent with a PM or CbM WO should be included with those.
Standing Work Orders	WO	Non "wrench time" work such as administration, safety meetings, training, and other company activities; includes time not captured on any WO. Includes travel time unless logged on the WO.
Capital Work	WO	Work on capital projects, or non-capital project work directly related to end-of-life equipment replacement (1-for-1).
Demand Services (DM)	WO	Non-maintenance activities such as providing occupant services or any other tracked work that does not fit one of the other work types. Exclude standing work orders.
Unscheduled Maintenance	WO	"Corrective Maintenance"
Scheduled Maintenance	WO	"Preventive Maintenance" plus "Condition Based Maintenance" plus "Proactive Maintenance"
Non-Maintenance	WO	"Standing Work Orders" plus "Capital Work" plus "Demand Services"

ADDITIONAL WORK ORDER MEASURES

Measure	Units	Description
Average initial response time	Hours	Time from when unscheduled issue is reported until work order is assigned.
Average trouble call cycle / completion time	Hours	Time from when unscheduled issue is reported until work has been completed (or follow-up work scheduled)
WO by Status	WO	Work orders of any type can be tracked by status. Common status categories: Open, Completed on Time, Completed, Overdue, Skipped or cancelled.
WO by System or equipment type	WO	Work orders of any type can be tracked by facility system (per systems in Asset & Capital section) or Critical / Tracked Equipment.

INSPECTIONS AND RATINGS

This dimension includes all the non-financial evaluations of performance – in essence the “results” of the FM Operations practices execution and how well the operation meets the service level requirements (or perceived requirements).

Ratings can be any type of feedback you get on your facility operation performance from formal reviews and audits to inspections and measurements to system feedback to occupant surveys. Examples include: system alarms/failures, safety incidents, safety inspections, security assessments, risk assessments, reliability assessments, energy audits, code compliance reviews, condition assessments, occupant satisfaction surveys, and sustainability / wellness reviews. These inspections and ratings may be the responsibility of the facilities group or a performance management group, risk management team, safety health and wellness group, environmental department, or human resources.

Comparison to your strategic facility plan or external benchmarks will also be of interest. (Note: production operation systems such as BAS/BMS will have additional, more granular feedback measures for system operation purposes and are not considered here.)

CORE RATING METRICS

Metric	Units	Description / Calculation
Facility Uptime Rate	Percent	Percent of “Hours of Facility Downtime” per year vs. “Facility Operating Hours/Week” times 52
Lost Time Rate	Number per Year	“Lost Time Workdays” per Year (or YTD)
OSHA Recordable Rate	Number per Year	“OSHA Recordable Incidents” per Year (or YTD)
Overall Occupant Satisfaction	Percent	Percent of facility occupants satisfied with overall facility operations.
Rating Benchmark	Units	Target value for any metric from organizational goal or benchmarking program.
Rating per Business Measure	Ratio	Ratio of any metric per business measure such as # Customers, # Visitors, hours/days of operation, etc. (Example is traditional # days worked since last lost time incident.)

ADDITIONAL RATING METRICS

Metric	Units	Description / Calculation
Building System Issue Rate	Ratio	Rate of “Building System Issues”
Custodial Compliance Rate	Ratio	Rate of “Deficiencies Observed: Custodial”
Environmental Compliance Rate	Ratio	Rate of “Deficiencies Observed: Environmental”
Indoor Climate Compliance Rate	Ratio	Rate of “Deficiencies Observed: Indoor Climate”
Maintenance Compliance Rate	Ratio	Rate of “Deficiencies Observed: Maintenance”
Occupant Satisfaction (by category)	Percent	Percent of facility occupants satisfied with various categories of facility operations
Other Compliance Rate	Ratio	Rate of “Deficiencies Observed: Other”
Safety Compliance Rate	Ratio	Rate of “Deficiencies Observed: Safety”
Security Compliance Rate	Ratio	Rate of “Deficiencies Observed: Security”

CORE RATING MEASURES

Measure	Units	Description
Hours of Facility Downtime	Hours	Hours when facility is unavailable for full and normal operation for any reason. (Allows calculation of total uptime ratio as measure of reliability; could also be measured as number of events per year).
Lost Time Workdays	Number	Recorded lost time workdays by facilities staff
Occupant Satisfaction Rating	List	Rating (using yes/no, ranking scale from 1 to 5, etc.) with degree of satisfaction with overall facility operations.
OSHA Recordable Incidents	Number	OSHA Recordable events by facilities staff

ADDITIONAL RATING MEASURES

Measure	Units	Description
Occupant Satisfaction Rating (by category)	List	Rating using a ranking scale such as 1 to 5 with degree of satisfaction for categories of operations. (Typical categories include Custodial, Facility Appearance, Food Services, Grounds, Maintenance, Projects, Security, Temperature, Workspace, etc.)
Deficiencies Observed: Security	Number	Incidence of non-compliance with established security standards based on inspection, audit, or reported issue.
Deficiencies Observed: Environmental	Number	Incidence of non-compliance with established environmental standards based on inspection, audit, or reported issue.
Deficiencies Observed: Safety	Number	Incidence of non-compliance with established safety standards based on inspection, audit, or reported issue. Includes any facility-related safety incident such as “slips, trips, and falls.”
Deficiencies Observed: Custodial	Number	Incidence of non-compliance with cleaning service level agreement based on inspection, audit, or reported issue.
Deficiencies Observed: Maintenance	Number	Incidence of non-compliance with maintenance service level agreement based on inspection, audit, or reported issue.
Deficiencies Observed: Other	Number	Incidence of non-compliance with any expected service level not included in another category including codes, accessibility, or business measure.
Deficiencies Observed: Indoor Climate	Number	Incidence of non-compliance with indoor climate (temperature, humidity) service level agreement based on inspection, audit, or reported issue.
Building System Issues	Number	Incidence of system issues needing attention due to improper operating schedules or abnormal operation as identified by BAS, inspection, audit or maintenance staff. (May or may not be logged on a work order.)

APPENDIX

This section contains definitions for units of measure in case any of those are unclear, and an index listing all the defined terms to make it easier to find a specific term of interest.

UNITS OF MEASURE

These are the units used for the metrics and measures.

Units	Definition
CF/CM	Cubic feet / Cubic meters
Currency	Currency of the type used by the organization
FT2/M2	Square feet / Square meters
FTE	Full Time Equivalent (for staff based on nominal 40-hour work week)
Gal/L	Gallons / Liters
Hours	Hour (60 minutes)
KG	Kilo-grams (used for CO23 universally)
KWH	Kilo-watt hours
List	Nominal data values (yes/no, high/medium/low, types of things)
Mi/Km	Miles / Kilometers
MT	Metric Ton (Tonne)
Number	Cardinal numbers
Percent	Percentage (ratio in proportion of 100)
Ratio	Numeric value representing the proportion of one value to another
Text	Alphanumeric text
Tons/Kg	US Tons (short ton / Kilograms)
Unit	Unit specific to the measure, used here as placeholder where units of measure may vary
WO	Work order
Years	Year (365 days)

INDEX OF TERMS

This is an alphabetical listing of all the Metrics and Measures contained in the document along with the section where they can be found.

Metric / Measure Name	Category	Type
Adjusted Maintenance Workers	Operations	Additional Measure
Adjusted Supervisors	Operations	Additional Measure
Annual Mileage Craft Workers	Operations	Additional Measure
Annual Mileage FM Supervisors	Operations	Additional Measure
Annual Objectives	Operations	Core Measure - Business
Architect / Engineer / Designer	Operations	Additional Measure
Asset Book Value	Capital	Additional Measure
Asset Market Value	Capital	Additional Measure
Asset Value Market to Book	Capital	Additional Metric
Asset Value Market to RAV	Capital	Additional Metric
Average Daily Occupancy	Occupancy	Core Measure
Average Daily Visitors	Occupancy	Core Measure
Average Daily Workers	Occupancy	Core Measure
Average Daily Workers: 1st shift	Occupancy	Additional Measure
Average Daily Workers: Non-Office	Occupancy	Additional Measure
Average Daily Workers: Office	Occupancy	Additional Measure
Average Daily Workers: Office 1st shift	Occupancy	Additional Measure
Best Practices / Technology	Operations	Additional Measure
Bldg. Maint. Cost per Gross Area	Cost	Additional Metric
Bldg. Maint. Cost per Maintained Area	Cost	Additional Metric
Bldg. Maint. Cost per Occupant	Cost	Additional Metric
Building Maintenance Cost: Exceptional	Cost	Additional Measure
Building Maintenance Cost: Regular	Cost	Additional Measure
Building System Issue Rate	Rating	Additional Metric
Building System Issues	Rating	Additional Measure
Capital Cost per Project Manager	Operations	Core Metric
Capital Improvements	Capital	Additional Measure
Capital Maintenance	Capital	Core Measure
Capital Maintenance per Gross Area	Capital	Core Metric
Capital Maintenance per Gross Area Benchmark	Capital	Core Metric
Capital Maintenance per Occupant	Capital	Core Metric
Capital Maintenance per Occupant Benchmark	Capital	Core Metric
Capital Projects / Assets Manager	Operations	Additional Measure
Capital Renewal	Capital	Additional Measure
Capital Renewal as Percent of RAV	Capital	Core Metric
Capital Work	Work	Core Measure
Cleaned Area	Space	Core Measure
Cleaned Area per Custodian	Operations	Core Metric

Metric / Measure Name	Category	Type
CM Incidence: Critical Systems	Work	Additional Metric
CO2 Equivalent per Gross Area	Consumption	Additional Metric
Condition Based Maintenance (CbM)	Work	Core Measure
Conditioned Area	Space	Additional Measure
Corrective Maintenance (CM)	Work	Core Measure
Craft / Maintenance Worker: Overtime	Operations	Additional Measure
Craft / Maintenance Worker: Training	Operations	Additional Measure
Craft / Maintenance Workers	Operations	Core Measure
Craft Workers per Planner	Operations	Additional Metric
Craft Workers per Supervisor	Operations	Additional Metric
Critical Equipment	Capital	Additional Measure
Custodial Compliance Rate	Rating	Additional Metric
Custodial Cost	Cost	Core Measure
Custodial Cost per Cleaned Area	Cost	Core Metric
Custodial Cost per Gross Area	Cost	Core Metric
Custodial Cost per Occupant	Cost	Core Metric
Custodial Workers	Operations	Core Measure
Day Porter	Operations	Additional Measure
Deferred Facility Maintenance Cost	Capital	Core Measure
Deficiencies Observed: Custodial	Rating	Additional Measure
Deficiencies Observed: Environmental	Rating	Additional Measure
Deficiencies Observed: Indoor Climate	Rating	Additional Measure
Deficiencies Observed: Maintenance	Rating	Additional Measure
Deficiencies Observed: Other	Rating	Additional Measure
Deficiencies Observed: Safety	Rating	Additional Measure
Deficiencies Observed: Security	Rating	Additional Measure
Demand Services (DM)	Work	Core Measure
Demand Services per Occupant	Work	Additional Metric
Direct Operating Cost	Cost	Core Measure
Direct Operating Cost per Business Measure	Cost	Core Metric - Business
Direct Operating Cost per Gross Area	Cost	Core Metric
Direct Operating Cost per Occupant	Cost	Core Metric
Electricity Consumption	Consumption	Core Measure
Employee Engagement	Rating	Core Metric
Energy Consumption: All Other Fuels	Consumption	Additional Measure
Energy Consumption: Heating/Cooling District	Consumption	Additional Measure
Energy Consumption: On-Site Generator	Consumption	Additional Measure
Energy Consumption: On-Site Renewable	Consumption	Additional Measure
Energy Consumption: Purchased Electricity	Consumption	Additional Measure
Energy Consumption: Purchased Natural Gas	Consumption	Additional Measure
Energy Consumption: Purchased Renewable	Consumption	Additional Measure
Energy Cost	Cost	Core Measure

Metric / Measure Name	Category	Type
Energy Cost per Conditioned Area	Cost	Additional Metric
Energy Cost per Gross Area	Cost	Additional Metric
Energy Cost per Occupant	Cost	Additional Metric
Energy Use Intensity (EUI)	Consumption	Core Metric
Energy Use Intensity (EUI) Benchmark	Consumption	Core Metric
Energy: District Heating / Cooling Cost	Cost	Additional Measure
Energy: On-Site Generators Cost	Cost	Additional Measure
Energy: On-Site Renewable Energy Cost	Cost	Additional Measure
Energy: Other Fuels Cost	Cost	Additional Measure
Energy: Purchased Electricity Cost	Cost	Additional Measure
Energy: Purchased Natural Gas Cost	Cost	Additional Measure
Environmental Compliance Rate	Rating	Additional Metric
Facility Capital Budget	Capital	Core Measure
Facility Condition Index (FCI)	Capital	Core Metric
Facility Condition Index (FCI) Benchmark	Capital	Core Metric
Facility Operating Budget	Cost	Core Measure
Facility Operating Hours/Week	Occupancy	Additional Measure
Facility Operations Managers	Operations	Additional Measure
Facility Operations Supervisors	Operations	Core Measure
Facility Scheduler / Planner	Operations	Additional Measure
Facility Scheduler/Planners	Operations	Additional Measure
Facility Uptime Rate	Rating	Core Metric
Fixed Cost per Gross Area	Cost	Additional Metric
Fixed Operating Cost	Cost	Additional Measure
Fixed: Debt Service / Depreciation	Cost	Additional Measure
Fixed: Other Cost	Cost	Additional Measure
Fixed: Property Insurance	Cost	Additional Measure
Fixed: Property Taxes	Cost	Additional Measure
FM Capital as % of Organization Capital	Capital	Additional Metric
FM Cost as % Organization Cost	Cost	Additional Metric
FM Craft Workers Union	Demographics (Organization)	Additional Measure
FM Organization Executive	Demographics (Organization)	Additional Measure
FM Staffing Approach	Demographics (Organization)	Additional Measure
FM Support Staff / Facility Indirect Staff	Operations	Additional Measure
FM Systems	Operations	Additional Measure
Gross Area	Space	Core Measure
Gross Area per Business Measure	Space	Core Metric - Business
Gross Area per Business Measure	Work	Core Metric - Business
Gross Area per Craft Worker	Operations	Core Metric
Gross Area per Custodian	Operations	Core Metric
Gross Area per Occupant	Space	Core Metric
Gross Area per Security Guard	Operations	Additional Metric

Metric / Measure Name	Category	Type
Gross Area per Supervisor	Operations	Core Metric
Gross Area per Supported Worker	Space	Core Metric
Gross Area per Worker	Space	Core Metric
Gross Area per Worker Benchmark	Space	Core Metric
Gross Area per Workspace	Space	Core Metric
Grounds Cost per Gross Area	Cost	Additional Metric
Grounds Cost per Grounds Area	Cost	Additional Metric
Grounds Maintenance Cost	Cost	Additional Measure
Grounds Support Mission	Demographics (Organization)	Additional Measure
Grounds Workers	Operations	Additional Measure
Hours of Facility Downtime	Rating	Core Measure
Indirect Operating Cost	Cost	Additional Measure
Indirect: Facility Planning and Assessment	Cost	Additional Measure
Indirect: Facility Support Function Cost	Cost	Additional Measure
Indirect: FM Administrative Cost	Cost	Additional Measure
Indirect: Property Technology & Systems	Cost	Additional Measure
Indoor Climate Compliance Rate	Rating	Additional Metric
KWH per Business Measure	Consumption	Core Metric - Business
KWH per Gross Area	Consumption	Core Metric
KWH per Occupant	Consumption	Core Metric
Lost Time Rate	Rating	Core Metric
Lost Time Workdays	Rating	Core Measure
Mac Coordinator /Space Planner	Operations	Additional Measure
Maintained Area	Space	Additional Measure
Maintained Area per Craft Worker	Operations	Additional Metric
Maintained Grounds per Worker	Operations	Additional Metric
Maintenance Compliance Rate	Rating	Additional Metric
Maintenance Cost	Cost	Core Measure
Maintenance Cost per Gross Area	Cost	Core Metric
Maintenance Cost per Occupant	Cost	Core Metric
Maintenance WO per RAV	Work	Additional Metric
Maintenance Work Order per Craft Worker	Work	Additional Metric
Move Workers	Operations	Additional Measure
Natural Gas Consumption	Consumption	Core Measure
Non-Maintenance	Work	Core Measure
Number of Bldgs.	Demographics (Property)	Additional Measure
Number of Sites	Demographics (Property)	Additional Measure
Occupant Satisfaction (by category)	Rating	Additional Metric
Occupant Satisfaction Rating	Rating	Core Measure
Office Area per Office Worker	Space	Additional Metric
Office Area per Supported Worker	Space	Additional Metric
Office Area per Workspace	Space	Additional Metric

Metric / Measure Name	Category	Type
Ontime Completion Rate by WO Type and/or System	Work	Additional Metric
Ontime Completion Rate: Benchmark	Work	Core Metric
Ontime Completion Rate: Scheduled Work	Work	Core Metric
Ontime Completion Rate: Scheduled Work	Work	Core Metric
Organization Payroll	Demographics (Organization)	Additional Measure
Organization Size by Employees	Demographics (Organization)	Core Measure
Organization Size by Gross Area	Demographics (Organization)	Core Measure
Organization Type	Demographics (Organization)	Core Measure
OSHA Recordable Incidents	Rating	Core Measure
OSHA Recordable Rate	Rating	Core Metric
Other Compliance Rate	Rating	Additional Metric
Other Energy Consumption	Consumption	Core Measure
Other Operating Cost	Cost	Additional Measure
Overall Occupant Satisfaction	Rating	Core Metric
Overhead Cost per Gross Area	Cost	Additional Metric
Overtime Hours per Craft Worker	Operations	Additional Metric
Pavement Cost per Gross Area	Cost	Additional Metric
Pavement Cost per Paved Area	Cost	Additional Metric
Pavement Maintenance Cost	Cost	Additional Measure
Percent Annual Objectives Completed	Operations	Core Metric - Business
Percent Available Workspaces	Occupancy	Additional Metric
Percent Available Workspaces by Business Unit	Occupancy	Additional Metric
Percent FM Systems Employed	Operations	Additional Metric
Percent Occupants by Type	Occupancy	Additional Metric
Percent of Best Practices Used (by function)	Operations	Additional Metric
Percent Of Demand Work Completed On Time	Work	Core Metric
Percent of Renewable Energy	Consumption	Additional Metric
Percent of Total Work Orders Planned (vs Reactive)	Work	Core Metric
Percent of Waste Recycled: Weight	Consumption	Additional Metric
Percent Planned Work	Work	Core Metric
Percent Planned Work: Critical Systems	Work	Additional Metric
Percent Remote Workers	Occupancy	Additional Metric
Percent Site Utilization	Space	Additional Metric
Percent Staff Training Completed	Operations	Additional Metric
Percent Usable Area	Space	Core Metric
Percent Utilized Area	Space	Core Metric
Percent Water: Domestic Use	Consumption	Additional Metric
Percent Workspaces Meeting Standard	Space	Additional Metric
Percent Wrench Time	Work	Core Metric
Physical Security Guards	Operations	Additional Measure
Physical Security Manager	Operations	Additional Measure

Metric / Measure Name	Category	Type
Physical Security Support Staff	Operations	Additional Measure
PM Compliance Rate	Work	Additional Metric
Preventive Maintenance (PM)	Work	Core Measure
Proactive Maintenance	Work	Core Measure
Project Managers	Operations	Core Measure
Project Support Staff	Operations	Additional Measure
Project Support Staff	Operations	Additional Measure
Projects or Assets Manager/Director	Operations	Additional Measure
Property "Green" Certification	Demographics (Property)	Additional Measure
Property Age	Demographics (Property)	Additional Measure
Property Business Division	Demographics (Property)	Additional Measure
Property Climate Zone	Demographics (Property)	Core Measure
Property Location - Country	Demographics (Property)	Core Measure
Property Location - Postal code	Demographics (Property)	Additional Measure
Property Location - State/Prov	Demographics (Property)	Core Measure
Property Nature	Demographics (Property)	Additional Measure
Property Resiliency	Demographics (Property)	Core Measure
Property Setting	Demographics (Property)	Additional Measure
Property Size by Gross Area	Demographics (Property)	Core Measure
Property Size by Occupants	Demographics (Property)	Core Measure
Property System Redundancy	Demographics (Property)	Additional Measure
Property Tenure	Demographics (Property)	Additional Measure
Property Type	Demographics (Property)	Core Measure
Rating Benchmark	Rating	Core Metric
Rating per Business Measure	Rating	Core Metric
Recycled Materials: Volume	Consumption	Additional Measure
Recycled Materials: Weight	Consumption	Additional Measure
Remote Workers Supported	Occupancy	Additional Measure
Rent / Lease Cost	Cost	Core Measure
Rentable Area	Space	Additional Measure
Replacement Asset Value (RAV)	Capital	Core Measure
Replacement Asset Value per Craft Worker	Operations	Core Metric
Replacement Asset Value per Supervisor	Operations	Core Metric
Safety Compliance Rate	Rating	Additional Metric
Scheduled Maintenance	Work	Core Measure
Security Compliance Rate	Rating	Additional Metric
Security Cost	Cost	Core Measure
Security Cost per Gross Area	Cost	Additional Metric
Security Cost per Post	Cost	Additional Metric
Service Level - Cleaning	Demographics (Property)	Additional Measure
Service Level - Grounds	Demographics (Property)	Additional Measure
Service Level - Indoor Climate	Demographics (Property)	Additional Measure

Metric / Measure Name	Category	Type
Service Level - Maintenance	Demographics (Property)	Additional Measure
Site Area	Space	Additional Measure
Site Area - Maintained Landscaped	Space	Core Measure
Site Capital Renewal	Capital	Additional Measure
Snow Removal Cost	Cost	Additional Measure
Snow Removal Cost per Gross Area	Cost	Additional Metric
Snow Removal Cost per Paved Area	Cost	Additional Metric
Space Complexity Factor	Space	Additional Metric
Standing Work Orders	Work	Core Measure
Supply Chain Objectives	Operations	Additional Measure
Surplus Area	Space	Additional Measure
Total Facility Cost per Gross Area	Cost	Additional Metric
Total Facility Cost per Gross Area Benchmark	Cost	Additional Metric
Total Facility Cost per Occupant	Cost	Additional Metric
Total Facility Cost per Occupant Benchmark	Cost	Additional Metric
Total Facility Operating Cost	Cost	Additional Measure
Total FM Capital Cost	Capital	Core Measure
Total FM Staff	Operations	Additional Measure
Total Organization Capital Expenses	Capital	Additional Measure
Total Organization Operating Cost	Cost	Additional Metric
Total Power Usage	Consumption	Core Measure
Total Project Staff	Operations	Additional Measure
Total Supported Workers	Occupancy	Additional Measure
Total Water Usage	Consumption	Core Measure
Total Workstations	Occupancy	Core Measure
Tracked Equipment	Capital	Additional Measure
Training Hours per Craft Worker	Operations	Additional Metric
Trash and Recycled Waste: Volume	Consumption	Additional Measure
Trash and Recycled Waste: Weight	Consumption	Additional Measure
Unscheduled Maintenance	Work	Core Measure
Usable Area	Space	Core Measure
Usable Area per Supported Worker	Space	Additional Metric
Usable Area per Worker	Space	Additional Metric
Usable Area per Workspace	Space	Additional Metric
Utility Cost	Cost	Core Measure
Utility Cost per Conditioned Area	Cost	Additional Metric
Utility Cost per Gross Area	Cost	Core Metric
Utility Cost per Occupant	Cost	Core Metric
Vacant Area	Space	Core Measure
Waste Cost	Cost	Core Measure
Waste Cost per Gross Area	Cost	Additional Metric
Waste Cost per Occupant	Cost	Additional Metric

Metric / Measure Name	Category	Type
Waste per Gross Area: Weight	Consumption	Additional Metric
Waste: Domestic Trash Disposal Cost	Cost	Additional Measure
Waste: Recycling Cost	Cost	Additional Measure
Waste: Volume	Consumption	Additional Measure
Waste: Weight	Consumption	Additional Measure
Water Cost per Gross Area	Cost	Additional Metric
Water Cost per Occupant	Cost	Additional Metric
Water Consumption: Domestic Water	Consumption	Additional Measure
Water Consumption: Grounds/Landscaping	Consumption	Additional Measure
Water Consumption: Mechanical Systems	Consumption	Additional Measure
Water Cost	Cost	Core Measure
Water Cost: Domestic	Cost	Additional Measure
Water Cost: Grounds	Cost	Additional Measure
Water Cost: Mechanical	Cost	Additional Measure
Water Cost: Other	Cost	Additional Measure
Water Usage per Gross Area	Consumption	Core Metric
Water Usage per Occupant	Consumption	Core Metric
Workers per Workspace	Occupancy	Core Metric
Workers per Workspace Benchmark	Occupancy	Core Metric
Workstations: Non-Office	Occupancy	Additional Measure
Workstations: Open Office	Occupancy	Additional Measure
Workstations: Private Offices	Occupancy	Additional Measure
Workstations: Unassigned	Occupancy	Additional Measure
YTD Budget Variance	Cost	Core Metric
YTD Capital Budget Variance	Capital	Core Metric
YTD Cost vs. Prior Year	Cost	Core Metric