IBM TRIRIGA Version 10 Release 5

# *Workplace Performance Management User Guide*



Note

Before using this information and the product it supports, read the information in "Notices" on page 223.

This edition applies to version 10, release 5, modification 0 of IBM TRIRIGA and to all subsequent releases and modifications until otherwise indicated in new editions.

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### Chapter 1. Managing workplace performance

IBM<sup>®</sup> TRIRIGA<sup>®</sup> Workplace Performance Management is a suite of analytical applications that provides the insights and tools for workplace executives to align, analyze, and act immediately to improve workplace performance. By using TRIRIGA Workplace Performance Management, organizations can systematically measure actual workplace performance and compare the measurements to internal targets and industry benchmarks. This measurement capability provides the foundation to manage business performance.

To achieve compelling results, organizations first need to develop appropriate objectives. TRIRIGA Workplace Performance Management provides pre-defined key workplace performance indicators to turn business plans into measurable objectives so that performance can be evaluated. These objectives are embedded into TRIRIGA Workplace Performance Management to automatically measure and manage workplace performance. Business objectives are systematically communicated throughout business units to drive measurable actions. The net result is the alignment of workplace operations with strategic objectives to drive business results.

TRIRIGA Workplace Performance Management analyzes operations, detects exceptions, and evaluates workplace performance across multiple dimensions and factors. By using TRIRIGA Workplace Performance Management you can drill down into operational, and financial information to determine root cause issues and identify specific actions to improve performance.

IBM TRIRIGA's complete, fully Integrated Workplace Management Systems (IWMS) product suite has common tools and database across operational applications for real estate, facilities, projects, and operations. TRIRIGA Workplace Performance Management extends these unique capabilities with analytics that are fully integrated inside the IWMS suite to provide access to accurate, up-to-date information upon which to base decisions.

With this approach, key workplace performance indicators, actual results, targets, and thresholds all share database and information with the operational applications. Analytical functions are embedded into the relevant business processes to automatically measure and report current performance and status. Further, analytical information and analysis drill paths provide access to operational data and transactions for management to take corrective action.

TRIRIGA Workplace Performance Management provides workplace performance metrics that are developed based on the real-world experience of TRIRIGA's market-leading customers, and from standards organizations and industry experience in measuring, managing, and benchmarking workplace performance. TRIRIGA Workplace Performance Management includes the following features:

- Balanced scorecard with metrics around the five key dimensions of financial performance, portfolio performance, operational performance, customer satisfaction, and environmental performance.
- Pre-defined key performance indicators to improve customer, operational, portfolio, financial, and environmental performance.
- Varying reports and views to analyze workplace operations data.

• Robust analytical star schema data model of different fact tables across the IWMS product suite and dimensions.

TRIRIGA Workplace Performance Management uses the proven IBM TRIRIGA Web-based design tools to configure the analytical applications. This approach enables quick deployment, modification, and creation of new workplace performance management metrics, which can accelerate the realization of business value.

To enable organizations to quickly configure TRIRIGA Workplace Performance Management and realize benefits, the analytics engine is pre-defined, and includes the processes, roles, metrics, reports, views, extract, transform, and load (ETL), and schema. Any changes can be implemented easily with supplied workflow tools.

### Chapter 2. Metric chart types and templates

IBM TRIRIGA Workplace Performance Management products are delivered with a wide range of metric chart types and templates. Metric chart templates are maintained by an Application Administrator.

TRIRIGA Workplace Performance Management includes the following metric chart types and templates:

**Bar** Displays one or more sets of values by using rectangles whose lengths are proportional to the values.

#### Bar that includes percentages

Converts and displays the values as percentages.

#### Bubble

Displays values in a four-quadrant chart where the upper-right quadrant depicts a positive x-axis and y-axis value. The size of the bubble corresponds to the size of the represented value.

#### Circular gauge

Displays values by using scales in the form of circular arcs. Typically, the scale includes tick marks and their labels.

#### Circular gauge that includes percentages

Converts and displays the values as percentages.

**Line** Displays changes for a specific set of data. These types of charts are often used to show the changes or trends over time.

#### Line/bar combo

Displays the values of more than one series of data by using different chart types.

#### Linear gauge

Displays values by using scales in a horizontal or vertical orientation. Typically, the scale includes tick marks and their labels.

#### Linear gauge that includes percentages

Converts and displays the values as percentages.

**Pie** Displays a circular chart in which the relative percentages of the values are represented by wedges or slices of the pie.

#### Pyramid

A variation on the bar chart that displays values by using pyramidal shapes instead of rectangular bars to achieve an alternative expression of the data.

Among the available metric chart types and templates, TRIRIGA Workplace Performance Management has standardized the following bar chart types for consistency and ease of use:

#### Horizontal grouped bar

Used for value-based metrics where the metric value is expressed as a non-percentage, for example, \$/Rentable Square Foot. This bar chart type contains extra functions that display the threshold lines and that color the bars based on their relationship to the threshold targets.

#### Horizontal grouped bar that includes percentages

Used for value-based metrics where the metric ratio is expressed as a percentage, for example, Occupancy Rate (%). This bar chart type contains extra functions that display the threshold lines and that color the bars based on their relationship to the threshold targets.

#### Horizontal stacked bar

Used for value-based metrics where the primary bar has subcomponents, for example, Cost of Operations (USD/Rentable Square Foot) with breakdown of Expense Types.

#### Line/bar combo

Used for actual versus budget metrics.

#### Vertical grouped bar

Used for Time Capture drill path where the metric value is expressed as a non-percentage, for example, \$/Rentable Square Foot.

#### Vertical grouped bar that includes percentages

Used for Time Capture drill path where the metric ratio is expressed as a percentage, for example, Occupancy Rate (%).

For consistency in an organization, metric chart templates are maintained by an Application Administrator by using the **Tools** > **System Setup** > **General** > **Chart Templates** menu.

### Metric thresholds and queries

Metric chart types and templates include several metric-specific features, such as thresholds, value-based versus score-based metrics, and capture period metrics. You can define metric thresholds and queries to help evaluate performance.

#### Metric thresholds

Some bar chart types contain extra functions that show the threshold lines and that color the bars based on their relationship to the threshold targets. Metric queries in TRIRIGA Workplace Performance Management are associated with threshold records. Threshold records contain the definition of the targets and provide a basis for evaluating the operational performance against objectives. For consistency in an organization, threshold records are maintained by an Application Administrator by using the **Tools > System Setup > General > Thresholds** menu.

#### Metric queries

TRIRIGA Workplace Performance Management provides several views of metrics to help with analysis and to help identify exception conditions. With this information, you can then take corrective action on under-performing resources and processes and can reward over-performing resources.

TRIRIGA Workplace Performance Management evaluates performance by using the following metric query types:

#### Value-based metric query

Displays the resulting values from the metric calculation, for example, the overall percent satisfaction for each survey category. The bars in value-based metric queries are colored red, yellow, and green based on their relation to the defined thresholds.

#### Score-based metric query

Displays the percentage of responses that fall into the threshold ranges. Therefore, all bars equal 100%, but show the percent breakdown, colored red, yellow, and green, for each bar. Sometimes, information can be derived from score-based metric queries that can be overlooked when you view value-based metric queries. In particular, this situation can occur when the value-based metric query is aggregated at a high level, for example to show results at a worldwide level. For example, a survey category might show that between 10% and 30% of the responses are poor or under-performing while the overall customer satisfaction is good. Such a score-based view might warrant investigation of the poor and under-performing results.

#### Time-trend metric query

Displays performance over multiple capture periods so that you can discern trends over time. Most metrics in TRIRIGA Workplace Performance Management contain a **Show By** option that includes the **Capture Period** drill path that shows performance over time.

# Chapter 3. User roles and portals

User roles, and corresponding home portals are delivered with the Workplace Performance Management and IBM TRIRIGA Real Estate Environmental Sustainability products. Your Application Administrator might tailor your home portal to align with your company's processes. Therefore, your portal settings might differ from the default settings.

### **Enterprise roles and portals**

The Workplace Performance Management Enterprise Portal includes portal configurations for the Workplace Executive, Finance Executive, and Business Unit Manager user roles.

### Workplace Executive role

The Workplace Executive includes any executive role that is responsible for managing the performance of the workplace management team and the workplace portfolio. This role might include C-level and Senior Vice President-level executives.

The Workplace Executive role includes the following tasks:

- Accessing the TRIRIGA application infrequently.
- Monitoring performance metrics.
- Establishing workplace strategic goals, objectives, and performance criteria.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Workplace Executive role.

Portal details	Portal content
Home Portal Name	Home - Workplace Executive Portal
Group Details	IBM TRIRIGA Workplace Executive
License Details	IBM TRIRIGA Enterprise Workplace Management
	<ul> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> </ul>
	• IBM TRIRIGA Workplace Performance Management Projects
Performance Metrics	Customer Satisfaction
	Leased to Owned Ratio
	Operation Cost Per Area
	Occupancy Rate
	Projects Over Budget
	Total Occupancy Cost Per Area

### **Finance Executive role**

The Finance Executive includes any executive role that is responsible for managing the financial performance of the company. This role might include C-level and Senior Vice President-level executives.

The Finance Executive role includes the following tasks:

- Accessing the TRIRIGA application infrequently.
- Monitoring financial performance metrics and compliance.
- Establishing financial strategic goals, objectives, and performance criteria.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Finance Executive role.

Portal details	Portal content
Home Portal Name	Home - Finance Executive Portal
Group Details	IBM TRIRIGA Finance Executive
License Details	<ul> <li>IBM TRIRIGA Enterprise Workplace Management</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Projects</li> </ul>
Performance Metrics	<ul> <li>Total Occupancy Cost Per Area</li> <li>Leased to Owned Ratio</li> <li>Capital Cost Ratio</li> <li>Operating Cost Ratio</li> <li>Operation Cost Per Area</li> </ul>

#### **Business Unit Manager role**

Business Unit Managers are typically responsible for the space and equipment needs, and the self-service requirements for the business unit. Business Unit Managers are typically the customer of the workplace management team.

The Business Unit Manager role includes the following tasks:

- Coordinating the space and equipment needs for the business unit.
- Responding to space forecast requests.
- Approving and coordinating space use and space allocations for the business unit.
- Coordinating moves for the business unit.
- Establishing services and service level agreements (SLA) with workplace service providers.
- Coordinating self-service training for the business unit.
- Approving some self-service request types, for examples, move and product requests.
- · Monitoring occupant satisfaction.
- Monitoring performance for service level agreements.

The following table describes the portal for the Business Unit Manager role.

Portal details	Description
Home Portal Name	Home - Business Unit Manager Portal
Group Details	IBM TRIRIGA Business Unit Manager

Portal details	Description
License Details	IBM TRIRIGA Enterprise Workplace Management
	IBM TRIRIGA Workplace Performance Management Enterprise
	IBM TRIRIGA Workplace Performance Management Projects
Performance Metrics	Occupancy Rate
	Forecast Occupancy Rate
	Workpoint Utilization Rate
	Forecast Utilization Density
	Occupant Satisfaction
	• Mobile Worker %
	Churn Rate
	Energy Use Intensity

### **Environmental Manager/Planner role**

The Environmental Manager/Planner role can vary from a role that is solely dedicated to environmental sustainability to a person who takes on responsibility for environmental sustainability but has a different primary responsibility.

The facilities-oriented Environmental Manager/Planner role includes the following tasks:

- Defining and monitoring facilities-related carbon, energy, water, waste, travel, and emissions programs.
- Collecting and reporting on facilities-related environmental performance.
- Initiating requests to onsite environmental team members or service providers for monthly updates.
- Reporting to senior management on the current and planned environmental performance of facilities.
- Recommending environmental improvement projects, which are often initiated by other facilities departments.
- Participating in approved environmental projects.

The following table describes the portal for the Environmental Manager/Planner role.

Portal details	Description
Home Portal Name	Home - Environmental Manager Portal
Group Details	IBM TRIRIGA Environmental Manager/Planner
License Details	<ul> <li>IBM TRIRIGA Enterprise Workplace Management</li> <li>IBM TRIRIGA Real Estate Environmental Sustainability</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Projects</li> </ul>

Portal details	Description
Performance Metrics	• Emissions (Carbon) Intensity (GSF)
	• Energy Cost (USD)
	• Energy Use Intensity (GSF)
	Satisfaction Survey
	• Waste

### **Operations roles and portals**

The Workplace Performance Management Operations Portal includes portal configurations for the Operations Executive, Facility Assessment Manager, Contact Center Manager, Contract/Purchasing Manager, Service Manager, and Service Technician user roles.

### **Operations Executive role**

The Operations Executive is responsible for the part of the workplace team that directly manages the operations and maintenance of facilities. The Operations Executive can report to various parts of the company such as the Facilities Executive, Chief Financial Officer or Chief Operations Officer, but usually has direct access to senior management.

The Operations Executive role includes the following tasks:

- Communicating with upper management to develop strategic operations goals.
- Developing strategic long-range plans to achieve strategic objectives.
- Creating and managing the organization's fiscal operating and capital budget and expenses.
- Monitoring operational performance of both internal and external service providers.
- Monitoring facility condition and environmental performance and recommending or approving funding levels and spending plans.
- · Providing a workplace setting that is conducive to productive work.
- Monitoring occupant satisfaction.
- Monitoring construction and renovation projects.
- Monitoring performance metrics.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Operations Executive role.

Portal details	Description
Home Portal Name	Home - Operations Executive Portal
Group Details	IBM TRIRIGA Operations Executive
License Details	<ul> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Operations</li> </ul>

Portal details	Description
Performance Metrics	Customer Satisfaction
	Cost Of Operations (\$ / Area)
	Maintenance Cost / Area Maintained
	• Energy Use Intensity (GSF)
	My On-Time Service Responsiveness
	My On-Target Service Costs
	Callback Index
	PM Task Completion Ratio

### Facility Assessment Manager/Planner role

The Facility Assessment Manager/Planner role can vary from a role that is solely dedicated to facility condition assessments (CA) to a person who takes on responsibility for condition assessments but has a different primary responsibility.

The Facility Assessment Manager/Planner role includes the following tasks:

- Defining and monitoring facilities-related condition assessment and remediation programs.
- Collecting and reporting data that is related to the condition of facility building systems, locations, and key structures and assets.
- Initiating inspection requests to onsite team members or external service providers for facility walk-downs.
- Reporting to senior management on the current and planned performance of facilities.
- Recommending CA improvement projects, which are often initiated by other facilities departments.
- Participating in approved CA projects.

The following table describes the portal for the Facility Assessment Manager/Planner role.

Portal details	Description
Home Portal Name	Home - Facility Assessment Manager Planner Portal
Group Details	IBM TRIRIGA Facility Assessment Manager
License Details	<ul> <li>IBM TRIRIGA Facility Assessment</li> <li>IBM TRIRIGA Operations</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Operations</li> </ul>
	IBM IRIRIGA Workplace Performance Management Projects
Performance Metrics	Facility Operating Current Replacement Value Index
	Facility Condition Index
	Capital Renewal Index
	Preventative Maintenance Task Completion Rate

### **Contact Center Manager role**

The Contact Center Manager manages the Contact Center Agents and can also act as a Contact Center Agent. The Contact Center Manager can report to the Facilities Executive or the Operations Executive. In some companies, the Contact Center Manager manages both facilities and technology-related agents.

The Contact Center Manager role includes the following tasks:

- Defining and monitoring contact center agent performance metrics, such as on-call resolution rate and call volume.
- Helping with calls during periods of high-volume.
- Assisting with calls that are escalated.
- Managing the knowledge base.
- Managing agent training.

The following table describes the portal for the Contact Center Manager role.

Portal details	Description
Home Portal Name	Home - Contact Center Manager Portal
Group Details	IBM TRIRIGA Contact Center Manager
License Details	<ul> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Projects</li> </ul>
Performance Metrics	<ul><li>This Week First Call Resolution</li><li>Agent Efficiency</li><li>Customer Satisfaction</li></ul>

### **Contract Manager and Purchasing Manager roles**

The Contract Manager and the Purchasing Manager are similar roles that include responsibility for managing contracts and purchasing for projects. The Contract Manager and the Purchasing Manager can be two dedicated roles or can be one combined role.

The Contract Manager and Purchasing Manager roles includes the following tasks:

- Creating and managing all proposals and contracts at the company-level and for specific projects.
- · Managing contracts and purchasing for a project.
- Managing performance against contract deliverables.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Contract Manager and Purchasing Manager roles.

Portal details	Description
Home Portal Name	Home - Contract And Purchasing Manager Portal
Group Details	IBM TRIRIGA Contract Manager
License Details	<ul><li>IBM TRIRIGA Enterprise Workplace Management</li><li>IBM TRIRIGA Workplace Performance Management Projects</li></ul>

Portal details	Description
Performance Metrics	My Change Orders to Contract
	Contract On-Time Completion Rate

### Service Manager role

Service Managers are typically responsible for managing service level agreements with customers and external service providers.

The Service Manager role includes the following tasks:

- Defining and managing service level agreements with customers.
- Managing external service providers.
- Assigning tasks to technicians throughout each work day that are based on SLAs, technician availability, and the technician's skills.
- Reviewing both tactical and longer-term metrics for their team and handling performance that is outside of the defined thresholds.

The following table describes the portal for the Service Manager role.

Portal details	Description
Home Portal Name	Home - Service Manager Planner Portal
Group Details	IBM TRIRIGA Service Manager
License Details	IBM TRIRIGA Operations
	IBM TRIRIGA Real Estate Environmental Sustainability
	IBM TRIRIGA Strategic Facility Planning
	<ul> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> </ul>
	IBM TRIRIGA Workplace Performance Management Projects
Performance Metrics	Customer Satisfaction
	On-Time Service Responsiveness
	PM to Repair Ratio
	On-Target Service Costs
	Overtime Utilization Rate
	• % PM Tasks Completed vs Open
	Callback Index

### Service Technician role

Service Technicians are typically responsible for completing tasks in the field. Service Technicians work closely with the Service Manager.

The Service Technician role includes the following tasks:

- Receiving five to 10 tasks per day in TRIRIGA.
- Completing tasks in the field.
- Planning daily tasks or work tasks, which are determined by the Service Manager.
- Updating the system to record time and materials.

The following table describes the portal for the Service Technician role.

Portal details	Description
Home Portal Name	Home – Service Technician Portal
Group Details	IBM TRIRIGA Service Technician
License Details	IBM TRIRIGA Facility Assessment
	IBM TRIRIGA Operations
	<ul> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> </ul>
	• IBM TRIRIGA Workplace Performance Management Projects
Performance Metrics	My Customer Satisfaction
	My On-Time Service Responsiveness
	My On-Target Service Costs
	Customer Satisfaction
	On-Time Service Responsiveness
	PM to Repair Ratio
	On-Target Service Costs
	Overtime Utilization Rate
	% PM Tasks Completed vs Open
	Callback Index

### Facilities roles and portals

The Workplace Performance Management Facilities Portal includes portal configurations for the Facilities Executive, Space Manager/Planner, and Move Manager/Planner user roles.

### **Facilities Executive role**

The Facilities Executive or Facilities Manager is responsible for the part of the workplace management team that directly manages the facilities. Facilities Executives are typically responsible for developing strategic facility goals, monitoring space allocations, and providing efficient space use.

The Facilities Executive role includes the following tasks:

- Communicating with upper management to develop strategic facility goals.
- Developing strategic long-range plans to achieve strategic objectives.
- Creating and managing the organization's fiscal operating and capital budget and expenses.
- Monitoring space allocations and providing efficient space use.
- Monitoring moves and organizational churn rates.
- Providing a workplace setting that is conducive to productive work.
- Monitoring occupant satisfaction.
- Monitoring construction and renovation projects.
- Monitoring performance metrics.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Facilities Executive role.

Portal details	Description
Home Portal Name	Home – Facilities Executive Portal
Group Details	IBM TRIRIGA Facilities Manager
License Details	<ul> <li>IBM TRIRIGA Facilities</li> <li>IBM TRIRIGA Strategic Facility Planning</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Projects</li> <li>IBM TRIRICA Particular Data Management</li> </ul>
Performance Metrics	<ul> <li>Cost of Operations (\$ / Area)</li> <li>Total Occupancy Cost (TCO)(\$ / Area)</li> <li>Leased vs. Owned</li> <li>Occupancy Rate</li> <li>Density (Area/Person)</li> <li>Move Cost Per Person</li> <li>Energy Use Intensity</li> </ul>

### Space Manager/Planner role

The Space Manager and the Space Planner are similar roles that include responsibility for optimizing space and planning space to meet business objectives. The Space Manager and the Space Planner can be two dedicated roles or can be one combined role.

The Space Manager/Planner role includes the following tasks:

- Optimizing space utilization.
- Planning space to meet business objectives.
- Managing day-to-day organizational space assignments and charge backs.
- Advising internal customers on utilization improvements and planning options.
- Assigning and managing task assignments.
- Reviewing both tactical and longer-term metrics for their team and handling performance that is outside of the defined thresholds.

The following table describes the portal for the Space Manager/Planner role.

Portal details	Description
Home Portal Name	Home – Space Manager Planner Portal
Group Details	<ul><li> IBM TRIRIGA Space Manager</li><li> IBM TRIRIGA Space Planner</li></ul>
License Details	IBM TRIRIGA Workplace Performance Management Enterprise
Performance Metrics	<ul> <li>Customer Satisfaction</li> <li>Occupancy Rate %</li> <li>Density, Occupancy (Area/Person)</li> <li>Density, Seating Capacity (Area/Work Point)</li> <li>Occupant Survey Ratings</li> <li>Churn Rate</li> </ul>

### Move Manager/Planner role

The Move Manager and the Move Planner are similar roles that include responsibility for planning and implementing move projects, tasks, and move layout designs. The Move Manager and the Move Planner can be two dedicated roles or can be one combined role. Traditionally, this role comes from an architectural, interior design or CAD background and therefore is visual in nature.

The Move Manager/Planner role includes the following tasks:

- Delivering space plan rearrangements.
- Planning and implementing move projects, tasks, and move layout designs.
- Managing day-to-day small moves, office reconfigurations, and furniture requests.
- Coordinating move plans with other roles.
- Assigning tasks to the team.
- Generating tasks and requests for maintenance or services that are related to moves.

Portal details	Description
Home Portal Name	Home – Move Manager Planner Portal
Group Details	<ul><li> IBM TRIRIGA Move Manager</li><li> IBM TRIRIGA Move Planner</li></ul>
License Details	IBM TRIRIGA Workplace Performance Management Enterprise
Performance Metrics	<ul> <li>Churn Rate</li> <li>Move Cost/Person</li> <li>Occupancy Rate %</li> <li>Density, Occupancy (Area/Person)</li> <li>Density, Seating Capacity (Area/Work Point)</li> <li>Occupant Survey Ratings</li> </ul>

The following table describes the portal for the Move Manager/Planner role.

#### Real estate roles and portals

The Workplace Performance Management Real Estate Portal includes portal configurations for the Real Estate Executive, Real Estate Contract Manager, and Real Estate Transaction Manager user roles.

### **Real Estate Executive role**

The Real Estate Executive is responsible for the part of the workplace management team that directly manages real estate transactions and contracts. The Real Estate Executive's primary responsibility is to find, obtain, manage, and dispose of real estate facilities to optimize the portfolio for the company's primary business needs and objectives.

The Real Estate Executive role includes the following tasks:

- Communicating with upper management to develop strategic facility goals.
- Developing strategic long-range plans to achieve strategic objectives.
- Creating and managing the organization's fiscal operating and capital budget and expenses.

- Managing facility acquisition and disposal.
- Managing real estate contracts (leases and owned property).
- Insuring that proper payments are made, options are executed, and renewals are evaluated.
- Reviewing critical dates, evaluating contract options, and determining strategic direction.
- Monitoring space assignments and real estate costs that are associated with internal organizations.
- · Facilitating compliance with regulatory reporting.
- Monitoring space allocations and providing efficient space use.
- Providing a workplace setting that is conducive to productive work.
- Monitoring occupant satisfaction.
- Monitoring performance metrics.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Real Estate Executive role.

Portal details	Description
Home Portal Name	Home - RE Executive Portal
Group Details	IBM TRIRIGA RE Executive
License Details	<ul> <li>IBM TRIRIGA Enterprise Workplace Management</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Real Estate</li> </ul>
Performance Metrics	<ul> <li>Vacancy Rate</li> <li>Cost Per Area – Leased</li> <li>Cost Per Area – Owned</li> <li>Area Per Person</li> <li>% Portfolio Leased vs. Owned</li> <li>% On-time Delivery of Real Estate Projects</li> <li>Average Transaction Score</li> <li>Customer Satisfaction – Portfolio Managers</li> </ul>

#### **Real Estate Contract Manager role**

The primary responsibility of the Real Estate Contract Manager is to manage real estate contracts for the company. The Real Estate Contract Manager also ensures that proper payments are made, options are executed, and renewals are evaluated.

The Real Estate Contract Manager role includes the following tasks:

- Interpreting lease language, verifying building data, abstracting leases, and translating that information into TRIRIGA.
- Reviewing critical dates and determining financial information for each building, including rents, CAM adjustments, index adjustments, percentage rent schedules, and any other payments that are associated with real estate contracts.
- Allocating space assignments and costs that are associated with real estate contracts for internal organizations.
- Checking existing contract abstracts with the actual lease document for accuracy.

- Receiving and answering requests for information that pertain to the contracts, such as clarification of clauses.
- Ensuring compliance with contract clauses.
- Evaluating contract options, making recommendations to execute or close options, and logging the final decision in TRIRIGA.
- Facilitating legal notices and correspondence that is related to lease administration.

The following table describes the portal for the Real Estate Contract Manager role.

Portal details	Description
Home Portal Name	Home – RE Contract Manager Portal
Group Details	IBM TRIRIGA RE Contract Manager
License Details	<ul> <li>IBM TRIRIGA Workplace Performance Management</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Real Estate</li> </ul>
Performance Metrics	<ul> <li>Cost Per Area – Owned Property (Fee) Agreements</li> <li>Cost Per Area – Leased</li> <li>% On-Time Payments</li> <li>% Savings from Audits</li> <li>Average Days Payments Outstanding</li> <li>Income Per Area – AR Leases</li> </ul>

### **Real Estate Transaction Manager role**

The Real Estate Transaction Manager is responsible for all Real Estate transactions. Transactions are accomplished through the effective management of transaction plans and real estate projects. The cost, time, and performance of service providers is critical to locating, acquiring, and disposing of critical company locations.

The Real Estate Transaction Manager role includes the following tasks:

- Communicating with upper management to develop strategic facility goals.
- Developing strategic long-range plans to achieve strategic objectives.
- Creating and managing transaction plans and real estate projects.
- Managing facility acquisition and disposal.
- Initiating real estate lease and owned property agreements.
- Managing external service providers, such as consultants, brokers, bankers, and facility owners.
- Reviewing critical dates, evaluating contract options, and determining strategic direction.
- Providing a workplace setting that is conducive to productive work.
- Monitoring performance metrics.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Real Estate Transaction Manager role.

Portal details	Description
Home Portal Name	Home - RE Transaction Manager Portal
Group Details	IBM TRIRIGA RE Transaction Manager
License Details	<ul> <li>IBM TRIRIGA Enterprise Workplace Management</li> <li>IBM TRIRIGA Workplace Performance Management Enterprise</li> <li>IBM TRIRIGA Workplace Performance Management Real Estate</li> </ul>
Performance Metrics	<ul> <li>Vacancy Rate</li> <li>Cost Per Area – Leased</li> <li>Cost Per Area – Owned</li> <li>% Portfolio Leased vs. Owned</li> <li>Implementation Plan Savings Progress</li> <li>Average Overall Transaction Score – My Projects</li> <li>% On-time Delivery of Real Estate Projects</li> <li>My Average Transaction Cycle Time</li> <li>Customer Satisfaction – Portfolio Managers</li> <li>Customer Satisfaction – Preferred Providers</li> </ul>

#### **Projects roles and portals**

The Workplace Performance Management Projects Portal includes portal configurations for the Project Executive, Program Manager, Project Manager, and Project Container user roles.

### **Project Executive role**

The Project Executive is responsible for the part of the workplace management team that directly manages short- and long-term projects. Project Executives are typically responsible for developing strategic program and project goals and monitoring program and project performance.

The Project Executive role includes the following tasks:

- Communicating with upper management to develop strategic program and project goals.
- Developing strategic long-range plans to achieve strategic objectives.
- Creating and managing the organization's fiscal operating and capital budget and expenses.
- Monitoring program and project performance of both internal and external service providers.
- Recommending and approving funding levels and spending plans.
- Monitoring occupant satisfaction.
- Monitoring construction and renovation projects.
- Monitoring performance metrics.
- Receiving and responding to approvals and notifications.

The following table describes the portal for the Project Executive role.

Portal details	Description
Home Portal Name	Home – Projects Executive Portal
Group Details	IBM TRIRIGA Project Executive
	• IBM TRIRIGA Project Executive - Retail
License Details	IBM TRIRIGA Capital Projects Manager
	IBM TRIRIGA Capital Projects Manager Upgrade
	IBM TRIRIGA Workplace Performance Management Projects
Performance Metrics	triWPMProjectExecutive
	% Projects Over Schedule
	Contract On-Time Completion Rate
	% Projects Over Budget
	% Current Budget To Forecast
	triWPMProjectManager
	% Change Order To Budget

### **Program Manager role**

The Program Manager is entrusted with and is responsible for managing significant funding and must decide on the best use of that funding to accomplish the program objectives.

The Program Manager role includes the following tasks:

- Estimating and submitting funding requests for new programs or changes to existing program funding.
- Establishing funding sources and allocates funds.
- Evaluating and approving requests for project funding.
- Managing program cost and schedule performance to achieve the program objectives.
- Monitoring project cost and schedule performance and adjusting or terminating project funding to achieve the program objectives.
- Reporting to senior management on program performance.

The following table describes the portal for the Program Manager role.

Portal details	Description
Home Portal Name	Home – Program Manager Portal
Group Details	IBM TRIRIGA Program Manager
License Details	<ul> <li>IBM TRIRIGA Capital Projects Manager</li> <li>IBM TRIRIGA Capital Projects Manager Upgrade</li> <li>IBM TRIRIGA Workplace Performance Management Projects</li> </ul>
Performance Metrics	<ul> <li>triWPMProgramManager</li> <li>% Projects Over Schedule</li> <li>Contract On-Time Completion Rate</li> <li>% Projects Over Budget</li> <li>% Current Budget To Forecast</li> <li>% Change Order To Budget</li> </ul>

# **Project Manager role**

Project Managers are typically responsible for new construction and major renovation projects. Project Managers are also responsible for facility assessment, environmental sustainability, or other projects that require the coordination of several team members, and budget and schedule management.

The Project Manager role includes the following tasks:

- Estimating and submitting funding requests for new projects.
- Establishing and managing the project budget and schedule.
- Coordinating all project activities, including design, construction, inspections, and permits.
- Managing all project-related proposals, contracts, purchase orders, change orders, invoices, and payments.
- Managing the close-out activities when the project is completed to ensure that all aspects of the project are successfully resolved.
- Reporting to senior management on project performance.

The following table describes the portal for the Project Manager role.

Portal details	Description
Home Portal Name	Home – Project Manager Portal
Group Details	IBM TRIRIGA Project Manager
License Details	<ul><li>IBM TRIRIGA Capital Projects Manager</li><li>IBM TRIRIGA Workplace Performance Management Projects</li></ul>
Performance Metrics	<ul> <li>triWPMProjectManager</li> <li>% Project Over Schedule</li> <li>My Current Budget to Forecast</li> <li>My Project Schedule Variance</li> <li>My Change Orders to Budget</li> <li>My Change Orders to Contract</li> </ul>

### **Project Container for project contexts**

A typical Program Manager or Project Manager role must work within the context of a project. The Project Container home portal is used for this purpose.

The following table describes the portal for the Project Container role for project contexts.

Portal details	Description
Home Portal Name	Home – Project Container Portal
Group Details	IBM TRIRIGA Project Team Member
License Details	<ul><li>IBM TRIRIGA Capital Projects Manager</li><li>Licenses that are associated with the selected role</li></ul>
Performance Metrics	<ul> <li>triWPMProjectManager</li> <li>My Change Orders to Budget</li> <li>% Project Over Schedule</li> <li>My Current Budget to Forecast</li> <li>My Original Budget To Forecast</li> </ul>

# **Chapter 4. Performance management metrics**

Metrics define performance targets and measurements to align workplace resources with business objectives. IBM TRIRIGA Workplace Performance Management provides workplace managers and employees with a view of workplace performance.

Metrics are provided in the following key areas:

#### Financial performance

Measures the cost of operations, total occupancy costs, revenue weeks, and profitability of workplace operations and resources.

#### **Operational performance**

Measures the efficiency and effectiveness of workplace processes.

#### **Customer performance**

Measures how well workplace operations align with the business organization needs.

#### Portfolio performance

Measures the use, condition, and return on workplace assets.

#### **Environmental performance**

Measures cost, intensity, and recovery for energy, emissions, water, and waste.

In TRIRIGA, the external corporate financial system is hierarchical and aggregates costs at the building or structure level. The cost code structure and roll-ups align with common industry definitions of capital, cost of operations based on varying factors, operating costs within spending targets, or expense.

#### % On-time Delivery – My Projects metric

Identifies operational performance of the active user in delivering real estate projects and transactions within a planned schedule.

Details of the metric	Description
Name	% On-time Delivery – My Projects
Category	Operational
Analysis objective	Determines root cause of delayed projects. If projects are late, they might affect revenue, customer satisfaction, or both.
Description	Calculates the actual end date of a real estate project against the planned end date.
Source	Customer Focus Group
Measurement	Achieved on-time delivery
Dependent data that is calculated	<ul><li>RE Project:</li><li>Real Estate Project Actual End Date</li><li>Real Estate Project Planned End Date</li></ul>
Roles	RE Transaction Manager

Details of the metric	Description
Display chart types	Score-based: Horizontal Stacked Bar Chart
	• (Capture Period: Vertical Stacked Bar Chart)
Thresholds	Low Threshold: 1
	High Threshold: Not Used
	Range 1: Below Target/Negative/Red
	Range 2: On Target/Positive/Green
	Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triREProjectFact
	Metric Queries: triREProjectFact - Metric - % On-time Delivery of RE Projects - My Projects (Score)
Drill paths	• Geography
	• Project Type
	Capture Period
Interactive filters	• Geography
	• Project Type
Static filters	RE Projects completed in data point refresh period
	• Active User (USERID) = Project Manager
Time	Months
Data point refresh rate	Monthly
License dependency	Real Estate
	Facilities
Functional dependency	Space Use Agreements (Real Estate)
I I I I I I I I I I I I I I I I I I I	Space Allocations (Facilities)
	Space Amocanons (racinites)

# % On-time Delivery – My Tasks metric

Identifies operational performance of the active user in delivering real estate project and tasks within a planned schedule.

Details of the metric	Description
Name	% On-time Delivery – My Tasks
Category	Operational
Analysis objective	Determines root cause of delayed projects. If projects are late, they might affect revenue, customer satisfaction, or both.
Description	Calculates the actual end date of a task against the planned end date.
Source	Customer Focus Group
Measurement	Achieved on-time delivery
Dependent data that is calculated	Tasks: • Actual End Date • Planned End Date

Roles       • RE Transaction Manager • RE Project Team Member         Display chart types       • Score-based: Horizontal Stacked Bar Chart • (Capture Period: Vertical Stacked Bar Chart)         Thresholds       • Low Threshold: 1 • High Threshold: Not Used • Range 1: Low/Negative/Red • Range 2: High/Positive/Green • Range 3: Not Used         Fact details       Module: triMetricFact Business Object: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)         Drill paths       • Geography • Project Name • Capture Period         Interactive filters       • Geography • Project Task         Interactive filters       • Geography • Project Task
NEE Project Team MemberDisplay chart types• Score-based: Horizontal Stacked Bar Chart • (Capture Period: Vertical Stacked Bar Chart)Thresholds• Low Threshold: 1 • High Threshold: Not Used • Range 1: Low/Negative/Red • Range 2: High/Positive/Green • Range 3: Not UsedFact detailsModule: triMetricFact Business Object: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)Drill paths• Geography • Project • Project Name • Capture PeriodInteractive filters• Geography • Project Type • Task Name • Capture Period
Display chart types       • Score-based: Horizontal Stacked Bar Chart         • (Capture Period: Vertical Stacked Bar Chart)         Thresholds       • Low Threshold: 1         • High Threshold: Not Used         • Range 1: Low/Negative/Red         • Range 2: High/Positive/Green         • Range 3: Not Used         Fact details         Module: triMetricFact         Business Object: triREProjectFact         Metric Queries: triREProjectTaskFact - Metric - % On-time         Completion - My Tasks (Score)         Drill paths       • Geography         • Project         • Project Name         • Capture Period         Interactive filters       • Geography         • Project Type         • Task Name         • Project Type
Image: Period: Vertical Stacked Bar Chart)Thresholds• Low Threshold: 1 • High Threshold: Not Used • Range 1: Low/Negative/Red • Range 2: High/Positive/Green • Range 3: Not UsedFact detailsModule: triMetricFact Business Object: triREProjectFact Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)Drill paths• Geography • Project • Project Name • Capture PeriodInteractive filters• Geography • Project Name • Project Name • Project Name • Capture Period
Thresholds       • Low Threshold: 1         • High Threshold: Not Used       • Range 1: Low/Negative/Red         • Range 2: High/Positive/Green       • Range 3: Not Used         Fact details       Module: triMetricFact         Business Object: triREProjectFact       Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)         Drill paths       • Geography         • Project Name       • Task Name         • Capture Period       Interactive filters         Interactive filters       • Geography         • Project Type       • Task Name
<ul> <li>High Threshold: Not Used</li> <li>Range 1: Low/Negative/Red</li> <li>Range 2: High/Positive/Green</li> <li>Range 3: Not Used</li> </ul> Fact details <ul> <li>Module: triMetricFact</li> <li>Business Object: triREProjectFact</li> <li>Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)</li> </ul> Drill paths <ul> <li>Geography</li> <li>Project</li> <li>Project Name</li> <li>Capture Period</li> </ul> Interactive filters <ul> <li>Geography</li> <li>Project Name</li> <li>Project Name</li> <li>Project Name</li> <li>Project Name</li> <li>Task Name</li> <li>Project Name</li> <li>Project Name</li> </ul>
<ul> <li>Range 1: Low/Negative/Red</li> <li>Range 2: High/Positive/Green</li> <li>Range 3: Not Used</li> <li>Fact details</li> <li>Module: triMetricFact</li> <li>Business Object: triREProjectFact</li> <li>Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)</li> <li>Drill paths</li> <li>Geography</li> <li>Project</li> <li>Project Name</li> <li>Capture Period</li> <li>Interactive filters</li> <li>Geography</li> <li>Project Name</li> <li>Project Name</li> <li>Capture Period</li> <li>Interactive filters</li> </ul>
• Range 2: High/Positive/Green         • Range 3: Not Used         Fact details       Module: triMetricFact         Business Object: triREProjectFact         Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)         Drill paths       • Geography         • Project         • Project Name         • Capture Period         Interactive filters         • Geography         • Project Name         • Project Name         • Capture Period
• Range 3: Not Used         Fact details       Module: triMetricFact         Business Object: triREProjectFact         Metric Queries: triREProjectTaskFact - Metric - % On-time         Completion - My Tasks (Score)         Drill paths         • Geography         • Project         • Project Name         • Capture Period         Interactive filters         • Geography         • Project Type         • Task Name
Fact details       Module: triMetricFact         Business Object: triREProjectFact         Metric Queries: triREProjectTaskFact - Metric - % On-time         Completion - My Tasks (Score)         Drill paths         • Geography         • Project         • Project Name         • Capture Period         Interactive filters         • Geography         • Project Name         • Capture Period         Interactive filters         • Geography         • Project Type         • Task Name
Business Object: triREProjectFact         Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)         Drill paths       • Geography         • Project         • Project Name         • Capture Period         Interactive filters       • Geography         • Project Name         • Project Name         • Capture Period         Interactive filters         • Geography         • Project Name         • Project Name         • Task Name         • Project Type         • Task Name
Metric Queries: triREProjectTaskFact - Metric - % On-time Completion - My Tasks (Score)         Drill paths       • Geography         • Project       • Project Name         • Task Name       • Capture Period         Interactive filters       • Geography         • Project Type       • Task Name
Drill paths       • Geography         • Project       • Project Name         • Task Name       • Capture Period         Interactive filters       • Geography         • Project Name       • Project Name         • Project Name       • Geography         • Project Name       • Project Name         • Project Name       • Project Name         • Project Name       • Project Name         • Project Type       • Task Name
<ul> <li>Project</li> <li>Project Name</li> <li>Task Name</li> <li>Capture Period</li> </ul> Interactive filters <ul> <li>Geography</li> <li>Project Name</li> <li>Project Type</li> <li>Task Name</li> </ul>
<ul> <li>Project Name</li> <li>Task Name</li> <li>Capture Period</li> <li>Interactive filters</li> <li>Geography</li> <li>Project Name</li> <li>Project Type</li> <li>Task Name</li> </ul>
Task Name     Capture Period  Interactive filters     Geography     Project Name     Project Type     Task Name
Capture Period      Interactive filters     Geography     Project Name     Project Type     Task Name
Interactive filters    Geography   Project Name  Project Type  Task Name
<ul> <li>Project Name</li> <li>Project Type</li> <li>Task Name</li> </ul>
<ul><li>Project Type</li><li>Task Name</li></ul>
Task Name
ask indiffe
Static filters  • Tasks that are completed in data point refresh period
• Active User (USERID) = Project Manager
Time Months
Data point refresh rate Monthly
License dependency • Real Estate
Facilities
Functional dependency • Space Use Agreements (Real Estate)
Space Allocations (Facilities)

# % On-time Delivery – Real Estate Projects metric

Identifies operational performance of real estate department in delivering real estate projects and transactions within a planned schedule.

Details of the metric	Description
Name	% On-time Delivery - Real Estate Projects
Category	Operational
Analysis objective	Determines root cause of delayed projects. If projects are late, they might affect revenue, customer satisfaction, or both.
Description	Calculates the actual end date of a real estate project against the planned end date.

Details of the metric	Description
Source	Customer Focus Group
Measurement	Achieved on-time delivery
Dependent data that is calculated	<ul><li>RE Project:</li><li>Real Estate Project Actual End Date</li><li>Real Estate Project Planned End Date</li></ul>
Roles	RE Executive
Display chart types	<ul> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>(Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: 1</li> <li>High Threshold: Not Used</li> <li>Range 1: Below Target/Negative/Red</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triREProjectFact Metric Queries: triREProjectFact - Metric - % On-time Delivery of RE Projects (Score)
Scorecard setup	<ul> <li>Default Target = 96%</li> <li>Results based on % Green projects</li> </ul>
Drill paths	<ul> <li>Geography</li> <li>Project Manager</li> <li>Project Type</li> <li>Capture Period</li> </ul>
Interactive filters	<ul><li>Geography</li><li>Project Manager</li><li>Project Type</li></ul>
Static filters	Completed Projects
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

### % On-time Payments - My Real Estate Contracts metric

Identifies operational performance of the active user in delivering on-time payments within the due date, therefore avoiding potential penalties, and late fees.

Details of the metric	Description
Name	% On-time Payments - My Real Estate Contracts
Category	Operational

Details of the metric	Description
Analysis objective	Determines root cause of delayed payments. If payments are late, they might increase expenses through late fees and other penalties.
Description	Calculates payment actual date that is paid of a task against the payment due date.
Source	Customer Focus Group
Measurement	<ul><li>Count of on-time payments</li><li>Total count of payments</li></ul>
Dependent data that is calculated	RE Contracts: • Payment Line Items • Due Date • Paid Date
Roles	RE Contract Manager
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart</li> <li>(Capture Period: Vertical Grouped Bar (percent) Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: 1</li> <li>High Threshold: Not Used</li> <li>Range 1: Below Target/Negative/Red</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triREPaymentFact Metric Queries: triREPaymentFact - Metric - % On-time Payment - My Real Estate Contracts
Drill paths	<ul> <li>Organization</li> <li>Payment Type</li> <li>Cost Code</li> <li>Contract Type</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Organization</li> <li>Contract Name</li> <li>Contract Type</li> <li>Payment Type</li> </ul>
Static filters	<ul> <li>Payment Line Items paid in data point refresh period</li> <li>RE Contracts filtered to Active User (USERID) = Project Manager</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

# % Portfolio Leased metric

Details of the metric	Description
Name	% Portfolio Leased
Category	Portfolio
Analysis objective	Determines the overall agility of the portfolio. This metric can be used to indicate whether leased or owned strategy is important in a transaction.
Description	Provides a measure of portfolio agility and flexibility. The higher the ratio the more agile the portfolio.
Source	<ul><li>Building Owners and Managers Association (BOMA)</li><li>General Services Administration (GSA)</li></ul>
Measurement	<ul><li>Sum of Rentable Area (Active Real Estate Leases)</li><li>Sum of Rentable Area (All Active RE Contracts)</li></ul>
Dependent data that is calculated	<ul> <li>RE Contracts:</li> <li>Sum of Rentable Area from RE Leases</li> <li>Sum of Rentable Area from All Active RE Contracts (Owned Property + Leases)</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>RE Executive</li> </ul>
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar (percent) Chart</li><li>(Capture Period: Vertical Grouped Bar (percent) Chart)</li></ul>
Thresholds	<ul> <li>Low Threshold: .29 (29%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Below Target/Negative/Red</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triREContractFact Metric Queries: triREContractFact - Metric - % Portfolio Leased vs. Owned
Drill paths	<ul><li>Geography</li><li>Organization</li><li>Capture Period</li></ul>
Interactive filters	<ul><li>Geography</li><li>Organization</li></ul>
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly

Defines portfolio agility and flexibility.

Details of the metric	Description
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

# % Savings from Audits

Identifies operational performance of common area maintenance (CAM) / operating expense (OPEX) audits in avoiding non-contracted payment line items.

Details of the metric	Description
Name	% Savings from Audits
Category	Operational
Analysis objective	Determines effectiveness of CAM and OPEX audits.
Description	Calculates audited payment savings against invoiced amounts.
Source	Customer Focus Group
Measurement	<ul><li>Total of Payment Difference</li><li>Total Amount Billed per Landlord</li></ul>
Dependent data that is calculated	Payment Reconciliation: • Amount Billed per Landlord • Payment Difference
Roles	RE Contract Manager
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart</li> <li>(Capture Period: Vertical Grouped Bar (percent) Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .02 (2%)</li> <li>High Threshold: .05 (5%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: On Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triREPaymentReconciliationFact Metric Queries: triREPaymentReconciliationFact - Metric - % Savings From Audits
Drill paths	<ul> <li>Tenant Organization</li> <li>Geography</li> <li>Cost Code</li> <li>Contract Name</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Tenant Organization</li> <li>Geography</li> <li>Contract Name</li> <li>Cost Code</li> </ul>

Details of the metric	Description
Static filters	<ul> <li>Payment Reconciliations within data point refresh period</li> <li>RE Contracts filtered to Active User (USERID) = Project Manager</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

# Area per Person – RE Contracts metric

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Name	Area per Person – RE Contracts
Category	Portfolio
Analysis objective	Determines which real estate contracts are outside of planned values, which indicated whether disposition, termination, or reconfiguration is desirable. Use time trends to compare over time to identify anomalies or trends.
Description	Organizations strive to keep a low area per person ratio. High area per person can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	<ul><li>Building Owners and Managers Association (BOMA)</li><li>General Services Administration (GSA)</li></ul>
Measurement	<ul><li>Total Rentable Area</li><li>Total Headcount</li></ul>
Dependent data that is calculated	RE Contract (triREContract): <ul> <li>Total Rentable Area</li> <li>Total Headcount</li> </ul>
Roles	RE Transaction Manager
Display chart types	<ul><li>Score-based: Horizontal Stacked Bar Chart</li><li>(Capture Period: Vertical Stacked Bar Chart)</li></ul>
Thresholds	<ul> <li>Low Threshold: 330 RSF/Person</li> <li>High Threshold: 370 RSF/Person</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triREContractFact Metric Queries: triREContractFact – Metric – Area per Person – RE Contracts (Score)
Details of the metric	Description
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Drill paths	• Geography
	Organization
	• Contract Type
	Capture Period
Interactive filters	• Geography
	Organization
	• Contract Type
	• Primary Use
	For US Federal Government:
	• Geography
	Organization
	Contract Type
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	Real Estate
Functional dependency	Space Use Agreements
	Space Allocations

# Average Days Outstanding metric

Identifies operational performance of receivables.

Details of the metric	Description
Name	Average Days Outstanding
Category	Operational
Analysis objective	Determines which payment issues exist, including bad creditors. Can be used to indicate whether to terminate a contract.
Description	Lease receivables that are measured in average days outstanding.
Source	Customer Focus Group
Measurement	Average of Outstanding Receivables (TODAY – Payment Due Date)
Dependent data that is calculated	Payment Line Items:
	• Outstanding Receivables = Payment Line Items, where due date less than or equal to TODAY AND date paid is NULL
	Payment Due Date
	Paid Date
Roles	RE Contract Manager

Details of the metric	Description
Display chart types	• Value-based: Horizontal Grouped Bar (percent) Chart
	• (Capture Period: Vertical Grouped Bar (percent) Chart)
Thresholds	Low Threshold: 10
	• High Threshold: 30
	Range 1: Good/Positive/Green
	Range 2: On Target/Caution/Yellow
	Range 3: Poor/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triREPaymentFact
	Metric Queries: triREPaymentFact - Metric - Average Days Outstanding
Drill paths	Organization
	• Payment Type
	Contract Name
	Contract Type
	Capture Period
Interactive filters	Organization
	Contract Name
	Payment Type
	Contract Type
Static filters	Payment Line Items paid in data point refresh period
	<ul> <li>RE Contracts filtered to Active User (USERID) = Contract</li> </ul>
	Administrator
Suppress zero values	Yes, suppress graphic display of zero values
	• Yes, suppress interactive filters list or drill-path list with
	zero values
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

#### Average Overall Transaction Score metric

Identifies operational performance of the real estate department in delivering real estate projects and quality that is based on the average overall critical to quality (CTQ) score for completed RE projects.

Details of the metric	Description
Name	Average Overall Transaction Score
Category	Operational

Details of the metric	Description
Analysis objective for exception conditions	Determines root cause of poor quality in completed transactions.
Description	Average overall transaction score for completed real estate projects.
Source	Customer Focus Group
Measurement	Overall Sigma Score
Dependent data that is	RE Projects:
calculated	Overall Sigma Score
Roles	RE Executive
Display chart types	Score-based: Horizontal Stacked Bar Chart
	(Capture Period: Vertical Stacked Bar Chart)
Thresholds	Low Threshold: 2
	High Threshold: 4
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triREProjectFact
	Metric Queries: triREProjectFact - Metric - Average Overall Transaction Score (Score)
Drill paths	• Geography
	Portfolio Manager
	Capture Period
Interactive filters	Geography
	Portfolio Manager
Static filters	RE Projects completed in data point refresh period
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)

#### Average Overall Transaction Score – My Projects metric

Identifies operational performance of the active user in delivering real estate projects and quality that is based on the average overall critical to quality (CTQ) score for completed RE projects.

Details of the metric	Description
Name	Average Overall Transaction Score – My Projects
Category	Operational
Analysis objective	Determines root cause of poor quality in completed transactions.

Details of the metric	Description
Description	Average overall transaction score for completed real estate projects for the active user.
Source	Customer Focus Group
Measurement	Overall Sigma Score
Dependent data that is calculated	RE Projects: • Overall Sigma Score
Roles	<ul><li> RE Transaction Manager</li><li> RE Contract Manager</li></ul>
Display chart types	<ul><li>Score-based: Horizontal Stacked Bar Chart</li><li>(Capture Period: Vertical Stacked Bar Chart)</li></ul>
Thresholds	<ul> <li>Low Threshold: 2</li> <li>High Threshold: 4</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triREProjectFact Metric Queries: triREProjectFact - Metric - Average Overall Transaction Score - My Projects (Score)
Drill paths	<ul><li>Geography</li><li>Capture Period</li></ul>
Interactive filters	Geography
Static filters	<ul><li>RE Projects completed in data point refresh period</li><li>Active User (USERID) = Project Manager</li></ul>
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

#### **Callback Index metric**

Determines the level of tasks that are not completed on the first response and require subsequent tasks to resolve the original issue.

Details of the metric	Description
Name	Callback Index
Category	Operational
Analysis objective	Determines how effective the operations team is in satisfying assigned work on the first response. View this metric over time to show, analyze, and adjust training or resource assignment based on observed trends.

Details of the metric	Description
Description	Informs management how the internal service providers, external service providers, or both are performing and the accuracy of 'first response' resolution. The customer company/agency expects that services are performed within the time and costs specified in the various agreements and contracts – without requiring extra callback work.
	This is an exception-based metric that is evaluating under-performers only.
	This metric is useful for monitoring performance on at least the following topics:
	<ul> <li>Rework related to Operator training</li> </ul>
	<ul> <li>Rework related to Maintenance training (lack of knowledge or skills)</li> </ul>
	<ul> <li>Lost productivity that is related to training</li> </ul>
	<ul> <li>Rework related to under-performing technicians</li> </ul>
	Rework related to improper procedures
Source	Customer Focus Group
Measurement	Total number of Completed Corrective Tasks where 'Callback' equals TRUE / Total number of Completed Corrective Tasks
Dependent data that is calculated	<ul> <li>Total number of Completed Tasks where 'Callback' field = TRUE and Task Type = Corrective</li> </ul>
	<ul> <li>Total number of Completed Tasks where Task Type = Corrective</li> </ul>
Roles	OP Service Manager
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period:</li> </ul>
	Vertical Stacked Bar Chart)
Thresholds	• Low Threshold: .01 (1%)
	• High Threshold: .1 (10%)
	Range 1: Low/Positive/Green
	Range 2: Medium/Caution/Yellow
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triTaskResourceFact
	Metric Queries: triTaskResourceFact - Metric - Callback Index, triTaskResourceFact - Metric - Callback Index (Score)
Drill paths	• Geography
	• Location
	Assigned Kesource
	• Kequest Class
	• Kesponsible Organization
	Capture Period

Details of the metric	Description
Interactive filters	• Geography
	Location
	Responsible Organization
	Request Class
	Assigned Resource
Static filters	<ul> <li>Tasks (only Task types with a Responsible Organization section)</li> </ul>
	• Status = Completed or Closed Tasks
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	<ul> <li>Task Management</li> <li>Service Management</li> </ul>
	- Service management

# Capital Cost (Actual vs. Budget) metric

Identifies whether capital costs are within spending targets.

Details of the metric	Description
Name	Capital Cost (Actual vs. Budget)
Category	Financial
Analysis objective	Determines which buildings are within targets or are performing poorly in relation to budget goals. Use time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates the measurement of actual costs against budgeted costs which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Capital Cost (Actual vs. Budget)
Dependent data that is calculated	Financial Summary Object provides summary data for total capital costs.
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>FA Move Manager/Planner</li> <li>OP Executive</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	Capture Period: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)
Thresholds	<ul> <li>Low Threshold: \$.85/RSF</li> <li>High Threshold: \$1.50/RSF</li> <li>Range 1: Under Budget/Caution/Yellow</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Over Budget/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triBuildingCostFact
	Metric Queries: triBuildingCostFact - Metric - Capital Cost Ratio (Actual / Budget) Metric
Drill paths	• Geography
	• Location
	• Time
	Service Class
	Capture Period
Interactive filters	• Geography
	Location
	Service Class
	• Building Tenure (Lease/Own)
	Organization (from cost code organization)
	For US Federal Government:
	• Geography
	Location
	Service Class
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
	<ul> <li>Organization (from cost code organization)</li> </ul>
Static filters	Cost Type = Capital
Time	Months
Data point refresh rate	• Monthly
	• After month-end close and scheduled load of financial data

# Capital Cost (Budget vs. Actual vs. Forecast) metric

Identifies whether capital costs are within spending targets.

Details of the metric	Description
Name	Capital Cost (Budget vs. Actual vs. Forecast)
Category	Financial
Analysis objective	Determines which buildings are within targets or performing poorly in relation to budget goals. Use time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates the measurement of actual costs against budgeted costs which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Capital Cost (Budget vs. Actual vs. Forecast)
Dependent data that is calculated	Financial Summary Object provides summary data for total capital costs

Details of the metric	Description
Roles	EN Workplace Executive
	FA Move Manager/Planner
	• OP Executive
	OP Facility Assessment Manager/Planner
Display chart types	Capture Period: Line or Bar Chart
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triBuildingCostFact
	Metric Queries: triBuildingCostFact - Metric - Capital Cost (Budget vs. Actual) Metric
Drill paths	Capture Period
Interactive filters	• Geography
	Location
	• Time
	Service Class
	• Building Tenure (Lease/Own)
	Organization (from cost code organization)
	For US Federal Government:
	• Geography
	Location
	• Time
	Service Class
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
	Organization (from cost code organization)
Static filters	Cost Type = Capital
Time	Months
Data point refresh rate	• Monthly
	• After month-end close and scheduled load of financial data

# **Capital Renewal Index metric**

Correlates the total capital investment in a facility relative to the current replacement value (CRV).

Details of the metric	Description
Name	Capital Renewal Index
Category	Portfolio

Details of the metric	Description
Analysis objective	Determines the ongoing capital investment in capital improvements and renovations against the Current Replacement Value (CRV) for the facilities. View this metric over time to show, analyze, and adjust programs based on observed trends.
Description	Informs management of the capital investment in a facility that is related to the replacement value of the facility. It is a key performance measure that provides the capital-side view of facility expenditures.
Source	IFMA, APPA
Measurement	Total Capital Cost / Total Current Replacement Value (CRV)
Dependent data that is calculated	<ul> <li>Total Capital Cost: Sum of Financial Summary table filtered for Cost Type = Capital</li> <li>Total Current Replacement Value: Building Condition Assessment Tab holds the Current Replacement Value for each building (CRV = Crees Area * Cast per Area)</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .1 (10%)</li> <li>High Threshold: .2 (20%)</li> <li>Range 1: Low Capital Investment/Caution/Yellow</li> <li>Range 2: Medium Capital Investment/Positive/Green</li> <li>Range 3: High Capital Investment/Caution/Yellow</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Capital Renewal Index, triBuildingFact - Metric - Capital Renewal Index (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Building Class</li> <li>Building Tenure</li> <li>Capture Period</li> </ul>

Details of the metric	Description
Interactive filters	• Geography
	Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	• Location
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
Static filters	Include Active Status Dimensions Only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Facility Assessment
	IBM TRIRIGA Operations
Functional dependency	• Building (Current Replacement Value fields)
	Financial data from external corporate system

#### **Change Orders to Budget metric**

Determines the percentage of a budget that is composed of change orders. In addition, related data shows the effect that potential change orders might contribute as a percentage of budget.

Details of the metric	Description
Name	Change Orders to Budget (Capital Projects Only)
Category	Financial
Analysis objective	Identifies projects where change orders are increasing as a percent of overall budget and provide analytic capabilities into the project's change orders to find out why.
Description	Identifies how much of a project's budget is composed of change orders as a percent of the overall budget.
Source	Customer Focus Group
Measurement	Project Total Change Orders / Current Project Budget
Dependent data that is calculated	None
Roles	<ul><li>PR Manager</li><li>PR Executive</li></ul>
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart

Details of the metric	Description
Thresholds	• Low Threshold: .1 (10%)
	• High Threshold: .2 (20%)
	Range 1: Good/Positive/Green
	Range 2: Under Performing/Caution/Yellow
	Range 3: Poor/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries: triCapitalProjectFact – Metric – Change Order to Budget
Drill paths	• Program
	• Project
Interactive filters	• Geography
	Organization
	Capture Period
Static filters	Change orders on Active Projects
	• Approved Change Orders, including change orders that are approved and closed
Time	Months
Data point refresh rate	Monthly

#### **Change Orders to Contract metric**

Determines the percentage of a contract that is composed of change orders. In addition, related data shows the effect that potential change orders might contribute as a percentage of contract.

Details of the metric	Description
Name	Change Orders to Contract
Category	Financial
Analysis objective	When change orders make up a large percent of the overall contract, project managers need to determine why and act, especially if it is trending upward.
Description	Identifies how much of a project's budget is composed of change orders, as a percent of the original contract.
Source	Customer Focus Group
Measurement	Total Contract Change Order Amount / Contract Original Commitment
Dependent data that is calculated	<ul> <li>Total Contract Change Order Amount = Sum of the "Change Amount" on each change order per contract</li> <li>Contract Original Commitment = On the Contract General page, Summary section, A. Original Commitment amount.</li> </ul>
Roles	<ul><li>PR Manager</li><li>PR Executive</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart

Details of the metric	Description
Thresholds	• Low Threshold: .1 (10%)
	• High Threshold: .2 (20%)
	Range 1: Good/Positive/Green
	Range 2: Under Performing/Caution/Yellow
	Range 3: Poor/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectContractFact
	Metric Queries: triCapitalProjectContractFact – Metric –
	Change Order to Contract (Score)
Drill paths	• Program
	• Project
	• Vendor
	Capture Period
Interactive filters	• Geography
	Organization
	• Vendor
Static filters	Active projects
Time	Months
Data point refresh rate	Monthly

# Churn Rate (%) metric

Determines the move activity levels of people and indirectly determines negative productivity impacts that are caused by excessive moves.

Details of the metric	Description
Name	Churn Rate (%)
Category	Operational
Analysis objective	Analyzes churn rates at a building level and organization level to focus investigation on root causes of exception conditions. Use time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	The Churn Rate might indicate excessive moves, move costs, and productivity disruption from move activity. However, churn rates increase in periods of change, such as grow, consolidation, or reorganization business needs. Other information that is based on time trends, move type, move reason, or organization might indicate opportunities or areas to investigate further.
Source	IFMA
Measurement	Total number of Moves / Total number of Workers
Dependent data that is calculated	<ul> <li>Moves: Count of People moved per time period (from Move Log)</li> <li>Total Workers: Count of People assigned to Space</li> </ul>

Details of the metric	Description
Roles	FA Move Manager/Planner
	• FA Space Manager/Planner
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)
Thresholds	• Low Threshold: .2 (20%)
	• High Threshold: .45 (45%)
	Range 1: Low/Positive/Green
	Range 2: Medium/Caution/Yellow
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triSpaceAllocationFact
	Metric Queries: triSpaceAllocationFact - Metric - Churn Rate (%) Metric
Drill paths	• Geography
	• Location
	Organization
	Capture Period
Interactive filters	• Geography
	Location
	Organization
	For US Federal Government:
	• Geography
	Location
	Organization
	Real Property Type
	• Real Property Use
Static filters	Active Buildings
	Active Floors
	Active Spaces
Time	Months
Data point refresh rate	Monthly

#### **Condition Index metric**

Indicates the relative physical condition of a building system, facility, or group of facilities.

Details of the metric	Description
Name	Condition Index
Category	Portfolio

Details of the metric	Description
Analysis objective	Determines the relative operational health of building systems, assets, and facilities by comparing the costs that are associated with known and documented 'deficiencies' against the Current Replacement Value (CRV) for the systems, assets, or facilities. View this metric over time to show, analyze, and adjust programs based on observed trends.
Description	Informs management of the relative physical health of building systems and facilities. It is a key performance measure with a defined set of industry-adopted thresholds. The FCI provides a corresponding industry-accepted guideline for the annual reinvestment rate to prevent further accumulation of deferred maintenance deficiencies.
Source	IFMA, APPA
Measurement	Total Cost of Deficiencies / Total Current Replacement Value (CRV)
Dependent data that is calculated	<ul> <li>Total Cost of Deficiencies = Total Cost of Deficiencies where Priority = Level 1, and Status not = Retired or Completed.</li> <li>Total Current Replacement Value: Building Condition Assessment Tab holds the Current Replacement Value for each building (CRV = Gross Area * Cost per Area).</li> <li>Total Current Replacement Value: Building System Item (Current Replacement Value for each building system (CRV))</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ol> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ol>
Thresholds	<ul> <li>Low Threshold: .05</li> <li>High Threshold: .1</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingSystemItemFact Metric Queries: triBuildingSystemItemFact - Metric - Condition Index, triBuildingSystemItemFact - Metric - Condition Index (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Building System Class</li> <li>Capture Period</li> </ul>

Details of the metric	Description
Interactive filters	• Geography
	Location
	Building System Class
	Building Class
	Building Tenure
Static filters	Include Active Status Dimensions Only:
	• Locations
	Organizations
	• People
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Facility Assessment
	IBM TRIRIGA Operations
Functional dependency	Facility Assessment
	Task Management
	Service Management

# **Contact Center Efficiency metric**

Measures the efficiency of processing contact center requests.

Details of the metric	Description
Name	Contact Center Efficiency
Category	Operational
Analysis objective for exception conditions	Determines whether requests are being processed in accordance with service goals. If not, investigate causes and remedies to increase efficiency.
Description	The time duration of processing contact center requests.
Source	Customer Focus Group
Measurement	Time Duration (start time - end time) / Total Requests
Dependent data that is calculated	Contact Center Communication Record - start time - end time
Roles	OP Service Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: 3 Minutes</li> <li>High Threshold: 5 Minutes</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: On Target/Caution/Yellow</li> <li>Range 3: Poor/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triContactCenterFact Metric Queries: triContactCenterFact - Metric - Contact Center Efficiency

Details of the metric	Description
Drill paths	• Geography
	Problem Location
	Requester Organization
	Request Class
	Agent Name
	Capture Period
Interactive filters	• Geography
	Problem Location
	Requester Organization
	Request Class
	Agent Name
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Contact Center

# **Contract On-Time Completion Rate metric**

Determines the schedule efficiency by comparing the contracts that are completed on or ahead of schedule to the total number of completed contracts.

Details of the metric	Description
Name	Contract On-Time Completion Rate
Category	Operational
Analysis objective	Calculates the contract on-time completion rate by comparing the percentage of contracts that are completed on time or ahead of schedule to the total number of completed contracts. Contracts that re completed late are not considered. The goal is to get a completion rate as near as possible to 100%.
Description	Through knowing the contract on-time completion rate, for example, by vendor, organizations can work to improve vendor performance.
Source	Customer Focus Group
Measurement	Total contracts completed on-time / total number contracts
Dependent data that is calculated	Contract completed on-time = Actual End Date (triFinalCompletionDA) < Planned End Date (triContractEndDA)
Roles	<ul><li>PR Manager</li><li>PR Executive</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart

Details of the metric	Description
Thresholds	• Low Threshold: .85 (85%)
	High Threshold: Not Used
	Range 1: Poor/Negative/Red
	Range 2: Good/Positive/Green
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectContractFact
	Metric Queries: triCapitalProjectContractFact – Metric – Contract On-Time Completion Rate (Score)
Drill paths	• Program
	• Project
	• Contract
	• Vendor
	Capture Period
Interactive filters	• Geography
	Organization
	• Project
	• Program
	• Project Manager
	• Status
Static filters	Completed Contracts
Time	Months
Data point refresh rate	Monthly

# Cost of Operations (\$/area) metric

Determines or compares the building cost efficiency based on building area.

Details of the metric	Description
Name	Cost of Operations (\$/area)
Category	Financial
Analysis objective	Determines which building operating costs are causing the over-expenditure. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the area managed. The cost of operations is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Total Operating Cost / Area (Area UOM) The Total Operating Cost includes maintenance, housekeeping, and utilities.

Details of the metric	Description
Dependent data that is calculated	<ul> <li>Financial Summary Object provides summary data for operating costs</li> <li>Area: Building Rentable Area (in square feet or square. meters)</li> </ul>
	The Fact table also captures Gross and Usable area values.
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$3/RSF</li> <li>High Threshold: \$6/RSF</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Cost of Operations (\$ / Area) Metric, triBuildingFact - Metric - Cost of Operations (\$ / Area) Metric (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Time</li> <li>Building Class</li> <li>Building Tenure (Lease/Own)</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Location</li> <li>Time</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Mission Dependency</li> <li>Legal Interest</li> </ul>
Static filters	<ul><li>Active Buildings</li><li>Operating Costs</li></ul>

Details of the metric	Description
Time	Months
Data point refresh rate	<ul><li>Monthly</li><li>After month-end close and scheduled load of financial data</li></ul>

# Cost of Operations (\$/person) metric

Determines or compares the building cost efficiency based on occupants that are housed.

Details of the metric	Description
Name	Cost of Operations (\$/person)
Category	Financial
Analysis objective	Determines which building operating costs are causing the over-expenditure. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the overall facility occupant population. The cost of operations is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Total Operating Cost / Total number of Workers
	The Total Operating Cost includes maintenance, housekeeping, and utilities.
Dependent data that is calculated	<ul> <li>Financial Summary Object provides summary data for operating costs</li> <li>Workers: People assigned to building's spaces, floors, or building.</li> </ul>
Roles	<ul> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> </ul>
	OP Executive
	OP Service Manager
	OP Facility Assessment Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	Low Threshold: \$1200/Person
	High Threshold: \$2400/Person
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Cost of Operations (\$ / Person) Metric triBuildingFact - Metric - Cost of Operations (\$ / Person) Metric (Score)
Drill paths	• Geography
	• Location
	Capture Period
Interactive filters	• Geography
	Location
	• Time
	Building Class
	Building Tenure (Lease/Own)
	For US Federal Government:
	• Geography
	Location
	• Time
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
Static filters	Active Buildings
	Operating Costs
Time	Months
Data point refresh rate	• Monthly
	• After month-end close and scheduled load of financial data

# Cost of Operations (by Service Type) metric

Determines or compares the building cost efficiency based on the type of services provided.

Details of the metric	Description
Name	Cost of Operations (by Service Type)
Category	Financial
Analysis objective	Determines which building operating costs are causing the over-expenditure. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the services provided. The cost of operations is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA

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Details of the metric	Description
Data point refresh rate	<ul><li>Monthly</li><li>After month-end close and scheduled load of financial data</li></ul>

#### Cost per Area (Leased) – RE Contracts metric

Determines or compares cost efficiency based on contract rentable area.

Details of the metric	Description
Name	Cost per Area (Leased) – RE Contracts
Category	Financial
Analysis objective	Determines which real estate leases have good or poor cost efficiencies. Determines which particular real estate costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating real estate costs as a function of the area managed.
Source	BOMA, GSA
Measurement	Total Real Estate Cost (leased) / Total Rentable Area
Dependent data that is calculated	<ul> <li>Total Real Estate Cost: Lease real estate costs populated from Payment Line Items</li> <li>Real Estate Lease (triREContract): Total Rentable Area</li> </ul>
Roles	RE Transaction Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: \$20.21/RSF</li> <li>High Threshold: \$22.45/RSF</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triREContractFact Metric Queries: triREContractFact – Metric – Cost per Area - Leased
Drill paths	<ul><li>Geography</li><li>Organization</li><li>Capture Period</li></ul>

Details of the metric	Description
Interactive filters	• Geography
	Organization
	• Primary Use
	For US Federal Government:
	• Geography
	Organization
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

# Cost per Area (Owned) – RE Contracts metric

Determines or compares cost efficiency based on contract rentable area.

Details of the metric	Description
Name	Cost per Area (Owned) – RE Contracts
Category	Financial
Analysis objective	Determines which owned properties have good or poor cost efficiencies. Determines which particular real estate costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating real estate costs as a function of the area managed.
Source	BOMA, GSA
Measurement	Total Real Estate Cost (owned) / Total Rentable Area
Dependent data that is calculated	<ul> <li>Total Real Estate Cost: Owned Property real estate costs populated from Payment Line Items</li> <li>Owned Property: Total Rentable Area</li> </ul>
Roles	RE Transaction (Portfolio) Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)

Details of the metric	Description
Thresholds	• Low Threshold: \$4.26/RSF
	• High Threshold: \$4.73/RSF
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triREContractFact
	Metric Queries: triREContractFact – Metric – Cost per Area - Owned
Drill paths	• Geography
	Organization
	Capture Period
Interactive filters	• Geography
	Organization
	Primary Use
	For US Federal Government:
	• Geography
	Organization
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	• Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

#### Cost per Person – RE Contracts metric

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Name	Cost per Person – RE Contracts
Category	Financial
Analysis objective	Determines which real estate contracts are outside of planned values to indicate whether disposition is desirable. Uses time trend analysis to compare anomalies or trends.
Description	Organizations strive to keep the cost per person ratio low. High cost per person can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.

Details of the metric	Description
Source	BOMA, GSA
Measurement	Total Real Estate Cost / Total Headcount
Dependent data that is calculated	<ul> <li>Total Real Estate Cost: Real estate costs populated from Payment Line Items</li> <li>RE Contract: Total Headcount</li> </ul>
Roles	RE Executive
	RE Transaction Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: \$13,050/Person</li> <li>High Threshold: \$14,500/Person</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triREContractFact
	Metric Queries: triREContractFact – Metric – Cost per Person
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Primary Use</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Mission Dependency</li> </ul>
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

# Cost per Seat – RE Contracts metric

Details of the metric	Description
Name	Cost per Seat – RE Contracts
Category	Financial
Analysis objective	Determines which real estate contracts are outside of planned values to indicate whether disposition is desirable. Uses time trend analysis to compare anomalies or trends.
Description	Organizations strive to keep the cost per seat ratio low. High cost per seat can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Total Real Estate Cost / Total Seats
Dependent data that is calculated	<ul><li>Total Real Estate Cost: Real Estate lease costs populated from Payment Line Items</li><li>RE Contract: Total Seats</li></ul>
Roles	RE Transaction Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: \$2500/Seat</li> <li>High Threshold: \$6000/Seat</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact         Business Object: triREContractFact         Metric Queries: triREContractFact - Metric - Cost per Seat
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Primary Use</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Mission Dependency</li> </ul>

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

# **Current Budget to Forecast metric**

Identifies projects that are over the current budget and analyzes to see how much specific projects are over budget.

Details of the metric	Description
Name	Current Budget to Forecast
Category	Financial
Analysis objective	Identifies projects that exceed the over-budget threshold.
Description	Identifies projects that exceeded budget variance objectives, to show how far off budget those projects are and to allow the user to drill into a specific project and identify variances at the project cost code level.
Source	Customer Focus Group
Measurement	Project Budget / Forecast Final Budget
Dependent data that is calculated	None
Roles	PR Executive
	• PR Manager
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart
Thresholds	Low Threshold: 0 (0%)
	• High Threshold: .1 (10%)
	Range 1: Good/Positive/Green
	Range 2: Under Performing/Caution/Yellow
	Range 3: Poor/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries: triCapitalProjectFact - Metric - Current Budget to Forecast

Details of the metric	Description
Drill paths	• Program
	• Geography
	• Project
	Project Type
	Project Classification
	Capture Period
Interactive filters	• Organization (Primary Organization for the Person who is the Project Manager Role)
	• Geography
	Budget Classification (Capital, Operating)
Static filters	Status: Active and Revision In-Progress projects only.
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Capital Projects Manager
Functional dependency	Capital Projects
	• Budgets
	Change Order Management

#### Custodial-Housekeeping Costs / Area (\$/area) metric

Determines cost efficiency based on comparing the custodial costs to the overall area of the facilities.

Details of the metric	Description
Name	Custodial-Housekeeping Costs / Area (\$/area)
Category	Financial
Analysis objective	Determines which facilities have good or poor cost efficiencies. Determines which particular custodial costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how their performance compares with industry benchmarks and allows managers to compare custodial costs across geographical regions, facilities, and building types.
Source	IFMA
Measurement	Total Custodial Cost / Total Facility Area
Dependent data that is calculated	<ul> <li>Total Custodial Cost: Sum of Financial Summary table filtered for Cost Type = Custodial.</li> <li>Total Area: Building Rentable Area</li> </ul>
Roles	<ul><li>OP Executive</li><li>OP Service Manager</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>

Details of the metric	Description
Thresholds	• Low Threshold: \$.50/RSF
	• High Threshold: \$1.5/RSF
	Range 1: Under Maintained/Caution/Yellow
	Range 2: Adequate Maintenance/Positive/Green
	Range 3: Excessive Maintenance/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Custodial- Housekeeping Costs / Area (\$ / Area), triBuildingFact - Metric - Custodial-Housekeeping Costs / Area (\$ / Area) (Score)
Drill paths	• Geography
	Location
	Capture Period
Interactive filters	• Geography
	Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	Location
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
Static filters	Cost Type Classification = Custodial/Housekeeping
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Building (Area Calculations)
	Financial data from external corporate system

#### **Customer Satisfaction - Facilities metric**

Determines the satisfaction of facility occupants with services and workplace solutions to indicate opportunities for improvement, improvement trends, or poor performance trends.

Details of the metric	Description
Name	Customer Satisfaction
Category	Customer

Details of the metric	Description
Analysis objective	Determines root cause of negative survey responses submitted and identify improvement opportunities. Also can identify misaligned service levels, expectation gaps, and consumer perceptions, and recognize and reward excellent customer service.
Description	Informs management how effective the organization is at satisfying the requests of the facility occupants. The metric is based on the aggregated scores from the returned evaluation forms.
Source	Customer Focus Group
Measurement	Sum of Survey Response Scores / Total Survey Maximum Score
Roles	<ul><li>EN Workplace Executive</li><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .58 (58%)</li> <li>High Threshold: .78 (78%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triSurvevFact
	Metric Queries: triSurveyFact - Metric - Customer Satisfaction (%) Metric – Facilities, triSurveyFact - Metric - Customer Satisfaction (%) Metric – Facilities (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Request Class</li> <li>Capture Period</li> <li>Question Category</li> </ul>

Details of the metric	Description
Interactive filters	• Geography
	• Location
	Responsible Organization
	• Request Class
	Question Category
	For US Federal Government:
	• Geography
	• Location
	Organization
	Space Class
	Real Property Type
	Real Property Use
Static filters	Active Buildings
	Active Floors
Time	Months
Data point refresh rate	Monthly

# Density (area/person) metric

Determines efficiency of the space usage of workers to identify opportunities to change capacity for a building or floor or improve occupancy.

Details of the metric	Description
Name	Density (area/person)
Category	Portfolio
Analysis objective	Determines which building and floor locations are causing inefficiencies. Reviews usage metric by organization to determine workers with opportunities for improvement. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates building occupancy capacity and layout efficiency comparisons for internal trend analysis and external benchmarking by equating the area that is used to a per-worker metric.
Source	IFMA
Measurement	Total Area / Total number of Workers
Dependent data that is calculated	<ul> <li>Area: Area as filtered/grouped by drill-path or interactive filter</li> <li>Person (workers): all People assigned within a building (to space, floor or building)</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>

Details of the metric	Description
Thresholds	Low Threshold: 230 SF/Person
	High Threshold: 350 SF/Person
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triSpacePeopleFact
	Metric Queries: triSpacePeopleFact - Metric - Density (Area / Person) Metric, triSpacePeopleFact - Metric - Density (Area / Person) Metric (Score)
Drill paths	• Geography
	Location
	• Space Class
	Organization
	Capture Period
Interactive filters	• Geography
	• Location
	Space Class
	Organization
	• Worker Type
	For US Federal Government:
	• Geography
	• Location
	Space Class
	Organization
	• Worker Type
	Real Property Type
	Real Property Use
Static filters	Active Buildings
	Active Floors
	Active Spaces
	Active People
Time	Months
Data point refresh rate	Monthly

# Density (area/workpoint) metric

Determines efficiency of workstation and workpoint standard size to identify opportunities in workstation layout or standards improvements.

Details of the metric	Description
Name	Density (area/workpoint)
Category	Portfolio

Details of the metric	Description
Analysis objective	Determines which building and floor locations are causing inefficiencies. Reviews usage metric by organization to determine workpoints with opportunities for improvement. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates building occupancy capacity and layout efficiency comparisons for internal trend analysis and external benchmarking by equating area that is used to a per-workpoint metric.
Source	Customer Focus Group
Measurement	Total Area / Total number of Workpoints
Dependent data that is calculated	<ul> <li>Area: Area as filtered by drill-path or interactive filter</li> <li>Workpoint: Capacity of space (filtered on Workpoint = TRUE)</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: 250 SF/Workpoint</li> <li>High Threshold: 400 SF/Workpoint</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triSpaceAllocationFact Metric Queries: triSpaceAllocationFact - Metric - Density (Area / Workpoint), triSpaceAllocationFact - Metric - Density (Area / Workpoint) (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Space Class</li> </ul>
Static filters	<ul><li>Active Buildings</li><li>Active Floors</li><li>Active Spaces</li></ul>
Time	Months
Data point refresh rate	Monthly

# **Emergency Task Cost Ratio metric**

Determines the level of emergency maintenance work that is performed compared to maintenance work that is scheduled.

Details of the metric	Description
Name	Emergency Task Cost Ratio
Category	Operational
Analysis objective	Determines the percentage of emergency maintenance task costs in a reporting period versus the total task costs that are completed during the same period. Views this metric over time to show, analyze, and adjust preventive programs based on observed trends. If the level of emergency or breakdown activities is high, then the productivity rates for the labor resources, whether in-house or contract, is low.
Description	Informs management how effective the organization is at implementing the preventive maintenance program. It is useful for examining whether maintenance labor is being used by emergency or breakdown work. Typically, if the amount of emergency or breakdown work uses more than 20% of the maintenance labor resources, then the preventive maintenance program is ineffective.
Source	Customer Focus Group
Measurement	Total Emergency Task Cost / Total Maintenance Cost
Dependent data that is calculated	<ul> <li>Total Emergency Task Cost = Total Cost of Tasks Completed where Task Priority = Emergency, Status = Complete or Closed, and Planned End is within the capture period</li> <li>Total Maintenance Cost = Total Cost of Tasks Completed, Status = Complete or Closed, and Planned End is within the capture period</li> </ul>
Roles	<ul><li>OP Service Manager</li><li>OP Facility Assessment Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .05 (5%)</li> <li>High Threshold: .2 (20%)</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triTaskDetailFact Metric Queries: triTaskDetailFact - Metric - Emergency Task Cost Ratio, triTaskDetailFact - Metric - Emergency Task Cost Ratio (Score)

Details of the metric	Description
Drill paths	• Geography
	Location
	Responsible Organization
	Capture Period
Interactive filters	• Geography
	Location
	Responsible Organization
Static filters	• Tasks (only Task types with a Responsible Organization section)
	• Status = Completed or Closed Tasks
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Task Management
	Service Management
	Preventive Maintenance Job Plans
	PM Schedules

# Emissions (Carbon) (US Tons CO2) metric

Determines emission efficiency based on comparing carbon footprint calculations by emission type, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Emissions (Carbon) (US Tons CO2)
Category	Environmental
Analysis objective	Determines which facilities have good or poor emissions. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies emission consumption that is measured in tons of carbon dioxide per year.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	<ul> <li>Sum of Total CO2e Equity Share Reporting</li> <li>Sum of CO2 Equity Share Reporting</li> <li>Sum of Travel Equity Share Reporting</li> <li>Sum of Waste Equity Share Reporting</li> <li>Sum of Other Emissions Equity Share Reporting</li> </ul>
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Stacked Bar Chart (default view)</li><li>Time Trend: Vertical Stacked Bar Chart</li></ul>
Thresholds	None

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Emissions (Carbon) (US Tons CO2), triLocationFact – Metric – Emissions (Carbon) – US Gov (US Tons CO2)
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	• Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Carbon Footprint Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log
	Carbon Footprint Log
	• Travel Log
	• Waste Log

#### Emissions (Carbon) Intensity (Ibs CO2 / GSF) metric

Determines emission efficiency based on comparing carbon footprint calculations per gross square feet by location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Emissions (Carbon) Intensity (lbs CO2 / GSF)
Category	Environmental
Analysis objective	Determines which facilities have good or poor emissions per gross square feet (GSF). Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized carbon emissions that are based on building size and are measured in lbs CO2/GSF per year.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	<ul> <li>Average of total emissions for Total CO2e Equity Share Reporting</li> <li>CO2 Equity Share Reporting</li> <li>Travel Equity Share Reporting</li> <li>Waste Equity Share Reporting</li> </ul>
Dependent data that is calculated	None
Details of the metric	Description
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Roles	EN Workplace Executive
	• ES Manager/Planner
	FA Move Manager/Planner
	OP Executive
	OP Service Manager
	OP Facility Assessment Manager/Planner
	OP Service Technician
	RE Executive
	RE Transaction Manager
Display chart types	• Value-based: Horizontal Stacked Bar Chart (default view)
	Score-based: Horizontal Stacked Bar Chart
	Time Trend: Vertical Stacked Bar Chart
Thresholds	Low Threshold: 1.2
	High Threshold: 8
	Range 1: Good/Positive/Green
	Range 2: Within Target/Caution/Yellow
	Range 3: Excessive/High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Emissions (Carbon) Intensity (lbs CO2 / GSF)
	triLocationFact – Metric – Emissions (Carbon) Intensity (lbs CO2 / GSF) (Score)
	triLocationFact – Metric – Emissions (Carbon) Intensity – GIS (lbs CO2 / GSF)
	triLocationFact – Metric – Emissions (Carbon) Intensity – US Gov (lbs CO2 / GSF)
	triLocationFact – Metric – Emissions (Carbon) Intensity – US Gov (lbs CO2 / GSF) (Score)
	triLocationFact – Metric – Emissions (Carbon) Intensity – US Gov - GIS (lbs CO2 / GSF)
Drill paths	• Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month
	• Score-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month

Details of the metric	Description
Interactive filters	• Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	• Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Carbon Footprint Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	• Energy Log
	Carbon Footprint Log
	• Travel Log
	Waste Log

#### Emissions (Carbon) Intensity per Occupant (tons CO2) metric

Determines emission efficiency based on comparing carbon footprint calculations by location, geography, calendar period, and other attributes, as a function of the total occupants in the facilities.

Details of the metric	Description
Name	Emissions (Carbon) Intensity per Occupant (tons CO2)
Category	Environmental
Analysis objective	Determines which facilities have good or poor emissions per occupant. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized emission consumption that is based on the number of occupants and is measured in tons CO2/occupant per year.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	<ul> <li>Average of total emissions for Total CO2e Equity Share Reporting</li> <li>CO2 Equity Share Reporting</li> </ul>
	Travel Equity Share Reporting
	• Waste Equity Share Reporting / Average of total occupants
Dependent data that is calculated	None
Roles	ES Manager/Planner

Details of the metric	Description
Display chart types	Value-based: Horizontal Stacked Bar Chart (default view)
	Score-based: Horizontal Stacked Bar Chart
	Time Trend: Vertical Stacked Bar Chart
Thresholds	Low Threshold: 0.08
	High Threshold: 3
	Range 1: Good/Positive/Green
	Range 2: Within Target/Caution/Yellow
	Range 3: Excessive/High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant (tons CO2)
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant (tons CO2) (Score)
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant – GIS (tons CO2)
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant – US Gov (tons CO2)
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant – US Gov (tons CO2) (Score)
	triLocationFact – Metric – Emissions (Carbon) Intensity per Occupant – US Gov - GIS (tons CO2)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month</li> </ul>
	<ul> <li>Score-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month</li> </ul>
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	<ul> <li>Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
Static filters	Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Carbon Footprint Log records
Time	Months
Data point refresh rate	Monthly

Details of the metric	Description
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	<ul><li>Energy Log</li><li>Carbon Footprint Log</li></ul>

#### Emissions to Air (lbs-mass) metric

Determines environmental sustainability condition and efficiency based on comparing emissions to air by emission type, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Emissions to Air (lbs-mass)
Category	Environmental
Analysis objective	Determines which facilities have good or poor emissions to air. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies emissions to air that are measured in kilograms.
Source	Customer Focus Group, consulting firms, GHG Initiative, GRI
Measurement	Total Emissions to Air (by Emission Type) (kilograms)
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart by Emissions Type</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Emissions to Air (lbs-mass), triLocationFact – Metric – Emissions to Air – US Gov (lbs-mass)
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Emissions Log records
Time	Months
Data point refresh rate	Monthly

Details of the metric	Description
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Emission Log

## Emissions to Air Intensity (kilograms / GSF) metric

Determines emission efficiency based on comparing by location, geography, calendar period, and other attributes by area of the facilities.

Details of the metric	Description
Name	Emissions to Air Intensity (kilograms / GSF)
Category	Environmental
Analysis objective	Determines which facilities have good or poor emissions to air intensity. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized emissions that are based on building size and are measured in kilograms/GSF per year.
Source	Customer Focus Group, consulting firms, GHG Initiative, GRI
Measurement	Total Emissions to Air in kilograms/GSF
Dependent data that is calculated	None
Roles	<ul> <li>ES Manager/Planner</li> <li>FA Move Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> <li>RE Executive</li> <li>RE Transaction Manager</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 80</li> <li>High Threshold: 91</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/High/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Emissions to Air Intensity (kilograms / GSF)
	triLocationFact – Metric – Emissions to Air Intensity (kilograms / GSF) (Score)
	triLocationFact – Metric – Emissions to Air Intensity – GIS (kilograms / GSF)
	triLocationFact – Metric – Emissions to Air Intensity – US Gov (kilograms / GSF)
	triLocationFact – Metric – Emissions to Air Intensity – US Gov (kilograms / GSF) (Score)
	triLocationFact – Metric – Emissions to Air Intensity – US Gov - GIS (kilograms / GSF)
Drill paths	Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Emissions Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Emission Log

## Energy Cost (USD) metric

Determines energy cost efficiency based on comparing energy cost by location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Cost (USD)

Details of the metric	Description
Category	Financial
Analysis objective	Determines which facilities have good or poor energy costs. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies energy cost efficiency that is calculated in USD.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Cost
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar Chart</li><li>Time Trend: Vertical Grouped Bar Chart</li></ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triEnergyLogFact
	Metric Queries:
	triEnergyFact – Metric – Energy Cost (USD)
	triEnergyLogFact – Metric – Energy Cost – US Gov (USD)
	triEnergyLogFact – Metric – Energy Cost – US Gov – GIS (USD)
Drill paths	Value-based: Geography, Location, Capture Period, Energy Type
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Energy Type</li> <li>For US Federal Covernment:</li> </ul>
	<ul> <li>Value-based: Geography, Location, Real Property Type, Real Property Use, Legal Interest, Mission Dependency, Energy Type</li> </ul>
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

# Energy Cost (USD) - Energy Type metric

Determines energy cost efficiency based on comparing energy cost by energy type, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Cost (USD)
Category	Financial
Analysis objective	Determines which facilities have good or poor energy costs based on the energy type. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies energy cost efficiency that is calculated in USD.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Cost (by Energy Type)
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar Chart by Energy Type</li><li>Time Trend: Vertical Grouped Bar Chart</li></ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Cost (USD)
	triLocationFact – Metric – Energy Cost – US Gov (USD)
	triLocationFact - Metric - Energy Cost - US Gov - GIS (USD)
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> <li>For US Federal Government:</li> </ul>
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	<ul><li>Active Land</li><li>Active Buildings</li><li>Active Structures</li></ul>
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Energy Cost Ratio (%) metric

Determines cost efficiency based on comparing the total energy cost to the total cost of operations (TCO).

Details of the metric	Description
Name	Energy Cost Ratio (%)
Category	Financial
Analysis objective	Measures the ratio of the energy cost in facilities as a percentage of total cost of operations (TCO).
Description	Facilitates internal trend analysis and external benchmarking by equating the total cost of energy as a function of the total cost to operate the facilities. This metric can be used by executives with other financial metrics to analyze the cost breakdown of the various environmental initiatives.
Source	Customer Focus Group, consulting firms
Measurement	Total Energy Cost / Total Cost of Operations (TCO)
Dependent data that is calculated	None
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>OP Executive</li> <li>RE Executive</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 0.03</li> <li>High Threshold: 0.07</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triLocationFact Metric Queries: triLocationFact – Metric – Energy Cost Ratio (%) triLocationFact – Metric – Energy Cost Ratio (%) (Score) triLocationFact – Metric – Energy Cost Ratio - GIS (%)
Drill paths	<ul><li>Value-based: Location, Geography, Capture Period</li><li>Score-based: Location, Geography, Capture Period</li></ul>
Interactive filters	<ul><li>Value-based: Location, Geography</li><li>Score-based: Location, Geography</li></ul>

Details of the metric	Description
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Cost Code Structure
	Financial Summary
	• Energy Log

## Energy Use metric

Determines energy use efficiency based on comparing energy use by location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Use
Category	Environmental
Analysis objective	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies energy consumption that is measured in thousands of British thermal units (kBtu) and then converted to kilowatt/square meter (kW/m2).
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar Chart by Energy Type</li><li>Time Trend: Vertical Grouped Bar Chart</li></ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triEnergyLogFact
	Metric Queries:
	triEnergyLogFact – Metric – Energy Use
	triEnergyLogFact – Metric – Energy Use – US Gov
	triEnergyLogFact – Metric – Energy Use – US Gov - GIS
Drill paths	Value-based: Geography, Location, Capture Period, Energy Type

Details of the metric	Description
Interactive filters	<ul> <li>Value-based: Geography, Location, Energy Type, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

### Energy Use - Energy Type metric

Determines energy use efficiency based on comparing energy use by energy type, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Use
Category	Environmental
Analysis objective	Determines which facilities have good or poor energy use based on the energy type. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies energy consumption that is measured in thousands of British thermal unit (kBtu) (kilowatt/square meter (kW/m2)).
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use (by Energy Type)
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar Chart by Energy Type</li><li>Time Trend: Vertical Grouped Bar Chart</li></ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Use
	triLocationFact – Metric – Energy Use – US Gov
	triLocationFact – Metric – Energy Use – US Gov - GIS

Details of the metric	Description
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

### Energy Use by Cooling Degree Day (kilowatt-hours) metric

Determines energy use efficiency based on comparing energy use by location, geography, calendar period, and other attributes. This metric also normalizes energy consumption for cooling based on number of buildings, buildings size, and the climate at the various locations.

Details of the metric	Description
Name	Energy Use by Cooling Degree Day (kilowatt-hours)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on building size and climate, which is measured in thousands of British thermal units (kBtu) per square foot per degree day.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use / GSF / degree-day
Dependent data that is calculated	Degree day value is from the building record.
Roles	ES Manager
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 1500</li> <li>High Threshold: 8000</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Use by Cooling Degree Day (kilowatt-hours)
	triLocationFact – Metric – Energy Use by Cooling Degree Day (kilowatt-hours) (Score)
	triLocationFact – Metric – Energy Use by Cooling Degree Day – US Gov (kilowatt-hours)
	triLocationFact – Metric – Energy Use by Cooling Degree Day – US Gov (kilowatt-hours) (Score)
Drill paths	• Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Energy Use by Degree Day Total (kilowatt-hours / degree days) metric

Determines energy use efficiency based on comparing energy use by location, geography, calendar period, and other attributes. This metric also normalizes total energy consumption based on number of buildings, buildings size, and the climate at the various locations.

Details of the metric	Description
Name	Energy Use by Degree Day Total (kilowatt-hours / degree days)
Category	Environmental

Details of the metric	Description
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on building size and climate, which is measured in thousands of British thermal units (kBtu) per square foot per degree day.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use / GSF / degree-day
Dependent data that is calculated	Degree day value is from the Building record.
Roles	ES Manager
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 900</li> <li>High Threshold: 8000</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact Metric Queries: triLocationFact – Metric – Energy Use by Degree Day Total (kilowatt-hours) triLocationFact – Metric – Energy Use by Degree Day Total (kilowatt-hours) (Score) triLocationFact – Metric – Energy Use by Degree Day Total – US Gov (kilowatt-hours) triLocationFact – Metric – Energy Use by Degree Day Total – US Gov (kilowatt-hours) triLocationFact – Metric – Energy Use by Degree Day Total – US Gov (kilowatt-hours)
Drill paths	<ul><li>Value-based: Geography, Location, Capture Period</li><li>Score-based: Geography, Location, Capture Period</li></ul>
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> <li>For US Federal Government:</li> <li>Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> <li>Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>

Details of the metric	Description
Static filters	Exclude Land
	Active Buildings     Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Energy Use by Heating Degree Day (kilowatt-hours) metric

Determines energy use efficiency based on comparing energy use by location, geography, calendar period, and other attributes. This metric also normalizes energy consumption for heating based on number of buildings, buildings size, and the climate at the various locations.

Details of the metric	Description
Name	Energy Use by Heating Degree Day (kilowatt-hours)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on building size and climate, which is measured in thousands of British thermal units (kBtu) per square foot per degree day.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use / GSF / degree-day
Dependent data that is calculated	Degree day value is from the Building record.
Roles	ES Manager
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 250</li> <li>High Threshold: 1500</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Use by Heating Degree Day (kilowatt-hours)
	triLocationFact – Metric – Energy Use by Heating Degree Day (kilowatt-hours) (Score)
	triLocationFact – Metric – Energy Use by Heating Degree Day – US Gov (kilowatt-hours)
	triLocationFact – Metric – Energy Use by Heating Degree Day – US Gov (kilowatt-hours) (Score)
Drill paths	• Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	• Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

### Energy Use Intensity (kilowatt hours / GSF) metric

Determines total energy use efficiency based on comparing energy use, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Use Intensity (kilowatt-hours / GSF)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.

Details of the metric	Description
Description	Identifies normalized energy consumption that is based on building size, which is measured in thousands of British thermal units (kBtu) per square foot per year, and then converted to kilowatt/square meter/year (kW/m2/year). This metric can also be normalized for the climate at the various locations.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use / GSF
Dependent data that is calculated	None
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>FA Move Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> <li>OP Service Technician</li> <li>RE Executive</li> <li>RE Transaction Manager</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 3.5</li> <li>High Threshold: 6</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact Metric Queries: triLocationFact – Metric – Energy Use Intensity (kilowatt-hours / GSF) triLocationFact – Metric – Energy Use Intensity (kilowatt-hours / GSF) (Score) triLocationFact – Metric – Energy Use Intensity – GIS (kilowatt-hours / GSF) triLocationFact – Metric – Energy Use Intensity – US Gov (kilowatt-hours / GSF) triLocationFact – Metric – Energy Use Intensity – US Gov (kilowatt-hours / GSF) (Score)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month</li> <li>Score-based: Geography, Location, Capture Period</li> </ul>

Details of the metric	Description
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Energy Use Intensity (megajoules / GSF) metric

Determines total energy use efficiency based on comparing energy use, location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Energy Use Intensity (megajoules / GSF)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on building size, which is measured in thousands of British thermal units (kBtu) per square foot per year, and then converted to megajoule/square meter/year (MJ/m2/year). This metric can also be normalized for the climate at the various locations.
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use / GSF
Dependent data that is calculated	None

Details of the metric	Description
Roles	EN Workplace Executive
	• ES Manager/Planner
	FA Move Manager/Planner
	OP Executive
	OP Service Manager
	OP Facility Assessment Manager/Planner
	OP Service Technician
	• RE Executive
	RE Transaction Manager
Display chart types	• Value-based: Horizontal Stacked Bar Chart (default view)
	Score-based: Horizontal Stacked Bar Chart
	Time Trend: Vertical Stacked Bar Chart
Thresholds	Low Threshold: 3.5
	High Threshold: 6
	Range 1: Good/Positive/Green
	Range 2: Within Target/Caution/Yellow
	Range 3: Excessive/High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Use Intensity (megajoules / GSF)
	triLocationFact – Metric – Energy Use Intensity (megajoules / GSF) (Score)
	triLocationFact – Metric – Energy Use Intensity – GIS (megajoules / GSF)
	triLocationFact – Metric – Energy Use Intensity – US Gov (megajoules / GSF)
	triLocationFact – Metric – Energy Use Intensity – US Gov (megajoules / GSF) (Score)
Drill paths	• Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	• Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest

Details of the metric	Description
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Energy Use Intensity per Occupant (kilowatt-hours / occupant) metric

Determines energy use efficiency based on comparing energy use, location, geography, calendar period, and other attributes as a function of the total occupants in the facilities.

Details of the metric	Description
Name	Energy Use Intensity per Occupant (kilowatt-hours / occupant)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on number of occupants, which is measured in thousands of British thermal units (kBtu) per occupant per year, and then converted to kilowatt/occupant/year (kW/occupant/year).
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use (by Energy Type) / Total Number of Occupants
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 320</li> <li>High Threshold: 700</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Energy Use Intensity per Occupant (kilowatt-hours)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov (kilowatt-hours)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov (kilowatt-hours) (Score)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov - GIS (kilowatt-hours)
	triLocationFact – Metric – Energy Use Intensity per Occupant (kilowatt-hours) (Score)
	triLocationFact – Metric – Energy Use Intensity per Occupant - GIS (kilowatt-hours)
Drill paths	• Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month
	Score-based: Geography, Location, Capture Period
Interactive filters	• Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

### Energy Use Intensity per Occupant (megajoules / occupant) metric

Determines energy use efficiency based on comparing energy use, location, geography, calendar period, and other attributes as a function of the total occupants in the facilities.

Details of the metric	Description
Name	Energy Use Intensity per Occupant (kilowatt-hours / occupant)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor energy use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies normalized energy consumption that is based on number of occupants, which is measured in thousands of British thermal units (kBtu) per occupant per year, and then converted to megajoule/occupant/year (MJ/occupant/year).
Source	Customer Focus Group, EPA, Architecture 2030, EO 13423
Measurement	Total Energy Use (by Energy Type) / Total Number of Occupants
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 320</li> <li>High Threshold: 700</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triLocationFact Metric Queries:
	triLocationFact – Metric – Energy Use Intensity per Occupant (megajoules)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov (megajoules)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov (megajoules) (Score)
	triLocationFact – Metric – Energy Use Intensity per Occupant – US Gov - GIS (megajoules)
	triLocationFact – Metric – Energy Use Intensity per Occupant (megajoules) (Score)
	triLocationFact – Metric – Energy Use Intensity per Occupant - GIS (megajoules)

Details of the metric	Description
Drill paths	• Value-based: Geography, Location, Capture Period, Calendar Year, Calendar Quarter, and Calendar Month
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	<ul> <li>Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
	<ul> <li>Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## Environmental Checklist Rating (%) metric

Determines environmental performance based on comparing environmental checklist ratings across facilities and geographies.

Details of the metric	Description
Name	Environmental Checklist Rating (%)
Category	Environmental
Analysis objective for exception conditions	Investigates environmental performance of facilities based on the ratings for checklist items. Analyzes best in class buildings by checklist category and compares energy opportunities.
Description	Facilitates internal trend analysis and external benchmarking by analyzing the environmental performance of a facility across buildings, geographies, and checklist categories and items.
Source	USGBC, BREEAM, IPD, GBI
Measurement	Checklist Category and Checklist Item ratings
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>

Details of the metric	Description
Thresholds	• Low Threshold: 0.1
	• High Threshold: 0.4
	Range 1: Below Target/Negative/Red
	Range 2: Within Target/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triChecklistItemFact
	Metric Queries:
	triChecklistItemFact – Metric – Environmental Checklist Rating (%)
	triChecklistItemFact – Metric – Environmental Checklist Rating (%) (Score)
	triChecklistItemFact – Metric – Environmental Checklist Rating - GIS (%)
	triChecklistItemFact – Metric – Environmental Checklist Rating – US Gov (%)
	triChecklistItemFact – Metric – Environmental Checklist Rating – US Gov (%) (Score)
	triChecklistItemFact – Metric – Environmental Checklist Rating – US Gov - GIS (%)
Drill paths	<ul> <li>Value-based: Location, Checklist Type, Checklist Category, Capture Period</li> </ul>
	<ul> <li>Score-based: Location, Checklist Type, Checklist Category, Capture Period</li> </ul>
Interactive filters	• Value-based: Geography, Location, Building Class, Building Tenure, Checklist Type, Checklist Category
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure, Checklist Type, Checklist Category</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Checklist Type, Checklist Category, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	<ul> <li>Score-based: Geography, Location, Checklist Type, Checklist Category, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
Static filters	Active Buildings
	Active and Approved Checklists
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Checklists
- menorial acpendency	

### **Environmental Evaluation Survey (%) metric**

Determines environmental performance of facility service providers in delivering productive workplace services and environments based on evaluations that are submitted by clients.

Details of the metric	Description
Name	Environmental Evaluation Survey (%)
Category	Customer
Analysis objective for exception conditions	Determines the root cause of negative survey responses that were submitted. Identifies improvement opportunities. Compares client response to implemented environmental improvements. Identifies misaligned expectation gaps and consumer perceptions. Recognizes and reward excellent environmental service.
Description	Informs management on how effective the organization is at providing productive work environments for the facility occupants. It is based on the average score from the returned evaluation forms.
Source	Customer Focus Group
Measurement	Overall Customer Satisfaction = Total Survey Response Scores / Total Survey Question Count
	(average scores of completed survey questions)
Dependent data that is	Environmental Request Evaluations:
Calculated	Total Survey Response Score
	• Total Survey Question Count with scores > 0.0 , exclude not applicable responses, or both.
Roles	ES Manager/Planner
Display chart types	• Value-based: Horizontal Stacked Bar Chart (default view)
	Score-based: Horizontal Stacked Bar Chart
	Time Trend: Vertical Stacked Bar Chart
Thresholds	• Low Threshold: 0.58
	• High Threshold: 0.78
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triSurveyFact
	Metric Queries:
	triSurveyFact – Metric – Environmental Evaluation Survey (%)
	triSurveyFact – Metric – Environmental Evaluation Survey (%) (Score)
	triSurveyFact – Metric – Environmental Evaluation Survey – US Gov (%)
	triSurveyFact – Metric – Environmental Evaluation Survey (Score) – US Gov (%)
	triSurveyFact – Metric – Environmental Evaluation Survey - GIS (%)
	triSurveyFact – Metric – Environmental Evaluation Survey – US Gov - GIS (%)
Drill paths	• Value-based: Geography, Location, Responding Organization, Requesting Organization, Capture Period, Question Category
	<ul> <li>Score-based: Geography, Location, Responding Organization, Requesting Organization, Capture Period, Question Category</li> </ul>
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Responding Organization, Requesting Organization, Question Category</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Responding Organization, Requesting Organization, Question Category</li> </ul>
	For US Federal Government:
	<ul> <li>Value-based: Geography, Location, Responding Organization, Requesting Organization, Question Category, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
	<ul> <li>Score-based: Geography, Location, Responding Organization, Requesting Organization, Question Category, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
Static filters	Exclude 0.0 question scores or not applicable
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Environmental Survey and Evaluation Request

### **Environmental Opportunity Analysis metric**

Analyzes environmental opportunities across the portfolio by opportunity type, cost, and savings to determine the best investment opportunities.

Details of the metric	Description
Name	Environmental Opportunity Analysis
Category	Environmental
Analysis objective for exception conditions	Analyzes environmental opportunities across the portfolio by opportunity type, cost, and savings to determine the best investment opportunities.
Description	Creates environmental opportunities to define areas where work done by projects, tasks, or administrative initiatives can positively affect energy, water, and waste consumption, reduce emissions, or reduce the carbon footprint.
Source	Customer Focus Group, consulting firms
Measurement	Environmental Opportunities (NPV)
Dependent data that is calculated	None
Roles	<ul> <li>ES Manager/Planner</li> <li>FA Move Manager/Planner</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul><li>Value-based: Horizontal Grouped Bar Chart (default view)</li><li>Time Trend: Vertical Grouped Bar Chart</li></ul>
Thresholds	<ul> <li>Low Threshold: 1</li> <li>High Threshold: 2</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact Metric Queries: triLocationFact – Metric – Environmental Opportunity Analysis, triLocationFact – Metric – Environmental Opportunity Analysis – US Gov
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location</li> <li>Score-based: Geography, Location For US Federal Government:</li> <li>Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> <li>Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
Static filters	<ul> <li>Active Buildings</li> <li>Active</li> <li>Deferred</li> <li>Completed Energy Opportunities</li> </ul>

Details of the metric	Description
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Opportunities (Deficiencies)

## Environmental Project Efficiency Ratio (USD / Tons CO2) metric

Determines cost efficiency based on comparing the savings of carbon emissions to the total cost of environmental projects and tasks.

Details of the metric	Description
Name	Environmental Project Efficiency Ratio (USD / Tons CO2)
Category	Environmental
Analysis objective for exception conditions	Measures the ratio of the projected savings of carbon emissions in facilities as a percentage of the total cost of environmental projects and tasks.
Description	Associates environmental projects and tasks savings on the carbon emissions. This metric facilitates internal trend analysis and external benchmarking by equating carbon emission savings as a function of the total cost of the environmental projects and tasks. This metric can be used by executives with other financial metrics to analyze the cost breakdown of the various environmental initiatives.
Source	Customer Focus Group, consulting firms
Measurement	Total Cost of Environmental Projects and Tasks / Total Carbon Emission Savings (USD/Ton kWh/year)
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 80</li> <li>High Threshold: 91</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> </ul>
	<ul> <li>Kange 3: Excessive/Negative/Ked</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries:
	triCapitalProjectFact – Metric – Environmental Project Efficiency Ratio (USD / Tons CO2)
	triCapitalProjectFact – Metric – Environmental Project Efficiency Ratio (USD / Tons CO2) (Score)
	triCapitalProjectFact – Metric – Environmental Project Efficiency Ratio (USD / Tons CO2) - GIS
Drill paths	<ul> <li>Value-based: Program, Project, Responsible Organization, Location, Geography, Capture Period</li> </ul>
	<ul> <li>Score-based: Program, Project, Responsible Organization, Location, Geography, Capture Period</li> </ul>
Interactive filters	<ul> <li>Value-based: Program, Project, Responsible Organization, Location, Geography</li> </ul>
	<ul> <li>Score-based: Program, Project, Responsible Organization, Location, Geography</li> </ul>
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
	IBM TRIRIGA Capital Projects Manager
	IBM TRIRIGA Facilities
	IBM TRIRIGA Operations
Functional dependency	Project Management
	Task Management
	Carbon Footprint Log

## Facility Operating Current Replacement Value (CRV) Index metric

Determines cost efficiency based on comparing the maintenance budget to the replacement value of the facilities.

Details of the metric	Description
Name	Facility Operating Current Replacement Value (CRV) Index
Category	Financial
Analysis objective for exception conditions	Determines which facilities have good or poor cost efficiencies. Determines which maintenance costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates accurate measure for plant and facilities because the cost is fixed. Also makes the metric easy to use to trend any increases over time. If the percentage of maintenance costs increases, then the efficiency and effectiveness indicators show which maintenance area caused the increase.

Details of the metric	Description
Source	IFMA, Building Research Board of National Research Council
Measurement	Total Maintenance Cost / Total Current Replacement Value (CRV)
Dependent data that is calculated	<ul> <li>Total Maintenance Cost: Sum of Financial Summary table filtered for Service Type = Maintenance. This includes all maintenance-related Cost values such as Utilities, Custodial, and Grounds.</li> <li>Total Current Replacement Value: Building Condition Assessment Tab holds the Current Replacement Value for each building (CRV = Gross Area * Cost per Area)</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .02 (2%)</li> <li>High Threshold: .04 (4%)</li> <li>Range 1: Under Maintained/Negative/Red</li> <li>Range 2: Adequate Maintenance/Caution/Yellow</li> <li>Range 3: Excessive Maintenance/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Facility Operating Current Replacement Value Index triBuildingFact - Metric - Facility Operating Current Replacement Value Index (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>

Details of the metric	Description
Interactive filters	• Geography
	Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	Location
	Real Property Type
	Real Property Use
	Mission Dependency
	• Legal Interest
Static filters	Active Properties
	Active Buildings
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Building (Current Replacement Value fields)
	Facility Assessment (optional)

#### **Green Condition Index metric**

Determines the relative environmental condition of a building or group of buildings by comparing the costs that are associated with documented energy opportunities with the current replacement value (CRV) for the facilities.

Details of the metric	Description
Name	Green Condition Index
Category	Portfolio
Analysis objective for exception conditions	Shows, analyzes, and adjusts programs over time based on observed trends.
Description	Informs management of the relative environmental condition of facilities. It is based on and shares processes with the Facility Condition Index (FCI).
Source	Customer Focus Group, industry-standard Facility Condition Index
Measurement	Ratio (Green Condition Index) = Total Cost of Energy Opportunities (Deficiencies) / Total Current Replacement Value (CRV)
Dependent data that is calculated	Environmental Request Evaluations:
	Total Survey Response Score
	• Total Survey Question Count with scores > 0.0, exclude not applicable responses, or both.
Roles	ES Manager/Planner

Details of the metric	Description
Display chart types	• Value-based: Horizontal Grouped Bar Chart (default view)
	Score-based: Horizontal Stacked Bar Chart
	Time Trend: Vertical Stacked Bar Chart
Thresholds	• Low Threshold: 0.05
	• High Threshold: 0.1
	Range 1: Good/Positive/Green
	Range 2: Within Target/Caution/Yellow
	Range 3: Excessive/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Green Condition Index
	triLocationFact – Metric – Green Condition Index – US Gov (Score)
	triLocationFact – Metric – Green Condition Index (Score)
	triLocationFact – Metric – Green Condition Index - GIS
	triLocationFact – Metric – Green Condition Index – US Gov
	triLocationFact – Metric – Green Condition Index – US Gov - GIS
Drill paths	• Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Environmental Opportunities (Deficiencies)

### **Implementation Plan Savings Progress metric**

Determines progress for plan savings goals. Adds savings from each transaction and compares them to the implementation savings goals.

Details of the metric	Description
Name	Implementation Plan Savings Progress
Category	Operational
Analysis objective for exception conditions	Determines progress for plan savings goals.
Description	Adds savings from each transaction and compares them to the implementation savings goals.
Source	Customer Focus Group
Measurement	Total Savings from Completed Transactions / Total Savings Goals
Dependent data that is calculated	<ul> <li>Implementation Plans</li> <li>Total Savings Goal = Yearly Savings + Yearly Savings Other + Productivity Savings + Cash Income</li> <li>Real Estate Project (triREProject)</li> <li>Total Savings from completed Transactions = Total Yearly Savings + Productivity Savings + Cash Income</li> </ul>
Roles	RE Executive
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: .75 (75%)</li> <li>High Threshold: 1 (100%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: On Target/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triREImplementationPlanFact Metric Queries: triREImplementationPlanFact - Metric - % Implementation Plan Savings Progress
Drill paths	<ul><li>Geography</li><li>Capture Period</li></ul>
Interactive filters	Geography
Static filters	Completed in data point refresh period
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

#### Income per Area (AR Leases) metric

Details of the metric	Description
Name	Income per Area (AR Leases)
Category	Financial
Source	BOMA, GSA
Measurement	Total Real Estate Income (AR Leases) / Total Rentable Area
Dependent data that is calculated	Total Real Estate Income: Owned Property real estate income
	• Owned Property: Iotal Rentable Area
Roles	RE Contract Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	• Low Threshold: \$20.21/RSF
	• High Threshold: \$22.45/RSF
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triREContractFact
	Metric Queries: triREContractFact – Metric – Income per Area – AR Leases
Drill paths	• Geography
	Organization
	Capture Period
Interactive filters	• Geography
	Primary Use
Static filters	Accounting Type = Accounts Receivable (AR)
Time	Months
Data point refresh rate	Monthly
License dependency	Real Estate
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

Determines or compares income based on accounts and receivable leases.

#### Maintenance Costs / Area (\$/area) metric

Determines cost efficiency based on comparing the maintenance costs to the overall area of the facilities.

Details of the metric	Description
Name	Maintenance Costs / Area (\$/area)
Category	Financial

Details of the metric	Description
Analysis objective for exception conditions	Determines which facilities have good or poor cost efficiencies. Determines which particular maintenance costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how they compare to industry benchmarks and allows managers to compare maintenance costs across geographical regions, facilities, and building types.
Source	IFMA
Measurement	Total Maintenance Cost / Total Facility Area
Dependent data that is calculated	• Total Maintenance Cost: Sum of Financial Summary table filtered for Cost Type = Maintenance. This includes all maintenance-related Cost values such as Utilities, Custodial, Grounds.
	Total Facility Area: Building Rentable Area
Roles	<ul> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: Not Used</li> <li>High Threshold: Not Used</li> <li>Range 1: Not Used</li> <li>Range 2: Not Used</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Maintenance Costs / Area (\$ / Area), triBuildingFact - Metric - Maintenance Costs / Area (\$ / Area) (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Building Class</li> <li>Building Tenure</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Location</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Mission Dependency</li> <li>Legal Interest</li> </ul>

Details of the metric	Description
Static filters	Cost Type Classification = Maintenance
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	<ul><li>Building (Area Calculations)</li><li>Financial data from external corporate system</li></ul>

#### Maintenance Costs / Area Maintained metric

Determines cost efficiency based on comparing the maintenance costs to the overall maintained area of the facilities.

Details of the metric	Description
Name	Maintenance Costs / Area Maintained
Category	Financial
Analysis objective for exception conditions	Determines which facilities have good or poor cost efficiencies. Determines which particular maintenance costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how they compare to industry benchmarks and allows managers to compare maintenance costs across geographical regions, facilities, and building types. This metric differs from the Maintenance Costs / Area metric in that it uses only the actual area that is maintained instead of the overall area.
Source	IFMA
Measurement	Total Maintenance Cost / Total Maintained Area
Dependent data that is calculated	<ul> <li>Total Maintenance Cost: Sum of Financial Summary table filtered for Service Type = Maintenance. This includes all maintenance-related Cost values such as Utilities, Custodial, Grounds.</li> <li>Total Maintained Area: Sum of Area where 'Floor Maintained' field = TRUE on the Floor Record.</li> </ul>
Roles	<ul> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> <li>OP Service Technician</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$.75/Area Maintained</li> <li>High Threshold: \$2.50/Area Maintained</li> <li>Range 1: Under Maintained/Caution/Yellow</li> <li>Range 2: Adequate Maintenance/Positive/Green</li> <li>Range 3: Excessive Maintenance/Negative/Red</li> </ul>
Details of the metric	Description
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Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Maintenance Costs / Area Maintained, triBuildingFact - Metric - Maintenance Costs / Area Maintained (Score)
Drill paths	• Geography
	Location
	Capture Period
Interactive filters	• Geography
	• Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	Location
	Real Property Type
	Real Property Use
	Mission Dependency
	• Legal Interest
Static filters	Cost Type Classification = Maintenance
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Building (Area Calculations)
	Financial data from external corporate system

## Mobility Space Rate (%) metric

Determines the percentage of space that is designated for shared use. Identifies locations to further adopt shared workspace solutions.

Details of the metric	Description
Name	Mobility Space Rate (%)
Category	Operational
Analysis objective for exception conditions	Narrows above target rates at property level or building level, and organization level, to focus investigation. Views organizational information for potential adopters of mobile or shared workspaces. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies trends and opportunities for improved use and agility through shared workstations.
Source	Customer Focus Group
Measurement	Total Flexible Workspace Area / Total Workspace Area

Details of the metric	Description
Dependent data that is calculated	<ul> <li>Total Flexible Workspace Area: Space records where Reservable = TRUE</li> <li>Total Workspace Area: Space records where Workpoint = TRUE</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .05 (5%)</li> <li>High Threshold: .2 (20%)</li> <li>Range 1: low/Negative/Red</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triSpaceAllocationFact Metric Queries: triSpaceAllocationFact - Metric - Mobility Space Rate (%) Metric, triSpaceAllocationFact - Metric - Mobility Space Rate (%) Metric (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Space Class</li> </ul>
Static filters	<ul> <li>Active Buildings</li> <li>Active Floors</li> <li>Active Spaces</li> <li>Shared/Reserved Workstation (flexible workspace)</li> </ul>
Time	Months
Data point refresh rate	Monthly

## Mobility Worker Rate (%) metric

Determines the percentage of remote and mobile workers that are designated to use shared space solutions. Identifies locations and organizations to further adopt shared workspace solutions.

Details of the metric	Description
Name	Mobility Worker Rate (%)
Category	Operational

Details of the metric	Description
Analysis objective for exception conditions	Narrows analysis to property level or building level, and organization level, to focus investigation. Views organizational information for potential adopters of mobile or shared workspaces. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Identifies trends and opportunities for improved use and agility for mobile workers with flexible workplace solutions.
Source	Customer Focus Group
Measurement	Total Flexible Workers / Total Workers
Dependent data that is calculated	Flexible Workers are determined by an 'Assignment Type' field on the Employee record. Assignment type options = Assigned, Mobile, Non-Office Worker, and Remote.
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .05 (5%)</li> <li>High Threshold: .2 (20%)</li> <li>Range 1: low/Negative/Red</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triWorkerFact Metric Queries: triWorkerFact - Metric - Mobility Worker Rate (%) Metric, triWorkerFact - Metric - Mobility Worker Rate (%) Metric (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Capture Period</li> </ul>
Interactive filters	<ul><li>Geography</li><li>Location</li><li>Organization</li></ul>
Static filters	<ul> <li>Active Buildings</li> <li>Active Floors</li> <li>Active Spaces</li> <li>Office Workers</li> </ul>
Time	Months
Data point refresh rate	Monthly

## Move Cost (\$/area) metric

Details of the metric	Description
Name	Move Cost (\$/area)
Category	Financial
Analysis objective for exception conditions	Narrows analysis to building locations to focus investigation and reviews move costs by location and geography to further pinpoint move complexity or simplification. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates cost efficiency comparisons for internal trend analysis and external benchmarking by equating costs to an area metric.
Source	IFMA
Measurement	Total Move Cost / Total Area
Dependent data that is calculated	<ul> <li>Financial Summary Object provides summary data for operating costs</li> <li>Area: Building Rentable Area (in square feet or square meters)</li> <li>The Fact table also captures Gross and Usable area values.</li> </ul>
Roles	<ul> <li>FA Move Manager/Planner</li> <li>OP Executive</li> <li>PR Executive</li> <li>PR Manager</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$.50/RSF</li> <li>High Threshold: \$1.50/RSF</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Move Cost (\$ / Area) Metric, triBuildingFact - Metric - Move Cost (\$ / Area) Metric (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>

Determines whether building move costs are within spending targets.

Details of the metric	Description
Interactive filters	• Geography
	Location
	• Time
	• Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	Location
	• Time
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
Static filters	Active Buildings
Time	Months
Data point refresh rate	• Monthly
	After month-end close and scheduled load of financial data

## Move Cost (\$/Person Moved) metric

Controls move costs and improves move cost efficiency.

Details of the metric	Description
Name	Move Cost (\$/Person Moved)
Category	Financial
Analysis objective for exception conditions	Narrows analysis to building locations to focus investigation and reviews costs by move type or worker type to further pinpoint move complexity or simplification. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates cost efficiency comparisons for internal trend analysis and external benchmarking by equating costs to a per-person metric.
Source	IFMA
Measurement	Total Move Cost / Total number of People Moved
Dependent data that is calculated	<ul> <li>Cost: Move Project Actual Cost</li> <li>Person (workers): Move Project line item count of people moved</li> <li>Data is from the Facilities Project object (which is used for MAC-type projects).</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>PR Executive</li><li>PR Manager</li></ul>

Details of the metric	Description
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> </ul>
	<ul> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	• Low Threshold: \$400/Person
	• High Threshold: \$800/Person
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triMoveProjectCostFact
	Metric Queries: triMoveProjectCostFact - Metric - Move Cost (\$ / Person Moved) Metric, triMoveProjectCostFact - Metric - Move Cost (\$ / Person Moved) Metric (Score)
Drill paths	• Geography
	• Location
	Capture Period
	Customer Organization
	Responsible Organization
Interactive filters	Location
	• Move Type
	Customer Organization
	Responsible Organization
Static filters	Active Buildings
Time	Months
Data point refresh rate	Monthly

## My Average Transaction Cycle Time metric

Identifies operational performance of the active user in delivering real estate projects within a planned schedule.

Details of the metric	Description
Name	My Average Transaction Cycle Time
Category	Operational
Analysis objective for exception conditions	Determines root cause of delayed projects. If projects are late, they might affect revenue, customer satisfaction, or both.
Description	Calculates actual end date of a real estate project against the actual start date.
Source	Customer Focus Group
Measurement	(Actual End – Actual Start) / Total Count of Completed Projects

Details of the metric	Description
Dependent data that is	RE Projects:
calculated	Real Estate Project Actual Start Date
	Real Estate Project Actual End Date
Roles	RE Transaction Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	• Low Threshold: 134 days
	• High Threshold: 274 days
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triREProjectFact
	Metric Queries: triREProjectFact - Metric - My Average Transaction Cycle Time
Drill paths	• Geography
	• Project Type
	Capture Period
Interactive filters	Geography
	• Project Type
Static filters	RE Projects completed in data point refresh period, Active User (USERID) = Project Manager
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

## My On-target Service Costs metric

Determines the level of responsiveness based on defined service-level metrics.

Details of the metric	Description
Name	My On-target Service Costs
Category	Operational
Analysis objective for exception conditions	Determines how the logged-in IBM TRIRIGA user is performing based on service-level metrics that are defined in the terms and conditions of service agreements, blanket purchase orders, and real estate lease contracts. Determines whether an individual's work or the organization they report to are performing or trending toward performance outside of customer expectations. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.

Details of the metric	Description
Description	Informs an individual service technician how he or she and his or her organization are performing. The customer company or agency expects that services are performed within the cost that is specified in the agreements and contracts. These expectations are recorded in the service matrix that is associated with the agreements and contracts based on the service that is requested, the requesting organization, and the geography or location of the request. This combination appends the estimated cost of the service level to the tasks.
Source	Customer Focus Group
Measurement	Actual Task Cost / Planned Task Cost
Dependent data that is calculated	<ul> <li>Task – includes all Task types with a Responsible Organization section</li> <li>Planned costs, Actual Costs, for completed or closed tasks</li> </ul>
Roles	<ul><li> OP Service Manager</li><li> OP Service Technician</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .8 (80%)</li> <li>High Threshold: 1 (100%)</li> <li>Range 1: Under Target/Caution/Yellow</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Over Target/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triTaskDetailFact Metric Queries: triTaskDetailFact - Metric - My On-Target Service Costs, triTaskDetailFact - Metric - My On-Target
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Assigned Resource</li> <li>Request Class</li> <li>Responsible Organization</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Request Class</li> <li>Assigned Resource</li> </ul>
Static filters	None
Suppress zero values	<ul><li>Yes, suppress graphic display of zero values</li><li>Yes, suppress interactive filters list or drill-path list with zero values</li></ul>

Details of the metric	Description
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	<ul><li>Task Management</li><li>Service Management</li><li>Contract Management with Service Matrix entries</li></ul>

# My On-Time Service Responsiveness (turn-around time) metric

Details of the metric	Description
Name	My On-Time Service Responsiveness (turn-around time)
Category	Operational
Analysis objective for exception conditions	Determines how the logged-in IBM TRIRIGA user is performing based on service-level metrics that are defined in the terms and conditions of service agreements, blanket purchase orders, and real estate lease contracts. Determines whether an individual's work or the organization they report to are performing or trending toward performance outside of customer expectations. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs an individual service technician how he or she is performing. The customer company or agency expects that services are performed within the time that is specified in the agreements and contracts. These expectations are recorded in the service matrix that is associated with the agreements and contracts based on the service that is requested, the requesting organization, and the geography or location of the request. This combination appends the service level time frames to the tasks based on the time to respond to the request, time to satisfy the request, and the time to follow-up with the requester.
Source	Customer Focus Group
Measurement	(Count of Completed Tasks where the Actual Complete Date-Time <= Baseline Planned Date-Time) / Total number of Completed Tasks
Dependent data that is calculated	Task – Baseline Complete Date, Baseline Planned Date, Complete/Closed Status
Roles	<ul><li> OP Service Manager</li><li> OP Service Technician</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>

Determines the level of responsiveness based on defined service-level metrics.

Details of the metric	Description
Thresholds	• Low Threshold: .6 (60%)
	• High Threshold: .85 (85%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triTaskDetailFact
	Metric Queries: triTaskDetailFact - Metric - My On-time Service Responsiveness, triTaskDetailFact - Metric - My On-time Service Responsiveness (Score)
Drill paths	• Geography
	Location
	Assigned Resource
	Request Class
	Responsible Organization
	Capture Period
Interactive filters	• Geography
	• Location
	Responsible Organization
	Request Class
	Assigned Resource
Static filters	Cost Type Classification = Maintenance
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Task Management
	Service Management
	Contract Management with Service Matrix entries
	This metric uses the Baseline Start Date, Baseline End Date, and Baseline Duration.

## My Overall Customer Satisfaction - Operations metric

Determines the operational performance of the logged in IBM TRIRIGA user and his or her organizations. The metric delivers maintenance services based on operations evaluations that are submitted by clients.

Details of the metric	Description
Name	My Services Satisfaction Survey
Category	Customer
Analysis objective for exception conditions	Determines root cause of negative survey responses that are submitted. Identifies improvement opportunities, misaligned service levels, expectation gaps, and consumer perception. Recognizes excellent customer service.

Details of the metric	Description
Description	Informs an individual service technician how effective the organization is at satisfying the requests of the facility occupants. It is based on the aggregate scores from the returned survey forms.
Source	Customer Focus Group
Measurement	Sum of Survey Response Scores / Total Survey Maximum Score
Dependent data that is calculated	None
Roles	<ul><li>OP Executive</li><li>OP Service Manager</li></ul>
	OP Service Technician
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> </ul>
	• Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: .58 (58%)</li> <li>High Threshold: .78 (78%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triSurveyFact Metric Queries: triSurveyFact - Metric - My Services Satisfaction Survey triSurveyFact - Metric - My Services Satisfaction Survey (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Request Class</li> <li>Question Category</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Request Class</li> <li>Question Category</li> </ul>
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li>IBM TRIRIGA Operations</li><li>Request Central</li></ul>

Details of the metric	Description
Functional dependency	Task Management
	Service Management
	Request Management

## My Project Budget metric

Determines project financial health based on comparing the current budget to the forecast final budget by project.

Details of the metric	Description
Name	My Project Budget
Category	Financial
Analysis objective for exception conditions	Determines how the logged in IBM TRIRIGA user is performing based on project budget versus forecast.
Description	Compares current budget to the forecast final budget by project. This metric is only relevant for capital projects.
Source	Customer Focus Group
Measurement	Lists projects by displaying Current Budget and Forecast Final Budget
Dependent data that is calculated	None
Roles	PR Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart
Thresholds	Low Threshold: Not Used
	• High Threshold: Not Used
	• Range 1: Not Used
	• Range 2: Not Used
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries: triCapitalProjectFact - Metric - My Project Budget
Drill paths	• Program
	• Project
	Capture Period
Interactive filters	Organization
	Geography
	Budget Classification (Capital, Operating)
	• Location
Static filters	Status: Active and Revision In Progress projects only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Capital Projects Manager

Details of the metric	Description
Functional dependency	Capital Projects
	• Budgets
	Change Order Management

## My Service Time Utilization metric

Allows the logged in Service Technician to view his or her productivity based on time entries that are logged for tasks that are compared to total available time.

Details of the metric	Description
Name	My Service Time Utilization
Category	Operational
Analysis objective for exception conditions	Determines how well maintenance resources are being used. Views over time to show, analyze, and adjust programs based on observed trends. This metric is essential for analyzing worker productivity and effectiveness within the maintenance organization.
Description	Informs the service technician how effective his or her time on tasks is compared to downtime and other non-work time, such as holidays and vacation.
Source	Customer Focus Group
Measurement	Total Hours on Task-related Time Entries / Total Standard Hours (based on work schedule)
Dependent data that is calculated	<ul> <li>Total Hours on Task-related Time Entries = Total hours logged on Time Entries with associated Tasks for the capture period</li> <li>Total Hours on Time Entries = Total "Standard" Hours (that is, 40 hr week, 8-hour day) based on work schedule for the individuals that are captured in the Task-related Time Entries (numerator) for the capture period</li> <li>Time period is based on time log line item date (not time card period)</li> <li>Organization, Location, and Geography are based on associations of employee on time card entry.</li> </ul>
Roles	OP Service Technician
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .65 (65%)</li> <li>High Threshold: .8 (80%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>

e Time ne

#### New Construction Cost / Area metric

Determines cost efficiency by comparing the new construction cost to the overall area for new construction.

Details of the metric	Description
Name	New Construction Cost / Area (Capital Projects Only)
Category	Financial
Analysis objective for exception conditions	Identifies business units or programs that have higher than average building costs and drill in to the project costs to identify the cause.
Description	Provides visibility into the average cost of new construction per square foot. This information helps provide more accurate new construction estimates. It also allows management to focus on projects or teams with overly high average costs. This metric provides a gauge for seeing price increases and decreases over time to help predict future cost changes.
Source	Customer Focus Group
Measurement	Actual Costs Incurred (new construction projects only) / Project Gross Construction Area (or Project Usable Area)
Dependent data that is calculated	Project Gross Construction Area and Project Usable Area

Details of the metric	Description
Roles	PR Executive
	• PR Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart
Thresholds	Low Threshold: \$225/SF
	• High Threshold: \$300/SF
	Range 1: Low/Positive/Green
	Range 2: Medium/Caution/Yellow
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries: triCapitalProjectFact - Metric - New Construction Cost (USD / GSF), triCapitalProjectFact - Metric - New Construction Cost (USD / USF)
Drill paths	• Program
	• Geography
	• Project
	Project Manager
	• Client
	Capture Period
Interactive filters	• Organization
	• Geography
	• Location
Static filters	Status: Completed projects
	Project Classification: New Construction
Time	Months
Data point refresh rate	Monthly

## **Occupancy Rate (%) metric**

Determines the efficiency of the sizing standards for workstations and workpoints to identify opportunities in workstation layout or standards improvements.

Details of the metric	Description
Name	Occupancy Rate (%)
Category	Portfolio
Analysis objective for exception conditions	Determines which building and floor locations to focus investigation to discover root causes of exception conditions. Further drill into space classifications for more detailed analysis. Reviews occupancy rate by organization to determine occupants with opportunities for improvement. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates building occupancy and layout efficiency comparisons for internal trend analysis and external benchmarking.

Details of the metric	Description
Source	IFMA
Measurement	Space Used / Space Available
Dependent data that is calculated	<ul><li>Space Used: space assigned to an organization</li><li>Space Available: total space within a building</li></ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .9 (90%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Under Utilized/Negative/Red</li> <li>Range 2: Good Utilization/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triSpaceFact Metric Queries: triSpaceFact - Metric - Occupancy Rate (%) Metric, triSpaceFact - Metric - Occupancy Rate (%) Metric (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>Real Property Type</li> <li>Real Property Use</li> </ul>
Static filters	<ul><li>Active Buildings</li><li>Active Floors</li><li>Active Spaces</li></ul>
Time	Months
Data point refresh rate	Monthly

## **On-target Service Costs metric**

Details of the metric	Description
Name	On-target Service Costs
Category	Operational
Analysis objective for exception conditions	Determines whether an individual's work or the organization that he or she reports to are performing or trending toward performance outside of expectations. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how the internal service providers, external service providers, or both are performing and the accuracy of task estimates. The customer company or agency expects that services are performed within the cost that is specified in the agreements and contracts. These expectations are recorded in the service matrix that is associated with the agreements and contracts based on the service that is requested, the requesting organization, and the geography or location of the request. This combination appends the planned cost to the tasks.
Source	Customer Focus Group
Measurement	Actual Task Cost / Planned Task Cost
Dependent data that is calculated	<ul> <li>Task – includes all Task types with a Responsible Organization section</li> <li>Planned costs, Actual Costs, for completed or closed tasks</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>PR Executive</li> <li>PR Manager</li> <li></li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .8 (80%)</li> <li>High Threshold: 1 (100%)</li> <li>Range 1: Under Target/Caution/Yellow</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Over Target/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triTaskResourceFact Metric Queries: triTaskResourceFact - Metric - On-target Service Costs, triTaskResourceFact - Metric - On-target Service Costs (Score)

Determines the level of cost efficiency based on defined planned task cost.

Details of the metric	Description
Drill paths	• Geography
	Location
	Assigned Resource
	Request Class
	Responsible Organization
	Capture Period
Interactive filters	• Geography
	Location
	Responsible Organization
	Request Class
	Assigned Resource
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Task Management
	Service Management
	Contract Management with Service Matrix entries

## **On-Time Service Responsiveness (turn-around time) metric**

Determines the level of responsiveness based on defined service-level metrics.

Details of the metric	Description
Name	On-Time Service Responsiveness (turn-around time)
Category	Operational
Analysis objective for exception conditions	Determines how the internal and external service providers are performing based on service-level metrics that are defined in the terms and conditions of service agreements, blanket purchase orders, and real estate lease contracts. Determines which service providers are performing or trending toward performance outside of customer expectations. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how the internal service providers, external service providers, or both are performing. The customer company or agency expects that services are performed within the time specified in the agreements and contracts. These expectations are recorded in the service matrix that is associated with the agreements and contracts based on the service that is requested, the requesting organization, and the geography or location of the request. This combination appends the service level time frames to the tasks based on the time to respond to the request, time to satisfy the request, and the time to follow-up with the requester. This metric is focused on the actual completion time.
Source	Customer Focus Group

Details of the metric	Description
Measurement	(Count of Completed Tasks where the Actual Complete Date-Time <= Baseline Planned Date-Time) / Total number of Completed Tasks
Dependent data that is calculated	Task – Baseline Complete Date, Baseline Planned Date, Complete/Closed Status
Roles	EN Workplace Executive
	FA Move Manager/Planner
	FA Space Manager/Planner
	OP Executive
	OP Service Manager
	• PR Executive
	PR Manager
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> </ul>
	<ul> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	• Low Threshold: .6 (60%)
	• High Threshold: .85 (85%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triTaskResourceFact
	Metric Queries: triTaskResourceFact - Metric - On-time Service Responsiveness, triTaskResourceFact - Metric - On-time Service Responsiveness (Score)
Drill paths	• Geography
	Location
	Assigned Resource
	Request Class
	Responsible Organization
	Capture Period
Interactive filters	• Geography
	Location
	Responsible Organization
	Request Class
	Assigned Resource
Static filters	Cost Type Classification = Maintenance
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations

Details of the metric	Description
Functional dependency	<ul> <li>Task Management</li> <li>Service Management</li> <li>Contract Management with Service Matrix entries</li> <li>This metric uses the Baseline Start Date, Baseline End Date, and Baseline Duration.</li> </ul>

## Operating Cost (Actual vs. Budget) metric

Details of the metric	Description
Name	Operating Cost (Actual vs. Budget)
Category	Financial
Analysis objective for exception conditions	Determines which buildings are within targets or performing poorly to budget goals. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates the measurement of actual costs against budgeted costs, which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Operating Cost (Actual vs. Budget)
Dependent data that is calculated	Financial Summary Object provides summary data for total operating costs
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	Capture Period: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)
Thresholds	<ul> <li>Low Threshold: \$.85/RSF</li> <li>High Threshold: \$1.50/RSF</li> <li>Range 1: Under Budget/Caution/Yellow</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: Over Budget/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingCostFact Metric Queries: triBuildingCostFact - Metric - Operating Cost Ratio (Actual / Budget) Metric
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Service Class</li> <li>Capture Period</li> </ul>

Determines whether building operating costs are within spending targets.

Details of the metric	Description
Interactive filters	• Geography
	• Location
	• Service Class
	• Building Tenure (Lease/Own)
	<ul> <li>Organization (from cost code organization)</li> </ul>
	For US Federal Government:
	• Geography
	Location
	Service Class
	Real Property Type
	Real Property Use
	Mission Dependency
	• Legal Interest
	Organization (from cost code organization)
Static filters	Cost Type = Operating
Time	Months
Data point refresh rate	Monthly, after month-end close and scheduled load of financial data

## Operating Cost (Budget vs. Actual vs. Forecast) metric

Determines whether building operating costs are within spending targets.

Details of the metric	Description
Name	Operating Cost (Budget vs. Actual vs. Forecast)
Category	Financial
Analysis objective for exception conditions	Determines which buildings are within targets or performing poorly to budget goals. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates the measurement of actual costs against budgeted costs, which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	Operating Cost (Budget vs. Actual vs. Forecast)
Dependent data that is calculated	Financial Summary Object provides summary data for total operating costs.
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	Capture Period: Line/Bar Chart
Thresholds	None

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triBuildingCostFact
	Metric Queries: triBuildingCostFact - Metric - Operating Cost (Budget vs Actual) Metric
Drill paths	Capture Period
Interactive filters	• Geography
	Location
	• Time
	Service Class
	Building Tenure (Lease/Own)
	Organization (from cost code organization)
Static filters	Cost Type = Operating
Time	Months
Data point refresh rate	Monthly, after month-end close and scheduled load of financial data

## **Original Budget to Forecast metric**

Identifies projects that exceed their original budgets and provides details of how much projects are over budget.

Details of the metric	Description
Name	Original Budget to Forecast
Category	Financial
Analysis objective for exception conditions	Identifies projects that exceed the over-budget threshold.
Description	Identifies projects that exceed budget variance objectives and how far off the original budget those projects are. It also allows the user to drill into a specific project and identify variances at the project cost code level.
Source	Customer Focus Group
Measurement	Original Project Budget / Forecast Final Budget
Dependent data that is calculated	None
Roles	<ul><li>PR Executive</li><li>PR Manager</li></ul>
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart
Thresholds	<ul> <li>Low Threshold: 0 (0%)</li> <li>High Threshold: .1 (10%)</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Poor/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact
	Metric Queries: triCapitalProjectFact - Metric - Original Budget to Forecast
Drill paths	• Program
	• Geography
	• Project
	• Project Type
	Project Classification
	Capture Period
Interactive filters	• Geography
	Organization
	Budget Classification (Capital, Operating)
	• Program
Static filters	Status: Active and Revision In Progress projects only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Capital Projects Manager
Functional dependency	Capital Projects
	• Budgets
	Change Order Management

#### **Outsource Ratio metric**

Determines the overall cost impact from outsourced tasks.

Details of the metric	Description
Name	Outsource Ratio
Category	Analysis Report
Analysis objective for exception conditions	Determines how well maintenance resources are being used by comparing the costs of outsourced work to in-house work. Views this metric over time to show, analyze, and adjust programs based on observed trends. This metric can be used to monitor contractor usage and effectiveness. If the contractor charges to perform a type of work that exceeds the in-house costs to perform the same work, then negotiations on pricing can be considered. Alternatively, a decision can be made to bring back the work in-house.
Description	Informs management of the amount of task work that is outsourced to external service providers.
Source	IFMA
Measurement	Total Contract Costs on Tasks / Total Task Cost

Description
<ul> <li>Total Contract Costs on Tasks = Total Task Cost where Responsible Organization associated to the Task is an External Organization; or the Responsible Organization is an internal Department/Agency or Workgroup but has an External Organization as a Resource.</li> <li>Total Task Cost = Total Cost of all Tasks</li> </ul>
OP Executive
OP Service Manager
OP Facility Assessment Manager/Planner
Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)
• Low Threshold: .3 (30%)
• High Threshold: .5 (50%)
Range 1: Low/Caution/Yellow
Range 2: On Target/Positive/Green
Range 3: High/Caution/Yellow
Module: triMetricFact
Business Object: triTaskDetailFact
Metric Queries: triTaskDetailFact - Metric - Outsource Ratio
• Geography
• Location
Responsible Organization
Building Class
Capture Period
• Geography
• Location
Responsible Organization
Responsible Person
Include Active Status Dimensions Only
Months
Monthly
IBM TRIRIGA Operations
Task Management
Service Management

#### **Overall Customer Satisfaction – All Workplace Organizations metric**

Determines operational performance of all workplace service providers based on the evaluations that are submitted by clients.

Details of the metric	Description
Name	Overall Workplace Customer Satisfaction
Category	Customer

Details of the metric	Description
Analysis objective for exception conditions	Identifies root cause of negative survey responses that are submitted, improvement opportunities, misaligned service levels, expectation gaps, and consumer perceptions. Recognizes and rewards excellent customer service, which is often the most important service measurement. In scorecards, it is the key customer metric. This metric aggregates the various facilities, real estate, and operations evaluations to provide a view across all workplace services functions.
Description	Informs management how effective the organization is at satisfying the requests of the facility occupants. It is based on the aggregated scores from the returned evaluation forms.
Source	Customer Focus Group
Measurement	Total Survey Response Score / Total Survey Question Possible Score
Roles	EN Workplace Executive
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Stacked Bar (percent) Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: 58%</li> <li>High Threshold: 78%</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performance/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triSurveyFact Metric Queries: triSurveyFact - Metric - Customer Satisfaction (%) Metric – Enterprise, triSurveyFact - Metric - Customer Satisfaction (%) Metric - Enterprise (Score)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period, Survey Type, Question Category, Responsible Organization, Survey</li> <li>Score-based: Geography, Location, Capture Period, Survey Type, Question Category, Responsible Organization, Survey</li> </ul>
Interactive filters	<ul> <li>Value-based: Geography, Location, Responsible Organization, Survey Type, Request Class</li> <li>Score-based: Geography, Location, Responsible Organization, Survey Type, Request Class</li> </ul>
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	<ul> <li>IBM TRIRIGA Real Estate</li> <li>IBM TRIRIGA Facilities</li> <li>IBM TRIRIGA Operations (or a subset)</li> <li>This metric summarizes only those Evaluation Forms utilized.</li> </ul>

Details of the metric	Description
Functional dependency	This metric summarizes only those evaluation forms used. Functionality that is required per evaluation type:
	<ul> <li>Real Estate: RE Transaction Management for RE Portfolio Manager Evaluation and RE Preferred Provider Evaluation</li> </ul>
	<ul> <li>Facilities Management: Task Management, Service Management, Request Management, and Move Management for Facilities Service and Move Service Provider Evaluations</li> </ul>
	<ul> <li>Operations Management: Task Management, Service Management, and Request Management for Operations Service Provider Evaluations</li> </ul>

## **Overall Customer Satisfaction – Portfolio Managers metric**

Identifies operational performance of the real estate department in delivering real estate project services based on portfolio manager evaluations that are submitted by clients.

Details of the metric	Description
Name	Overall Customer Satisfaction – Portfolio Managers
Category	Customer
Analysis objective for exception conditions	Determines root cause of negative survey responses that are submitted.
Description	Informs management of the average scores of portfolio manager evaluations.
Source	Customer Focus Group
Measurement	Total Survey Response Score / Total Survey Question Possible Score
Dependent data that is calculated	<ul><li>Portfolio Manager Evaluations:</li><li>Total Survey Response Score</li><li>Total Survey Question Possible Score</li></ul>
Roles	<ul><li> EN Workplace Executive</li><li> RE Executive</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: .58 (58%)</li> <li>High Threshold: .78 (78%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triSurveyFact Metric Queries: triSurveyFact - Metric - Overall Customer Satisfaction - Portfolio Managers (Score)

Details of the metric	Description
Drill paths	<ul> <li>Geography</li> <li>Portfolio Manager</li> <li>Question Category</li> <li>Capture Period</li> </ul>
Interactive filters	<ul><li>Geography</li><li>Question Category</li><li>Portfolio Manager</li></ul>
Static filters	<ul> <li>Survey Type = Real Estate</li> <li>Survey Form Name = Portfolio Manager Evaluation Survey</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

#### **Overall Customer Satisfaction – Preferred Providers metric**

Identifies operational performance of external preferred providers, such as brokers, in delivering real estate project services based on preferred provider evaluations that are submitted by portfolio managers.

Details of the metric	Description
Name	Overall Customer Satisfaction – Preferred Providers
Category	Customer
Analysis objective for exception conditions	Determines root cause of negative survey responses that are submitted.
Description	Informs management of the average scores of preferred provider evaluations.
Source	Customer Focus Group
Measurement	Total Survey Response Score / Total Survey Question Possible Score
Dependent data that is calculated	Preferred Provider Evaluations:
	Total Survey Response Score
	Total Survey Question Possible Score
Roles	EN Workplace Executive
	• RE Executive
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	• Low Threshold: .58 (58%)
	• High Threshold: .78 (78%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green

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Module: triMetricFact
Business Object: triSurveyFact
Metric Queries: triSurveyFact - Metric - Overall Customer Satisfaction - Preferred Providers (Score)
Geography
Preferred Provider
Question Category
Capture Period
• Geography
Question Category
Preferred Provider
• Survey Type = Real Estate
• Survey Form Name = Portfolio Manager Evaluation Survey
Months
Monthly
Real Estate
• Facilities
Space Use Agreements (Real Estate)
Space Allocations (Facilities)

# Overall Customer Satisfaction – Preferred Providers – My Projects metric

Allows the logged in real estate transaction manager to identify the operational performance of external preferred providers, such as brokers, in delivering real estate project services based on preferred provider evaluations that are submitted by portfolio managers.

Details of the metric	Description
Name	Overall Customer Satisfaction – Preferred Providers – My Projects
Category	Customer
Analysis objective for exception conditions	Determine root cause of negative survey responses that are submitted.
Description	Informs the logged in real estate transaction manager of the average scores of preferred provider evaluations.
Source	Customer Focus Group
Measurement	Total Survey Response Score / Total Survey Question Possible Score
Dependent data that is calculated	<ul><li>Preferred Provider Evaluations:</li><li>Total Survey Response Score</li><li>Total Survey Question Possible Score</li></ul>
Roles	RE Transaction Manager

Details of the metric	Description
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	• Low Threshold: .58 (58%)
	• High Threshold: .78 (78%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triSurveyFact
	Metric Queries: triSurveyFact - Metric - Overall Customer
	Satisfaction - Preferred Providers - My Projects (Score)
Drill paths	• Geography
	Preferred Provider
	Question Category
	Capture Period
Interactive filters	• Organization
	Question Category
	Preferred Provider
Static filters	RE Projects completed in data point refresh period, Active User (USERID) = Project Manager
Time	Months
Data point refresh rate	Monthly
License dependency	Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

## **Overtime Utilization** Rate metric

Determines worker productivity based on overtime entries that are logged for tasks, which are compared to total hours worked.

Details of the metric	Description
Name	Overtime Utilization Rate
Category	Operational
Analysis objective for exception conditions	Determines how well maintenance resources are being used. Views this metric over time to show, analyze, and adjust programs based on observed trends. This metric is essential for analyzing worker productivity and effectiveness within the maintenance organization. Although this metric is not always a direct indicator of the maintenance program's effectiveness, it can still be helpful. In some organizations, overtime is worked in response to breakdowns or emergency work. High overtime rates can highlight a potentially ineffective maintenance program.

Details of the metric	Description
Description	Informs management of the amount of work that requires overtime.
Source	Customer Focus Group
Measurement	Overtime Hours / Total Hours
Dependent data that is calculated	<ul> <li>From Time Card and Time Entries:</li> <li>Overtime = Time Entries with Time Type = Overtime</li> <li>Total Hours on Time Entries = Total "Standard" Hours (that is, 40 hr week, 8-hour day) based on work schedule for the individuals captured in the Task-related Time Entries (numerator) for the capture period (triTask – include all Task types with a Responsible Organization section)</li> <li>Time period is based on time log line item date (not time card period)</li> <li>Organization, Location, and Geography are based on associations of employee on time card entry.</li> </ul>
Roles	OP Service Manager
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .1 (10%)</li> <li>High Threshold: .25 (25%)</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: On Target/Caution/Yellow</li> <li>Range 3: Poor/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triResourceFact Metric Queries: triResourceFact - Metric - Overtime (OT) Utilization Rate, triResourceFact - Metric - Overtime (OT) Utilization Rate (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Assigned Resource</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Assigned Resource</li> </ul>
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li>IBM TRIRIGA Operations</li><li>Request Central</li></ul>

Details of the metric	Description
Functional dependency	Task Management
	Service Management
	Time Entries

## Percent Projects over Budget metric

Identifies the percentage of projects that are over budget against the projects that are at or under budget. This metric applies to capital projects only.

Details of the metric	Description
Name	Percent Projects Over Budget
Category	Financial
Analysis objective for exception conditions	Identifies overall operational problems or issues if the percentage of projects over budget trends upward over time.
Description	Provides management with a picture of how well the organization is managing projects to budget. By rolling projects up into programs, or by viewing this metric by region or project type, management can isolate where budget problems are originating.
Source	Customer Focus Group
Measurement	Projects Over Budget / Total Projects
Dependent data that is calculated	Projects Over Budget = where Forecast Final > Current Budget
Roles	<ul><li> EN Workplace Executive</li><li> PR Executive</li><li> PR Manager</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: .1 (10%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Poor/Negative/Red</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triCapitalProjectFact Metric Queries: triCapitalProjectFact - Metric - Percent Project Over Budget (Score)
Drill paths	<ul> <li>Program</li> <li>Geography</li> <li>Project Class</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Organization (Primary Organization for the Person who is the Project Manager Role)</li> <li>Geography</li> <li>Project Type</li> </ul>

Details of the metric	Description
Static filters	Status: Active and Revision In-Progress projects only.
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Capital Projects Manager
Functional dependency	Capital Projects, Budgets, Change Order Management

## Percent Projects over Schedule metric

Details of the metric	Description
Name	Percent Projects Over Schedule
Category	Operational
Analysis objective for exception conditions	Identifies overall operational problems or issues if the percentages of projects that are over schedule trends upward over time.
Description	Provides an overview of how many projects are over schedule with drill-down capabilities to see within a project which tasks are late. The threshold capability allows management to know by geography or project type. for example, if more than a certain percent of projects are late.
Source	Customer Focus Group
Measurement	Number projects over schedule (planned end date < projected end date) / total projects
Dependent data that is calculated	Days over/under schedule (variance) = planned end date – projected end date.
Roles	<ul><li> EN Workplace Executive</li><li> PR Executive</li><li> PR Manager</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart
Thresholds	<ul> <li>Low Threshold: .5 (5%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Poor/Negative/Red</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triCapitalProjectFact Metric Queries: triCapitalProjectFact – Metric – Percent Project Over Schedule (Score)
Drill paths	<ul> <li>Program</li> <li>Geography</li> <li>Project</li> <li>Project Classification</li> <li>Capture Period</li> </ul>

Identifies which projects are over schedule as a percentage of all projects.

Details of the metric	Description
Interactive filters	<ul><li>Geography</li><li>Organization</li></ul>
Static filters	Status: Active projects only; does not include Completed projects.
Time	Months
Data point refresh rate	Monthly

#### Percent RFI Overdue metric

Identifies projects that contain a large percentage of overdue RFIs, then drill in to that project and act on those RFIs that are identified as the most overdue.

Details of the metric	Description
Name	Percent RFI Overdue
Category	Operational
Analysis objective for exception conditions	Identifies the projects with a higher number of overdue RFIs than normal require attention.
Description	Helps project managers identify projects that need attention by showing which projects have the most RFIs overdue and by showing at the project level which RFIs are the most overdue.
Source	Customer Focus Group
Measurement	Total RFIs Overdue / Total RFIs
Dependent data that is calculated	RFI overdue = RFI Required By date < System Date
Roles	PR Manager
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart
Thresholds	<ul> <li>Low Threshold: .1 (10%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Poor/Negative/Red</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triRFIFact Metric Queries: triRFIFact – Metric – Percent RFI Overdue
Drill paths	<ul> <li>Program</li> <li>Project Classification</li> <li>Project</li> <li>Project Manager</li> <li>Capture Period</li> </ul>
Interactive filters	<ul><li>Geography</li><li>Organization</li></ul>
Static filters	<ul><li>Active Project</li><li>Active RFIs</li></ul>

Details of the metric	Description
Time	Months
Data point refresh rate	Monthly

#### **Preventive Maintenance Task Completion Ratio metric**

Determines the level of preventive maintenance work that is performed compared to preventive maintenance work that is scheduled.

Details of the metric	Description
Name	Preventive Maintenance Task Completion Ratio
Category	Operational
Analysis objective for exception conditions	Determines the percentage of preventive maintenance tasks scheduled in a reporting period versus the preventive maintenance tasks that are completed during the same period. Views this metric over time to show, analyze, and adjust preventive programs based on observed trends. The chart shows that as the completion rate goes up, the breakdowns and emergencies go down. If accurately tracked, the correlation is undeniable and can be used to gain support for the preventive maintenance program.
Description	Informs management how effective the organization is at implementing the planned preventive maintenance program. It is useful for highlighting a preventive maintenance program that is not effective.
Source	Customer Focus Group
Measurement	Total Preventive Maintenance Tasks Completed / Total Preventive Maintenance Tasks Scheduled
Dependent data that is calculated	<ul> <li>Total Preventive Maintenance Tasks Completed = Total Preventive Maintenance Tasks Completed where Task Type = Preventive, Status = Complete or Closed, and Planned End is within the capture period</li> <li>Total Preventive Maintenance Tasks Scheduled = Total Preventive Maintenance Tasks Scheduled where Task Type = Preventive, Status = Complete, Closed, or Planned, and Planned End is within the capture period</li> </ul>
Roles	<ul><li>OP Service Manager</li><li>OP Facility Assessment Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .6 (60%)</li> <li>High Threshold: .9 (90%)</li> <li>Range 1: Low/Negative/Red</li> <li>Range 2: On Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triTaskDetailFact
	Metric Queries: triTaskDetailFact - Metric - Preventive Maintenance Task Completion Ratio, triTaskDetailFact - Metric - Preventive Maintenance Task Completion Ratio (Score)
Drill paths	• Geography
	Location
	Responsible Organization
	Capture Period
Interactive filters	• Geography
	Location
	Responsible Organization
	• Task Type
Static filters	• Task Type = Preventive
	<ul> <li>Tasks (only Task types with a Responsible Organization section)</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Task Management
	Service Management
	Preventive Maintenance Job Plans
	• PM Schedules

## Preventive Maintenance to Repair Maintenance Cost Ratio metric

Determines the level of preventive maintenance as compared to repair maintenance.

Details of the metric	Description
Name	Preventive Maintenance to Repair Maintenance Cost Ratio
Category	Operational
Analysis objective for exception conditions	Determines how maintenance costs are being used and the percentage of actual costs that are spent on the preventive maintenance program and the effect those expenditures have on corrective repair work. Views this metric over time to show, analyze, and adjust preventive programs based on observed trends.
Description	Informs management how maintenance costs are being distributed between proactive preventive maintenance programs and reactive corrective maintenance. Use it in combination with other metrics, such as the Facilities Condition Index (FCI) and other financial metrics, to determine the effectiveness of the preventive maintenance program.
Source	Customer Focus Group

Details of the metric	Description
Measurement	Total Cost of Completed Preventive Tasks / Total Cost of Completed Repair Tasks
Dependent data that is calculated	<ul> <li>Total Cost of Completed Preventive Tasks where Task Type = Preventive</li> <li>Total Cost of Completed Tasks where Task Type = Corrective</li> </ul>
Roles	<ul><li>OP Service Manager</li><li>OP Facility Assessment Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .4 (40%)</li> <li>High Threshold: .6 (60%)</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: On Target/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triTaskDetailFact Metric Queries: triTaskDetailFact - Metric - Preventive Maintenance to Repair Maintenance Cost Ratio, triTaskDetailFact - Metric - Preventive Maintenance to Repair Maintenance Cost Ratio (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Responsible Organization</li> <li>Task Type</li> </ul>
Static filters	<ul> <li>Task Type = Corrective or Preventive</li> <li>Tasks (only Task types with a Responsible Organization section)</li> <li>Status = Completed or Closed Tasks</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	<ul> <li>Task Management</li> <li>Service Management</li> <li>Preventive Maintenance Job Plans</li> <li>PM Schedules</li> </ul>
## **Project On-Time Completion Rate metric**

Determines schedule efficiency by comparing the number of projects that are completed on or ahead of schedule against the total number of completed projects.

Details of the metric	Description
Name	Project On-Time Completion Rate
Category	Operational
Analysis objective for exception conditions	Measures the percentage of projects that are completed on-time. The goal is to get a completion rate of as near as possible to 100%.
Description	Knowing the project on-time completion rate acts as a starting point for improving project efficiency and can be tracked over time. Trends identify whether an organization is improving on completing projects on-time or not.
Source	Customer Focus Group
Measurement	Total number of projects that are completed on time / Total number of projects
Dependent data that is calculated	Project completed on-time = Actual End Date < Plan End Date
Roles	PR Manager
Display chart types	Score-based: Horizontal Stacked Bar Chart
Thresholds	<ul> <li>Low Threshold: .85 (85%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Good/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triCapitalProjectFact Metric Queries: triCapitalProjectFact – Metric – Project On-Time Completion Rate (Score)
Drill paths	<ul> <li>Program</li> <li>Project</li> <li>Project Manager</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Organization</li> <li>Project Classification</li> <li>Project Name</li> <li>Program</li> </ul>
Static filters	Completed Projects
Time	Months
Data point refresh rate	Monthly

## **Project Schedule Variance metric**

Identifies projects that are late, analyze project variance that is compared to original schedule, and identify the project tasks that are overdue.

Details of the metric	Description
Name	Project Schedule Variance
Category	Operational
Analysis objective for exception conditions	Identifies overall operational problems or issues if the percent of projects that are over schedule trends upward over time.
Description	Shows how actual project schedules compare to original schedules, showing how late compared to original schedules the projects or groups of projects are. Drill down capabilities allow the user to see within a project which tasks are late. The threshold capability allows management to know if projects are more than a certain amount late.
Source	Customer Focus Group
Measurement	Planned End Date – Projected End Date
Dependent data that is calculated	Days over/under schedule (variance) = planned end date – projected end date.
Roles	<ul><li>PR Executive</li><li>PR Manager</li></ul>
Display chart types	Value-based: Horizontal Grouped Bar (percent) Chart
Thresholds	<ul> <li>Low Threshold: .1 (10%)</li> <li>High Threshold: .2 (20%)</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Poor/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triCapitalProjectFact Metric Queries: triCapitalProjectFact – Metric – Project Schedule Variance
Drill paths	<ul> <li>Program</li> <li>Geography</li> <li>Project</li> <li>Project Class</li> <li>Capture Period</li> </ul>
Interactive filters	<ul><li>Geography</li><li>Organization</li></ul>
Static filters	Status: Active projects only; does not include Completed projects
Time	Months
Data point refresh rate	Monthly

# **Real Estate Contract Utilization – Space Use Agreement metric**

Details of the metric	Description
Name	Real Estate Contract Utilization – Space Use Agreement
Category	Portfolio
Analysis objective for exception conditions	Determines which contracts are outside of planned values to indicate whether contract disposition or termination is desirable. Uses time trend to compare over time to identify anomalies or trends.
Description	Organizations strive to keep the utilization ratio low. High vacancy rates can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Sum SUA Rentable Area / Total Rentable Area
Dependent data that is calculated	<ul><li>Space Use Agreement:</li><li>SUA Rentable Area</li><li>RE Contract:</li><li>Total Rentable Area</li></ul>
Roles	RE Contract Manager
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: .05 (5%)</li> <li>High Threshold: .08 (8%)</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triREContractFact Metric Queries: triREContractFact - Metric - RE Contract Utilization - Space Use Agreements (Score)
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Capture Period</li> </ul>

Defines utilization and allocation of real estate contracts.

Details of the metric	Description
Interactive filters	• Geography
	Organization
	Contract Type
	Primary Use
	For US Federal Government:
	• Geography
	Organization
	Contract Type
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

## Renewable Energy Ratio (%) - Energy Type metric

Determines energy efficiency based on energy type and showing the usage of energy that is purchased from renewable sources as a percentage of total energy usage.

Details of the metric	Description
Name	Renewable Energy Ratio (%)
Category	Environmental
Analysis objective for exception conditions	Measures the ratio of the energy that is purchased from renewable sources in facilities as a percentage of total energy usage.
Description	Facilitates internal trend analysis and external benchmarking by measuring the ratio.
Source	Customer Focus Group, consulting firms, EO 13423, GRI
Measurement	Total Energy Usage from Renewable Sources / Total Energy Usage all Sources
Dependent data that is calculated	None
Roles	<ul> <li>EN Workplace Executive</li> <li>ES Manager/Planner</li> </ul>
	• OP Executive

Details of the metric	Description
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (default view)</li> <li>Score-based: Horizontal Grouped Bar Chart</li> <li>Time Trend: Vertical Grouped Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 0.05</li> <li>High Threshold: 0.2</li> <li>Range 1: Below Target/Negative/Red</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triEnergyLogFact Metric Queries:
	triEnergyLogFact – Metric – Renewable Energy Ratio (%)
	triEnergyLogFact – Metric – Renewable Energy Ratio (%) (Score)
	triEnergyLogFact – Metric – Renewable Energy Ratio - GIS (%)
	triEnergyLogFact – Metric – Renewable Energy Ratio – US Gov (%)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period, Energy Type</li> <li>Score-based: Location, Geography, Capture Period, Energy Type</li> </ul>
Interactive filters	<ul> <li>Value-based: Location, Geography, Energy Type</li> <li>Score-based: Location, Geography, Energy Type For US Federal Government:</li> <li>Value-based: Location, Geography, Energy Type, Real Property Type, Real Property Use, Legal Interest, Mission Dependency</li> </ul>
Static filters	<ul> <li>Active Land</li> <li>Active Buildings</li> <li>Active Structures</li> <li>Active Retail Locations</li> <li>Active Energy Log records</li> </ul>
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

# **Renewable Energy Ratio (%) metric**

Determines energy efficiency based on showing the usage of energy that is purchased from renewable sources as a percentage of total energy usage.

Details of the metric	Description
Name	Renewable Energy Ratio (%)
Category	Environmental
Analysis objective for exception conditions	Measures the ratio of the energy that is purchased from renewable sources in facilities as a percentage of total energy usage.
Description	Facilitates internal trend analysis and external benchmarking by measuring the ratio.
Source	Customer Focus Group, consulting firms, EO 13423, GRI
Measurement	Total Energy Usage from Renewable Sources / Total Energy Usage all Sources
Dependent data that is calculated	None
Roles	<ul><li>EN Workplace Executive</li><li>ES Manager/Planner</li><li>OP Executive</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (default view)</li> <li>Score-based: Horizontal Grouped Bar Chart</li> <li>Time Trend: Vertical Grouped Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 0.05</li> <li>High Threshold: 0.2</li> <li>Range 1: Below Target/Negative/Red</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact Metric Queries:
	triLocationFact – Metric – Renewable Energy Ratio (%)
	triLocationFact – Metric – Renewable Energy Ratio (%) (Score)
	triLocationFact - Metric - Renewable Energy Ratio - GIS (%)
	triLocationFact – Metric – Renewable Energy Ratio – US Gov (%)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period</li> <li>Score-based: Location, Geography, Capture Period</li> </ul>
Interactive filters	<ul> <li>Value-based: Location, Geography</li> <li>Score-based: Location, Geography For US Federal Government:</li> <li>Value-based: Location, Geography, Real Property Type, Real Property Use, Legal Interest, Mission Dependency</li> </ul>

Details of the metric	Description
Static filters	<ul> <li>Active Land</li> <li>Active Buildings</li> </ul>
	Active Buildings     Active Structures
	Active Retail Locations
	Active Energy Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Energy Log

## **Renovation Cost / Area metric**

Determines cost efficiency by comparing the average renovation cost per area for renovation type projects.

Details of the metric	Description
Name	Renovation Cost / Area (Capital Projects Only)
Category	Financial
Analysis objective for exception conditions	Identifies business units or programs that have higher than average building costs and drill-in to the project costs to identify the cause.
Description	Provides visibility into the average cost of a renovation per square foot. This information helps provide more accurate estimates, allows management to focus on projects or teams with overly high average costs, and provides a gauge for trending prices over time to help predict future cost estimates.
Source	Customer Focus Group
Measurement	Actual Costs Incurred (renovation projects only) / Project Gross Construction Area (or Project Usable Area)
Dependent data that is calculated	Project Gross Construction Area and Project Usable Area.
Roles	<ul><li>PR Executive</li><li>PR Manager</li></ul>
Display chart types	Value-based: Horizontal Grouped Bar Chart
Thresholds	<ul> <li>Low Threshold: \$150/SF</li> <li>High Threshold: \$200/SF</li> <li>Range 1: Low/Positive/Green</li> <li>Range 2: Medium/Caution/Yellow</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triCapitalProjectFact Metric Queries: triCapitalProjectFact - Metric - Renovation Cost (USD / GSF), triCapitalProjectFact - Metric - Renovation Cost (USD / USF)

Details of the metric	Description
Drill paths	• Program
	• Geography
	• Project
	Project Manager
	• Client
	Capture Period
Interactive filters	• Geography
	Organization
	• Location
Static filters	Status: Completed projects
	Project Classification: Renovation
Time	Months
Data point refresh rate	Monthly

## Revenue / Carbon Emissions (USD / Tons CO2) metric

Determines cost efficiency based on comparing carbon emissions to overall business revenue.

Details of the metric	Description
Name	Revenue / Carbon Emissions (USD / Tons CO2)
Category	Financial
Analysis objective for exception conditions	Measures the ratio of the carbon emissions in facilities as a percentage of overall business revenue that is generated.
Description	Facilitates internal trend analysis and external benchmarking by equating carbon emissions as a function of total business revenue. This metric can be used by executives with other financial metrics that allow an executive to analyze the cost breakdown of the various environmental initiatives.
Source	Customer Focus Group, consulting firms, GRI
Measurement	Total Business Revenue / Total CO2e Equity Share Reporting, Total CO2 Equity Share Reporting, Total Travel Equity Share Reporting, Total Waste Equity Share Reporting
Dependent data that is calculated	N/A
Roles	<ul><li> EN Workplace Executive</li><li> ES Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Vertical Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 80</li> <li>High Threshold: 91</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Revenue / Carbon Emissions (USD / Tons CO2), triLocationFact – Metric – Revenue / Carbon Emissions (USD / Tons CO2) (Score)
Drill paths	Value-based: Capture Period
	• Score-based: Capture Period
Interactive filters	Value-based: Location, Geography
	Score-based: Location, Geography
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Carbon Footprint Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Travel Log
	• Waste Log
	Financial Summary
	Carbon Footprint Log

# **Revenue Weeks to Target metric**

Identifies the revenue impact of the real estate department in delivering transaction plans according to a schedule.

Details of the metric	Description
Name	Revenue Weeks to Target
Category	Operational
Analysis objective for exception conditions	Determines whether revenue targets are going to be met.
Description	Identifies the revenue impact in delivering transaction plans according to a schedule.
Source	Customer Focus Group
Measurement	Sum of Revenue Weeks Calculated / Sum of Revenue Weeks Planned
Dependent data that is calculated	RE Transaction Plans:
	<ul> <li>Revenue Weeks Planned = Sum of (Fiscal Year End Date – RE Project Planned End Date</li> </ul>
	• Revenue Weeks Calculated = Sum of (Fiscal Year End Date – RE Project Calculated End Date)
Roles	• RE Executive
	RE Transaction Manager

Description
Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)
• Low Threshold: .8 (80%)
• High Threshold: .9 (90%)
Range 1: Poor/Negative/Red
Range 2: Under Performing/Caution/Yellow
Range 3: On Target/Positive/Green
Module: triMetricFact
Business Object: triRETransactionPlanFact
Metric Queries: triRETransactionPlanFact - Metric - % Revenue Weeks to Target
• Geography
Portfolio Manager
Capture Period
• Geography
Portfolio Manager
Active Transaction Plans
Months
Monthly
• Real Estate
• Facilities
Space Use Agreements (Real Estate)
Space Allocations (Facilities)

# **RFI Response Time metric**

Identifies how long it is taking project leads on average to respond to their RFIs.

Details of the metric	Description
Name	RFI Response Time
Category	Operational
Analysis objective for exception conditions	A long RFI response time indicates poor customer service. Project leads who have issues with long response times can be identified so that corrective action can be taken.
Description	Identifies project leads or projects where the average RFI response time is high.
Source	Customer Focus Group
Measurement	Average time to respond to each RFI / total number of RFIs
Dependent data that is calculated	RFI response time = Date RFI Closed – Date RFI Created
Roles	PR Manager
Display chart types	Value-based: Horizontal Grouped Bar Chart

Details of the metric	Description
Thresholds	• Low Threshold: 3 days
	High Threshold: Not Used
	Range 1: Low/Positive/Green
	Range 2: High/Negative/Red
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triRFIFact
	Metric Queries: triRFIFact – Metric – RFI Response Time
Drill paths	• Program
	• Project
	• Project Manager
	Capture Period
Interactive filters	• Geography
	Organization
Static filters	None
Time	Months
Data point refresh rate	Monthly

## Seat Occupancy % – RE Contracts metric

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Name	Seat Occupancy % – RE Contracts
Category	Portfolio
Analysis objective for exception conditions	Determines which contracts are outside of planned values to indicate whether disposition is desirable. Uses time trend to compare over time to identify anomalies, or trends.
Description	Organizations strive to keep the seats per person ratio low. High seats per person can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Total Headcount / Total Seats
Dependent data that is calculated	RE Contracts: • Total Headcount • Total Seats
Roles	RE Transaction Manager
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: .8 (80%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Under Utilized/Negative/Red</li> <li>Range 2: Good Utilization/Positive/Green</li> <li>Range 3: Not Used</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triREContractFact
	Metric Queries: triREContractFact - Metric - Seat Occupancy % - RE Contracts (Score)
Drill paths	• Geography
	Organization
	Contract Type
	Capture Period
Interactive filters	• Geography
	Organization
	Contract Type
	Primary Use
	For US Federal Government:
	• Geography
	Organization
	Contract Type
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

## Seats per Person – RE Contracts metric

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Name	Seats per Person – RE Contracts
Category	Portfolio
Analysis objective for exception conditions	Determines which contracts are outside of planned values to indicate whether disposition is desirable. Uses time trend to compare over time to identify anomalies, or trends.
Description	Organizations strive to keep the seats per person ratio high. Low seats per person can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Total Seats / Total Headcount

Details of the metric	Description
Dependent data that is	RE Contracts:
calculated	Total Headcount
	Total Seats
Roles	RE Transaction Manager
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: 1.1 Seats/Person</li> <li>High Threshold: 1.25 Seats/Person</li> </ul>
	Kange I: Low/Positive/Green
	Range 2: Medium/Caution/ fellow
Fast dataile	Madeley triMateieFast
Fact details	Module: triMetricFact
	Business Object: triREContractFact
	Metric Queries:
	triREContractFact - Metric - Seats per Person - RE Contracts (Score)
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Capture Period</li> </ul>
Interactive filters	• Coography
	Organization
	Contract Type
	Primary Use
	For US Federal Government:
	• Geography
	Organization
	Real Property Type
	Real Property Use
	Mission Dependency
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>

## Security Costs / Area Maintained metric

Determines cost efficiency based on comparing the security costs to the overall area that is maintained for the facilities.

Details of the metric	Description
Name	Security Costs / Area Maintained
Category	Financial
Analysis objective for exception conditions	Determines which facilities have good or poor security cost efficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how they compare to industry benchmarks and allows managers to compare security costs across geographical regions, facilities, and building types. This metric differs from the Maintenance Costs / Area metric in that it includes only the actual area that is maintained instead of the overall area.
Source	IFMA
Measurement	Total Security Cost / Total Maintained Area
Dependent data that is calculated	• Total Security Cost: Sum of Financial Summary table filtered for Service Type = Security.
	<ul> <li>Total Maintained Area: Sum of Area where 'Floor Maintained' field = TRUE on the Floor Record.</li> </ul>
Roles	<ul> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> <li>OP Service Technician</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$.50/Area Maintained</li> <li>High Threshold: \$.90/Area Maintained</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Security Costs / Area Maintained (\$ / Area), triBuildingFact - Metric - Security Costs / Area Maintained (\$ / Area) (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>

Details of the metric	Description
Interactive filters	• Geography
	Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	• Location
	Real Property Type
	Real Property Use
	Mission Dependency
	• Legal Interest
Static filters	Cost Type Classification = Maintenance
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Building (Area Calculations)
	Financial data from external corporate system

## Service Task Cost metric

Analyzes service task costs and breakdowns across request classes and locations to understand cost planning and resource needs. This metric also reviews time trends to determine changes that might identify resource plan changes or service level changes.

Details of the metric	Description
Name	Service Task Cost
Category	Analysis Report
Analysis objective for exception conditions	Analyzes service task costs and breakdowns across request classes and locations to understand cost planning and resource needs.
Description	Graphs any data on service task volume that is used for analysis of task cost and trends.
Source	Customer Focus Group
Measurement	Sum of task costs
Dependent data that is calculated	Task costs, for subtab data queries: associated building gross area, associated task organizations (requested by, responsible)
Roles	<ul><li>OP Executive</li><li>OP Service Manager</li><li>OP Facility Assessment Manager/Planner</li></ul>
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)

Details of the metric	Description
Thresholds	• Low Threshold: Not Used
	High Threshold: Not Used
	• Range 1: Not Used
	• Range 2: Not Used
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triTaskResourceFact
	Metric Queries: triTaskResourceFact - Metric - Service Task Cost
Drill paths	• Geography
	Location
	Request Class
	Requested By Organization
	Capture Period
Interactive filters	• Geography
	Location
	Assigned Resource
	Request Class
	Responsible Organization
Static filters	Include Active Status Dimensions Only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Service Management
	Service Tasks
	Task Cost data populated

## Service Task Volume metric

Analyzes service task volumes and breakdowns across request classes and locations to understand workload and resource needs. This metric also reviews time trends to determine changes that might identify resource plan changes or service level changes.

Details of the metric	Description
Name	Service Task Volume
Category	Analysis Report
Analysis objective for exception conditions	Analyzes service task volumes and breakdowns across request classes and locations to understand workload and resource needs.
Description	Graphs any data on service task volume that is used for analysis of task volume and trends.
Source	Customer Focus Group
Measurement	Count of Tasks

Details of the metric	Description
Dependent data that is calculated	Task Object and associated data for task cost, location, and building data
Roles	OP Service Manager
	OP Facility Assessment Manager/Planner
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	Low Threshold: Not Used
	High Threshold: Not Used
	• Range 1: Not Used
	• Range 2: Not Used
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triTaskResourceFact
	Metric Queries: triTaskResourceFact - Metric - Service Task Volume
Drill paths	• Geography
	Location
	Request Class
	Requested By Organization
	Responsible Organization
	Capture Period
Interactive filters	Geography
	Location
	Assigned Resource
	Request Class
	Responsible Organization
Static filters	Include Active Status Dimensions Only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Service Management
	Service Tasks

## **Service Time Utilization metric**

Determines worker productivity based on time entries that are logged for tasks that are compared to total available time.

Details of the metric	Description
Name	Service Time Utilization
Category	Operational

Details of the metric	Description
Analysis objective for exception conditions	Determines how well maintenance resources are being used. Views this metric over time to show, analyze, and adjust programs based on observed trends. This metric is essential for analyzing worker productivity and effectiveness within the maintenance organization.
Description	Informs management how effectively tasks are being assigned and resources are being used. Often referred to as <i>wrench-time</i> in maintenance workgroups, or billable rate in service companies.
Source	Customer Focus Group
Measurement	Total Hours on Task / Total Standard Hours (based on work schedule)
Dependent data that is calculated	<ul> <li>Total Hours on Task-related Time Entries = Total hours logged on Time Entries with associated Tasks for the capture period.</li> </ul>
	• Total Hours on Time Entries = Total "Standard" Hours (that is, 40 hr week, 8-hour day, and so on) based on work schedule for the individuals that are captured in the Task-related Time Entries (numerator) for the capture period.
	• Time period is based on time log line item date (not time card period).
	<ul> <li>Organization, Location, and Geography are based on associations of employee on time card entry.</li> </ul>
Roles	<ul><li>EN Workplace Executive</li><li>OP Executive</li></ul>
Display chart types	<ul> <li>OP Service Manager</li> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds (default)	<ul> <li>Low Threshold: .65 (65%)</li> <li>High Threshold: .8 (80%)</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Under Performing/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triResourceFact
	Metric Queries: triResourceFact - Metric - Service Time Utilization, triResourceFact - Metric - Service Time Utilization (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Organization</li> <li>Assigned Resource</li> <li>Capture Period</li> </ul>

Details of the metric	Description
Interactive filters	• Geography
	Location
	Organization
	Assigned Resource
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
	Request Central
Functional dependency	Task Management
	Service Management
	Time Entries

# Services Customer Satisfaction - Operations metric

Determines operational performance of operations service providers in delivering maintenance services based on operations evaluations that are submitted by clients.

Details of the metric	Description
Name	Services Customer Satisfaction - Operations
Category	Customer
Analysis objective for exception conditions	Identifies root cause of negative survey responses that are submitted, improvement opportunities, misaligned service levels, expectation gaps, and consumer perceptions. Recognizes and rewards excellent customer service, which is often the most important service measurement. In scorecards, it is the key customer metric.
Description	Informs management how effective the organization is at satisfying the requests of the facility occupants. It is based on the aggregated scores from the returned survey forms.
Source	Customer Focus Group
Measurement	Sum of Survey Response Scores / Total Survey Maximum Score
Dependent data that is calculated	N/A
Roles	<ul> <li>EN Workplace Executive</li> <li>OP Executive</li> <li>OP Service Manager</li> <li>OP Facility Assessment Manager/Planner</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>

Details of the metric	Description
Thresholds	• Low Threshold: .58 (58%)
	• High Threshold: .78 (78%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triSurveyFact
	Metric Queries: triSurveyFact - Metric - Services Satisfaction Survey, triSurveyFact - Metric - Services Satisfaction Survey (Score)
Drill paths	• Geography
	Location
	Responsible Organization
	Request Class
	Question Category
	Capture Period
Interactive filters	• Geography
	• Location
	Responsible Organization
	Request Class
	Question Category
Static filters	None
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
	Request Central
Functional dependency	Task Management
	Service Management
	Request Management
	1

## Solid Waste metric

Determines efficiency of handling the solid waste for a facility based on comparison by location, geography, waste type, calendar period, and other attributes.

Details of the metric	Description
Name	Solid Waste
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor solid waste management programs. Uses time trend analysis to compare and discover anomalies or trends.
Description	Determines solid waste consumption in tons.
Source	Customer Focus Group, EO 13423, GRI

Details of the metric	Description
Measurement	Total Waste
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	Value-based: Horizontal Grouped Bar Chart
	Time Trend: Vertical Grouped Bar Chart
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triWasteLogFact
	Metric Queries: triWasteLogFact – Metric – Solid Waste, triWasteLogFact – Metric – Solid Waste – US Gov
Drill paths	Value-based: Geography, Location, Capture Period, Waste Type
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Waste Type</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest, Waste Type
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Waste Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Waste Log

# Solid Waste - Type metric

Determines efficiency of handling the solid waste for a facility based on comparison by location, geography, waste steam type, calendar period, and other attributes.

Details of the metric	Description
Name	Solid Waste
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor solid waste management programs. Uses time trend analysis to compare and discover anomalies or trends.
Description	Determines solid waste consumption in tons.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Solid Waste (breakdown by Total Solid Waste, Quantity Recovered/Recycled, and Quantity Disposed)

Details of the metric	Description
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Stacked Bar Chart by Waste Type</li><li>Time Trend: Vertical Stacked Bar Chart</li></ul>
Thresholds	None
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Solid Waste, triLocationFact – Metric – Solid Waste – US Gov
Drill paths	Value-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Waste Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Solid Waste Log

## Solid Waste Recovery (%) metric

Determines efficiency of handling the solid waste for a facility by analyzing the percentage of total solid waste that is recovered, based on comparison by location, geography, waste type, calendar period, and other attributes.

Details of the metric	Description
Name	Solid Waste Recovery (%)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor solid waste management programs. Uses time trend analysis to compare and discover anomalies or trends.
Description	Determines efficiency of handling the solid waste recovery for a facility.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Solid Waste Recovered / Total Waste Use
Dependent data that is calculated	None

Details of the metric	Description
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (default view)</li> <li>Score-based: Horizontal Grouped Bar Chart</li> <li>Time Trend: Vertical Grouped Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 0.1</li> <li>High Threshold: 0.3</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triWasteLogFact
	Metric Queries:
	triWasteLogFact – Metric – Solid Waste Recovery (%)
	triWasteLogFact – Metric – Solid Waste Recovery (%) (Score)
	triWasteLogFact – Metric – Solid Waste Recovery (%) - GIS
	triWasteLogFact – Metric – Solid Waste Recovery (%) – US Gov
	triWasteLogFact – Metric – Solid Waste Recovery (%) – US Gov (Score)
	triWasteLogFact – Metric – Solid Waste Recovery (%) – US Gov - GIS
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period, Waste Type</li> <li>Score-based: Geography, Location, Capture Period, Waste Type</li> </ul>
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Waste Type</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned), Waste Type</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest, Waste Type
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest, Waste Type
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Waste Log records
Time	Months
Data point refresh rate	Monthly

Details of the metric	Description
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Waste Log

# Solid Waste Recovery (%) - Type metric

Determines efficiency of handling the solid waste for a facility by analyzing the percentage of solid waste that is recovered by conversion to energy or by recycling and is based on comparison by location, geography, waste steam type, calendar period, and other attributes.

Details of the metric	Description
Name	Solid Waste Recovery (%)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor solid waste management programs. Uses time trend analysis to compare and discover anomalies or trends.
Description	Determines efficiency of handling the solid waste recovery for a facility.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Solid Waste Recovered / Total Solid Waste
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 0.1</li> <li>High Threshold: 0.3</li> <li>Range 1: Poor/Negative/Red</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Good/Positive/Green</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact Metric Queries: triLocationFact – Metric – Solid Waste Recovery (%) triLocationFact – Metric – Solid Waste Recovery (%) (Score) triLocationFact – Metric – Solid Waste Recovery (%) - GIS triLocationFact – Metric – Solid Waste Recovery (%) – US Gov
	triLocationFact – Metric – Solid Waste Recovery (%) – US Gov (Score) triLocationFact – Metric – Solid Waste Recovery (%) – US Gov - GIS

Details of the metric	Description
Drill paths	• Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	<ul> <li>Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest</li> </ul>
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Waste Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Solid Waste Log

## Space Class Breakdown (%) metric

Determines efficiency of the space class mix in a building based on corporate space programming guidelines. It is useful for amenity and support spaces and overall building space efficiency or space layout design.

Details of the metric	Description
Name	Space Class Breakdown (%)
Category	Portfolio
Analysis objective for exception conditions	Determines which building and floor locations to focus investigation on to discover the root causes of exception conditions. Further drill into space classifications for more detailed analysis. Uses time trend analysis to compare seasonal peaks, anomalies, improvement trends, or trends.
Description	Facilitates building layout efficiency comparisons for internal trend analysis and external benchmarking.
Source	Customer Focus Group
Measurement	Area by Space Class
Dependent data that is calculated	Area: Area as filtered/grouped by drill-path or interactive filter
Roles	<ul> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>,</li> </ul>
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)

Details of the metric	Description
Thresholds	Low Threshold: Not Used
	High Threshold: Not Used
	• Range 1: Not Used
	• Range 2: Not Used
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triSpaceAllocationFact
	Metric Queries: triSpaceAllocationFact - Metric - Space Class Breakdown (%) Metric
Drill paths	• Geography
	Location
	• Space Class
	Organization
	Capture Period
Interactive filters	• Geography
	Location
	Space Class
	Organization
	For US Federal Government:
	• Geography
	Location
	Space Class
	Organization
	Real Property Type
	Real Property Use
Static filters	Active Buildings
	Active Floors
	Active Spaces
Time	Months
Data point refresh rate	Monthly

#### **Time Utilization Summary metric**

Analyzes labor breakdown to understand resource demands and efficiencies to use in planning or identify issues or opportunities.

Details of the metric	Description
Name	Time Utilization Summary (time card tracking)
Category	Analysis Report
Analysis objective for exception conditions	Analyzes labor breakdown to understand resource demands and efficiencies.
Description	Determines the breakdown of time card labor hours across various dimensions.
Source	Customer Focus Group

Details of the metric	Description
Measurement	Sum of time entry hours
Dependent data that is calculated	None
Roles	• OP Executive
	OP Service Manager
	OP Facility Assessment Manager/Planner
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	• Low Threshold: .65 (65%)
	• High Threshold: .8 (80%)
	Range 1: Poor/Negative/Red
	Range 2: Under Performing/Caution/Yellow
	Range 3: Good/Positive/Green
Fact details	Module: triMetricFact
	Business Object: triTimeEntryFact
	Metric Queries: triTimeEntryFact - Metric - Time Utilization
Drill paths	• Geography
	• Location
	Responsible Organization
	Assigned Resource
	Capture Period
Interactive filters	• Geography
	Location
	Responsible Organization
	Time Keeper
Static filters	Include Active Status Dimensions Only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	• Operations
	• Time Card

# Total Cost of Operations (\$) / Total Business Operating Expense (\$) metric

Determines cost efficiency based on comparing workplace operating costs to overall business operating costs.

Details of the metric	Description
Name	Workplace Total Cost of Operations (\$) / Total Business Operating Expense (\$)
Category	Financial

Details of the metric	Description
Analysis objective for exception conditions	Measures the ratio of the operational investment in facilities as a percentage of overall business operating costs.
Description	Facilitates internal trend analysis and external benchmarking by equating workplace operational costs as a function of total business operating expense. This metric can be used by executives with other financial metrics to analyze the cost breakdown of the various workplace services.
Source	Customer Focus Group
Measurement	Total Workplace Operating Cost / Total Business Operating Cost
Dependent data that is calculated	• Total Workplace Operating Cost: Sum of Financial Summary table filtered for 'Operating' costs only. This includes all workplace-related operating Cost values such as Moves, Utilities, Custodial, Grounds, and Maintenance.
	<ul> <li>Total Business Operating Expense: Sum of Financial Summary table filtered for 'Business Operating Expense' costs only.</li> </ul>
Roles	EN Workplace Executive
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> </ul>
	<ul> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	This metric is industry and company/agency specific, and the thresholds need to be determined by each company/agency during setup.
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Workplace Total Cost of Operations (\$) / Business Operating Expense (\$) Metric, triBuildingFact - Metric - Workplace Total Cost of Operations (\$) / Business Total Revenue (\$) Metric (Score)
Drill paths	<ul><li>Value-based: Geography, Location, Capture Period</li><li>Score-based: Geography, Location, Capture Period</li></ul>
Interactive filters	Value-based: Geography, Location
	<ul> <li>Score-based: Geography, Location</li> </ul>
	Capture Period: Geography, Location
Static filters	<ul><li>Active Buildings</li><li>Active Cost Codes</li></ul>
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Enterprise Performance Management
Functional dependency	Cost Codes
	• Geography
	Location
	Organization

## Total Cost of Operations / Carbon Emissions (USD / Tons CO2) metric

Determines cost efficiency based on comparing carbon emissions to the total cost of operations (TCO).

Details of the metric	Description
Name	Total Cost of Operations / Carbon Emissions (USD / Tons CO2)
Category	Financial
Analysis objective for exception conditions	Measures the ratio of the carbon emissions in facilities as a percentage of total cost of operations (TCO).
Description	Facilitates internal trend analysis and external benchmarking by equating carbon emissions as a function of the total cost to operate the facilities. This metric can be used by executives with other financial metrics to analyze the cost breakdown of the various environmental initiatives.
Source	Customer Focus Group, consulting firms, GRI
Measurement	Total Cost of Operations (TCO) / Total CO2e Equity Share Reporting, Total CO2 Equity Share Reporting, Total Travel Equity Share Reporting, Total Waste Equity Share Reporting
Dependent data that is calculated	None
Roles	<ul><li> EN Workplace Executive</li><li> ES Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 80</li> <li>High Threshold: 91</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Total Cost of Operations / Carbon Emissions (USD / Tons CO2), triLocationFact – Metric – Total Cost of Operations / Carbon Emissions (USD / Tons CO2) (Score)
Drill paths	<ul> <li>Value-based: Location, Geography, Capture Period</li> <li>Score-based: Location, Geography, Capture Period</li> </ul>
Interactive filters	<ul><li>Value-based: Location, Geography</li><li>Score-based: Location, Geography</li></ul>
Static filters	<ul> <li>Active Land</li> <li>Active Buildings</li> <li>Active Structures</li> <li>Active Retail Locations</li> <li>Active Carbon Footprint Log records</li> </ul>

Details of the metric	Description
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	• Travel Log
	• Waste Log
	Financial Summary
	Carbon Footprint Log

# Total Occupancy Cost (TCO) (\$/area) metric

Determines or compares building cost efficiency based on building area.

Details of the metric	Description
Name	Total Occupancy Cost (TCO) (\$/area)
Category	Financial
Analysis objective for exception conditions	Determines which buildings have good or poor cost efficiencies. Determines which particular building's occupancy costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the area managed. The occupancy cost is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA
Measurement	(Total Operating Cost + Cost of Providing Fixed Asset) / Total Rentable Area
Dependent data that is calculated	<ul> <li>Financial Summary Object provides summary data for operating costs</li> <li>Area: Building Rentable Area (in square feet or square meters)</li> <li>The Fact table also captures Gross and Usable area values.</li> </ul>
Roles	<ul> <li>EN Workplace Executive</li> <li>FA Move Manager/Planner</li> <li>FA Space Manager/Planner</li> <li>OP Executive</li> </ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$5/RSF</li> <li>High Threshold: \$12/RSF</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries:
	triBuildingFact - Metric - Total Occupancy Cost (\$ / Area) Metric
	triBuildingFact - Metric - Total Occupancy Cost (\$ / Area) Metric (Score)
Drill paths	• Geography
	Location
	Capture Period
Interactive filters	• Geography
	Location
	• Time
	Building Class
	• Building Tenure (Lease/Own)
	For US Federal Government:
	• Geography
	Location
	• Time
	• Real Property Type
	• Real Property Use
	Mission Dependency
	• Legal Interest
	• Building Tenure (Lease/Own)
Static filters	Active Buildings
Time	Months
Data point refresh rate	• Monthly
	After month-end close and scheduled load of financial data

## Total Occupancy Cost (TCO) (\$/person) metric

Determines or compares building cost efficiency based on occupants that are housed.

Details of the metric	Description
Name	Total Occupancy Cost (TCO) (\$/person)
Category	Financial
Analysis objective for exception conditions	Determines which buildings have good or poor cost efficiencies. Determines which particular building's occupancy costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.

Details of the metric	Description
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the overall facility occupant population. The occupancy cost is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA, Internal
Measurement	(Total Operating Cost + Cost of Providing Fixed Asset) / Total number of Workers
Dependent data that is calculated	<ul> <li>Financial Summary Object provides summary data for total operating costs</li> <li>Workers: People assigned to spaces.</li> </ul>
Roles	FA Move Manager/Planner     OP Executive
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: \$2000/Person</li> <li>High Threshold: \$4800/Person</li> <li>Range 1: Low/Caution/Yellow</li> <li>Range 2: Medium/Positive/Green</li> <li>Range 3: High/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triBuildingFact Metric Queries: triBuildingFact - Metric - Total Occupancy Cost (\$ / Person) Metric, triBuildingFact - Metric - Total
	Occupancy Cost (\$ / Person) Metric (Score)
Drill paths	<ul><li>Geography</li><li>Location</li><li>Capture Period</li></ul>
Interactive filters	<ul> <li>Geography</li> <li>Location</li> <li>Time</li> <li>Building Class</li> <li>Building Tenure (Lease/Own)</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Location</li> <li>Time</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Mission Dependency</li> <li>Legal Interest</li> </ul>
Static filters	Active Buildings

Details of the metric	Description
Time	Months
Data point refresh rate	<ul><li>Monthly</li><li>After month-end close and scheduled load of financial data</li></ul>

## Total Occupancy Cost (TCO) (by Service Type) metric

Details of the metric	Description
Name	Total Occupancy Cost (TCO) (by Service Type)
Category	Financial
Analysis objective for exception conditions	Determines which buildings have good or poor cost efficiencies. Determines which particular building's occupancy costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of the services provided. The occupancy cost is evaluated as an overall total cost of operations, at the subcomponent level, and at the various operations processes which are represented by cost codes in IBM TRIRIGA.
Source	IFMA, BOMA, APPA, Internal
Measurement	Total Operating Cost + Cost of Providing Fixed Asset
Dependent data that is calculated	Financial Summary Object provides summary data for total operating costs
Roles	<ul><li>FA Move Manager/Planner</li><li>OP Executive</li></ul>
Display chart types	Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	<ul> <li>Low Threshold: Not Used</li> <li>High Threshold: Not Used</li> <li>Range 1: Not Used</li> <li>Range 2: Not Used</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triBuildingCostFact Metric Queries: triBuildingCostFact - Metric - Total Cost of Operations (\$ / Service Type) Metric
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Service Class</li> <li>Organization</li> <li>Capture Period</li> </ul>

Determines or compares building cost efficiency based on type of services provided.

Details of the metric	Description
Interactive filters	• Geography
	Location
	• Time
	Building Class
	Building Tenure (Lease/Own)
	Organization
	For US Federal Government:
	• Geography
	Location
	• Time
	Real Property Type
	Real Property Use
	Mission Dependency
	Legal Interest
	Organization
Static filters	Active Buildings
Time	Months
Data point refresh rate	• Monthly
	• After month-end close and scheduled load of financial data

# Utilities Costs / Area (\$/area) metric

Determines cost efficiency based on comparing the utilities costs to the overall area of the facilities.

Details of the metric	Description
Name	Utilities Costs / Area (\$/area)
Category	Financial
Analysis objective for exception conditions	Determines which facilities have good or poor cost efficiencies. Determines which particular utilities costs are causing the inefficiencies. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Informs management how they match up against industry benchmarks and allows managers to compare utilities costs across geographical regions, facilities, and building types.
Source	IFMA
Measurement	Total Utilities Cost / Total Facility Area
Dependent data that is calculated	<ul> <li>Total Utilities Cost: Sum of Financial Summary table filtered for Cost Type = Utilities.</li> <li>Total Area: Building Rentable Area</li> </ul>
Roles	<ul><li> OP Executive</li><li> OP Service Manager</li></ul>

Details of the metric	Description
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period:</li> </ul>
	Vertical Stacked Bar Chart)
Thresholds	• Low Threshold: \$1.00/RSF
	• High Threshold: \$2.5/RSF
	Range 1: Low/Caution/Yellow
	Range 2: Medium/Positive/Green
	Range 3: High/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Utilities Costs / Area (\$ / Area), triBuildingFact - Metric - Utilities Costs / Area (\$ / Area) (Score)
Drill paths	• Geography
	• Location
	Capture Period
Interactive filters	• Geography
	• Location
	Building Class
	Building Tenure
	For US Federal Government:
	• Geography
	Location
	Real Property Type
	Real Property Use
	Mission Dependency
	• Legal Interest
Static filters	Cost Type Classification = Utilities
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	Building (Area Calculations)
	Financial data from external corporate system

# Vacancy Cost – RE Contracts metric

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Name	Vacancy Cost – RE Contracts
Category	Financial

Details of the metric	Description
Analysis objective for exception conditions	Determines which buildings are outside of planned values to indicate whether building disposition is desirable. Uses time trend to compare over time to identify anomalies, or trends.
Description	Organizations strive to keep the vacancy cost low. High vacancy cost can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Cost per Area / Total Vacant Area
Dependent data that is calculated	• Cost per Area = Total Real Estate Cost: Real estate costs populated from Payment Line Items (filtered by time) / RE Contract: Total Rentable Area
	• RE Contracts:
	Total Rentable Area
	Total Vacant
Roles	RE Executive
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: Not Used</li> <li>High Threshold: Not Used</li> <li>Range 1: Not Used</li> <li>Range 2: Not Used</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triREContractFact
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Capture Period</li> </ul>
Interactive filters	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Name</li> <li>Contract Type</li> </ul>
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	<ul><li> Real Estate</li><li> Facilities</li></ul>
Functional dependency	<ul><li>Space Use Agreements (Real Estate)</li><li>Space Allocations (Facilities)</li></ul>
# Vacancy Rate – RE Contracts metric

Details of the metric	Description
Name	Vacancy Rate – RE Contracts
Category	Portfolio
Analysis objective for exception conditions	Determines which buildings are outside of planned values to indicate whether building disposition is desirable. Uses time trend to compare over time to identify anomalies, or trends.
Description	Organizations strive to keep the vacancy rate ratio low. High vacancy rates can indicate unacceptable space quality, inadequate service delivery, or poor geographical location.
Source	BOMA, GSA
Measurement	Total Vacant Area / Total Rentable Area
Dependent data that is calculated	RE Contracts: • Total Vacant Area • Total Rentable Area
Roles	<ul><li> RE Executive</li><li> RE Transaction Manager</li></ul>
Display chart types	Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	<ul> <li>Low Threshold: 10</li> <li>High Threshold: 11.34</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: On Target/Caution/Yellow</li> <li>Range 3: Poor/Negative/Red</li> </ul>
Fact details	Module: triMetricFact Business Object: triREContractFact Metric Queries: triREContractFact – Metric – Vacancy Rate (Score)
Drill paths	<ul> <li>Geography</li> <li>Organization</li> <li>Contract Type</li> <li>Primary Use</li> <li>Capture Period</li> </ul>

Defines opportunities for disposition of real property assets.

Details of the metric	Description
Interactive filters	• Geography
	Organization
	Primary Use
	Contract Type
	For US Federal Government:
	• Geography
	Organization
	Real Property Type
	Real Property Use
	Mission Dependency
	Contract Type
Static filters	Active RE Contracts (Commencement Date <= TODAY AND Expiration Date >= TODAY AND Status NOT IN ('Retired', 'Terminated'))
Time	Months
Data point refresh rate	Monthly
License dependency	• Real Estate
	• Facilities
Functional dependency	• Space Use Agreements (Real Estate)
	Space Allocations (Facilities)

### Water Use metric

Determines water use efficiency by water type based on comparison by location, geography, calendar period, and other attributes.

Details of the metric	Description
Name	Water Use
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor water use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Measures water consumption in gallons.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Water Use (by Water Type)
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul><li>Value-based: Horizontal Stacked Bar Chart by Water Type</li><li>Time Trend: Vertical Stacked Bar Chart</li></ul>
Thresholds	None

Details of the metric	Description
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries: triLocationFact – Metric – Water Use, triLocationFact – Metric – Water Use – US Gov
Drill paths	Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	Active Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Water Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Water Log

# Water Use Intensity (CF / GSF) metric

Determines water use efficiency based on comparison by location, geography, calendar period, and other attributes by area of the facilities.

Details of the metric	Description
Name	Water Use Intensity (CF / GSF)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor water use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Measures normalized water use based on building size.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Water Use / GSF
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>

Details of the metric	Description
Thresholds	• Low Threshold: 0.25
	• High Threshold: 0.75
	Range 1: Good/Positive/Green
	Range 2: Within Target/Caution/Yellow
	Range 3: Excessive/Negative/Red
Fact details	Module: triMetricFact
	Business Object: triLocationFact
	Metric Queries:
	triLocationFact – Metric – Water Use Intensity (CF / GSF)
	triLocationFact – Metric – Water Use Intensity (CF / GSF) (Score)
	triLocationFact – Metric – Water Use Intensity - GIS (CF / GSF)
	triLocationFact – Metric – Water Use Intensity – US Gov (CF / GSF)
	triLocationFact – Metric – Water Use Intensity – US Gov (CF / GSF) (Score)
	triLocationFact – Metric – Water Use Intensity – US Gov - GIS (CF / GSF)
Drill paths	<ul> <li>Value-based: Geography, Location, Capture Period</li> </ul>
	Score-based: Geography, Location, Capture Period
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Water Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Water Log

# Water Use Intensity per Occupant (CF) metric

Determines water use efficiency based on comparison by location, geography, calendar period, and other attributes by number of occupants.

Details of the metric	Description
Name	Water Use Intensity per Occupant (CF)
Category	Environmental
Analysis objective for exception conditions	Determines which facilities have good or poor water use. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Measures water consumption in gallons per occupant.
Source	Customer Focus Group, EO 13423, GRI
Measurement	Total Water Use / Occupant
Dependent data that is calculated	None
Roles	ES Manager/Planner
Display chart types	<ul> <li>Value-based: Horizontal Stacked Bar Chart (default view)</li> <li>Score-based: Horizontal Stacked Bar Chart</li> <li>Time Trend: Vertical Stacked Bar Chart</li> </ul>
Thresholds	<ul> <li>Low Threshold: 500</li> <li>High Threshold: 2000</li> <li>Range 1: Good/Positive/Green</li> <li>Range 2: Within Target/Caution/Yellow</li> <li>Range 3: Excessive/Negative/Red</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triLocationFact Metric Queries:
	triLocationFact – Metric – Water Use Intensity per Occupant (CF)
	triLocationFact – Metric – Water Use Intensity per Occupant (CF) (Score)
	triLocationFact – Metric – Water Use Intensity per Occupant - GIS (CF)
	triLocationFact – Metric – Water Use Intensity per Occupant – US Gov (CF)
	triLocationFact – Metric – Water Use Intensity per Occupant – US Gov (CF) (Score)
	triLocationFact – Metric – Water Use Intensity per Occupant – US Gov - GIS (CF)
Drill paths	<ul><li>Value-based: Geography, Location, Capture Period</li><li>Score-based: Geography, Location, Capture Period</li></ul>

Details of the metric	Description
Interactive filters	<ul> <li>Value-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	<ul> <li>Score-based: Geography, Location, Building Class, Building Tenure (Lease/Owned)</li> </ul>
	For US Federal Government:
	• Value-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
	• Score-based: Geography, Location, Real Property Type, Real Property Use, Mission Dependency, Legal Interest
Static filters	• Exclude Land
	Active Buildings
	Active Structures
	Active Retail Locations
	Active Water Log records
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Real Estate Environmental Sustainability
Functional dependency	Water Log

# Work Distribution Ratio metric

Determines the level of work distribution for an organization.

Details of the metric	Description
Name	Work Distribution Ratio
Category	Operational
Analysis objective for exception conditions	Determines how maintenance resources are used and the distribution of emergency, preventive, corrective, and move tasks. Views this metric over time to show, analyze, and adjust programs based on observed trends. This metric is essential for analyzing work distribution within the maintenance organization. This metric is flexible enough to closely analyze trends, detect problems early, and take proactive steps to prevent the organization from moving toward a distribution that is not balanced per plan.
Description	Informs management how maintenance costs are being distributed between corrective, preventive, move, or other task work. Use in combination with other metrics such as the Facilities Condition Index (FCI) and other financial metrics, to determine the overall effectiveness of the maintenance program.
Source	Customer Focus Group
Measurement	Total Cost of Completed Tasks by Task Type / Total Cost of Completed Tasks
Dependent data that is calculated	<ul><li>Total Cost of Completed Tasks by Task Type</li><li>Total Cost of Completed Tasks</li></ul>
Roles	<ul><li>OP Service Manager</li><li>OP Facility Assessment Manager/Planner</li></ul>

Details of the metric	Description
Display chart types	Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)
Thresholds	Low Threshold: Not Used
	High Threshold: Not Used
	• Range 1: Not Used
	• Range 2: Not Used
	• Range 3: Not Used
Fact details	Module: triMetricFact
	Business Object: triTaskResourceFact
	Metric Queries: triTaskResourceFact - Metric - Work Distribution Ratio
Drill paths	• Geography
	Location
	Responsible Organization
	Responsible Person
	Assigned Resource
	• Contract
	• Task Type
	Capture Period
Interactive filters	• Geography
	Location
	Assigned Resource
	• Contract
	Responsible Organization
Static filters	Include Active Status Dimensions Only
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Operations
Functional dependency	• Task Management
	Service Management

# Worker Utilization Rate (%) metric

Determines efficiency of workstation and workpoint seating capacity based on assignment of space.

Details of the metric	Description
Name	Worker Utilization Rate (%)
Category	Portfolio

Details of the metric	Description
Analysis objective for exception conditions	Determines which building and floor locations to focus investigation on to discover the root causes of exception conditions. Further drill into space classifications for more detailed analysis. Reviews utilization metric by organization to determine occupants with opportunities for improvement. Uses time trend analysis to compare seasonal peaks, anomalies, improvement trends, or trends.
Description	Facilitates workstation and workpoint occupancy efficiency comparisons for internal trend analysis and external benchmarking.
Source	IFMA
Measurement	Total Number of Workers / Total Number of Workpoints
Dependent data that is calculated	<ul> <li>Total Workpoints: overall space capacity (filtered on Workpoint = TRUE)</li> <li>Workers: all People assigned within a building</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)</li> </ul>
Thresholds	<ul> <li>Low Threshold: .8 (80%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Under Utilized/Negative/Red</li> <li>Range 2: Good Utilization/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact Business Object: triSpacePeopleFact Metric Queries: triSpacePeopleFact - Metric - Worker Utilization Rate (%) Metric, triSpacePeopleFact - Metric - Worker Utilization Rate (%) Metric (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>Organization</li> <li>Capture Period</li> </ul>

Details of the metric	Description
Interactive filters	• Geography
	• Location
	• Space Class
	Organization
	• Worker Type
	For US Federal Government:
	• Geography
	• Location
	Space Class
	Organization
	• Worker Type
	Real Property Type
	Real Property Use
Static filters	Active Buildings
	Active Floors
	Active Spaces
	Office Worker
Time	Months
Data point refresh rate	Monthly

# Workplace Total Cost of Operations (\$) / Business Total Revenue (\$) metric

Determines cost efficiency based on comparing workplace operating costs to overall business revenue.

Details of the metric	Description
Name	Workplace Total Cost of Operations (\$) / Business Total Revenue (\$)
Category	Financial
Analysis objective for exception conditions	Measures the ratio of the operational investment in facilities as a percentage of overall business revenue that is generated.
Description	Facilitates internal trend analysis and external benchmarking by equating operational costs as a function of total business revenue. This metric can be used with other financial metrics to analyze the cost breakdown of workplace services.
Source	Customer Focus Group
Measurement	Workplace Total Operating Cost / Total Business Revenue
Dependent data that is calculated	<ul> <li>Workplace Total Operating Cost: Sum of Financial Summary table filtered for 'Operating' costs only. This includes all workplace-related operating Cost values such as Moves, Utilities, Custodial, Grounds, and Maintenance.</li> <li>Total Business Revenue value: Sum of Financial Summary table filtered for 'Revenue' only.</li> </ul>
Roles	EN Workplace Executive

Details of the metric	Description
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar Chart (Capture Period: Vertical Grouped Bar Chart)</li> </ul>
	• Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Chart)
Thresholds	This metric is industry and company/agency specific, and the thresholds need to be determined by each company/agency during setup.
Fact details	Module: triMetricFact
	Business Object: triBuildingFact
	Metric Queries: triBuildingFact - Metric - Workplace Total Cost of Operations (\$) / Business Total Revenue (\$) Metric, triBuildingFact - Metric - Workplace Total Cost of Operations (\$) / Business Total Revenue (\$) Metric (Score)
Drill paths	Value-based: Geography, Location, Capture Period
	Score-based: Geography, Location, Capture Period
Interactive filters	• Value-based: Geography, Location
	Score-based: Geography, Location
	Capture Period: Geography, Location
Static filters	Active Buildings
	Active Cost Codes
Time	Months
Data point refresh rate	Monthly
License dependency	IBM TRIRIGA Enterprise Performance Management
Functional dependency	Cost Codes
	• Geography
	• Location
	Organization

# Workpoint Utilization Rate (%) metric

Determines workstation and workpoint occupancy based on organization assignment.

Details of the metric	Description
Name	Workpoint Utilization Rate (%)
Category	Portfolio
Analysis objective for exception conditions	Determines which building and floor locations to focus investigation on to discover the root causes of exception conditions. Further drill into space classifications for more detailed analysis. Reviews utilization metric by organization to determine occupants with opportunities for improvement. Uses time trend analysis to compare seasonal peaks, anomalies, or trends.
Description	Facilitates occupancy efficiency for building office space comparisons for internal trend analysis and external benchmarking.

Details of the metric	Description
Source	IFMA
Measurement	Number of Workpoints Used / Total Workpoints Available
Dependent data that is calculated	<ul> <li>Workpoints used: space capacity of spaces assigned to an organization.</li> <li>Total Workpoints: overall space capacity (filtered on Workpoint = TRUE)</li> </ul>
Roles	<ul><li>FA Move Manager/Planner</li><li>FA Space Manager/Planner</li></ul>
Display chart types	<ul> <li>Value-based: Horizontal Grouped Bar (percent) Chart (Capture Period: Vertical Grouped Bar (percent) Chart)</li> <li>Score-based: Horizontal Stacked Bar Chart (Capture Period: Vertical Stacked Bar Char</li> </ul>
Thresholds	<ul> <li>Low Threshold: .8 (80%)</li> <li>High Threshold: Not Used</li> <li>Range 1: Under Utilized/Negative/Red</li> <li>Range 2: Good Utilization/Positive/Green</li> <li>Range 3: Not Used</li> </ul>
Fact details	Module: triMetricFact
	Business Object: triSpaceFact Metric Queries: triSpaceFact - Metric - Workpoint Utilization Rate (%) Metric, triSpaceFact - Metric - Workpoint Utilization Rate (%) Metric (Score)
Drill paths	<ul> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>Capture Period</li> </ul>
Interactive filters Static filters	<ul> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>For US Federal Government:</li> <li>Geography</li> <li>Location</li> <li>Space Class</li> <li>Real Property Type</li> <li>Real Property Use</li> <li>Active Buildings</li> </ul>
	Active Floors
	Active Spaces
Time	Months
Data point refresh rate	Monthly

# **Chapter 5. Related reports**

Related reports screens provide module, business object, metric query, and display details for the related reports that are delivered with the system reports.

To access related reports, go to **My Reports** > **System Reports** and select a metric. Select the **Related Reports** tab to show extra data in a tabular report that is relevant to the selected metric. Related reports are filtered by using the same filters that are selected for the metric. By filtering in this way, you always have additional information that is relative for the metric values that are currently displayed.

#### % Implementation Plan Progress by Geography report

Field name	Field value
Title	% Implementation Plan Progress by Geography
ID	2073-01-R
Order by	RE Implementation Plan
Display Columns	<ul> <li>RE Implementation Plan</li> <li>Total Savings from Completed Transactions (USD)</li> <li>Total Savings Goals (USD)</li> <li>Plan Category</li> <li>City</li> <li>State/Province</li> <li>Country</li> </ul>
	• % Progress
Module	triMetricFact
Business Object	triREImplementationPlanFact
Metric Queries	triREImplementationPlanFact - Related Report - Implementation Plan Progress by Geography

Data that is related to the % Implementation Plan Progress by Geography metric, including module, business object, and display details.

#### % On-time Completion (My Tasks) by Project Type report

Data that is related to the % On-time Completion (My Tasks) by Project Type metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Completion (My Tasks) by Project Type
ID	2056-01-R
Order by	Task ID, Task Name

Field name	Field value
Display Columns	• Task ID
	Task Name
	• Task Type
	Planned End Date
	Actual End Date
Module	triMetricFact
Business Object	triREProjectTaskFact
Metric Queries	triREProjectTaskFact - Related Report - % On-time Completion (My Tasks) by Project Type

# % On-time Completion (My Tasks) by Project report

Data that is related to the % On-time Completion (My Tasks) by Project metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Completion (My Tasks) by Project
ID	2055-01-R
Order by	Task ID, Task Name
Display Columns	<ul> <li>Task ID</li> <li>Task Name</li> <li>Task Type</li> <li>Planned End Date</li> <li>Actual End Date</li> </ul>
Module	triMetricFact
Business Object	triREProjectTaskFact
Metric Queries	triREProjectTaskFact - Related Report - % On-time Completion (My Tasks) by Project

# % On-time Completion (My Tasks) by Task Type report

Data that is related to the % On-time Completion (My Tasks) by Task Type metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Completion (My Tasks) by Task Type
ID	2057-01-R
Order by	Task Type, Task ID, Task Name
Display Columns	<ul> <li>Task Type</li> <li>Task ID</li> <li>Task Name</li> <li>Planned End Date</li> <li>Actual End Date</li> </ul>
Module	triMetricFact
Business Object	triREProjectTaskFact

Field name	Field value
Metric Queries	triREProjectTaskFact - Related Report - % On-time Completion (My Tasks) by Task Type

## % On-time Delivery by Portfolio Manager report

Data that is related to the % On-time Delivery by Portfolio Manager metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Delivery by Portfolio Manager
ID	2048-01-R
Order by	Project Name
Display Columns	<ul> <li>Project Name</li> <li>Project Type</li> <li>RE Project Planned End Date</li> <li>RE Project Actual End Date</li> </ul>
Module	triMetricFact
Business Object	triREProjectFact
Metric Queries	triREProjectFact - Related Report - % On-time Delivery by Portfolio Manager

# % On-time Delivery by Project Type report

Data that is related to the % On-time Delivery by Project Type metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Delivery by Project Type
ID	2049-01-R
Order by	Project Type, Project Name
Display Columns	• Project Type
	Project Name
	RE Project Planned End Date
	RE Project Actual End Date
Module	triMetricFact
Business Object	triREProjectFact
Metric Queries	triREProjectFact - Related Report - % On-time Delivery by Project Type

## % On-time Payment (My RE Contracts) by Organization report

Field name	Field value
Title	% On-time Payment (My RE Contracts) by Organization
ID	2061-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	• Address
	• City
	State/Province
	Country
	• % On Time Payment
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - % On-time Payment (My Real Estate Contracts) by Organization

Data that is related to the % On-time Payment (My RE Contracts) by Organization metric, including module, business object, and display details.

# % On-time Payment (My RE Contracts) by Payment Type report

Data that is related to the % On-time Payment (My RE Contracts) by Payment Type metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Payment (My RE Contracts) by Payment Type
ID	2064-01-R
Order by	Payment Type, RE Contract Name
Display Columns	• Payment Type
	RE Contract Name
	• RE Contract Type
	• Address
	• City
	State/Province
	Country
	% On Time Payment
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREPaymentFact - Related Report - % On-time Payment (My Real Estate Contracts) by RE Payment Type

## % On-time Payment (My RE Contracts) by RE Contract Type report

Field name	Field value
Title	% On-time Payment (My RE Contracts) by RE Contract Type
ID	2063-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	• RE Contract Type
	RE Contract Name
	• Address
	• City
	State/Province
	• Country
	% On Time Payment
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - % On-time Payment (My Real Estate Contracts) by RE Contract Type

Data that is related to the % On-time Payment (My RE Contracts) by RE Contract Type metric, including module, business object, and display details.

# % On-time Payment (My RE Contracts) by RE Contract report

Data that is related to the % On-time Payment (My RE Contracts) by RE Contract metric, including module, business object, and display details.

Field name	Field value
Title	% On-time Payment (My RE Contracts) by RE Contract
ID	2062-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	• Address
	• City
	State/Province
	• Country
	% On Time Payment
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - % On-time Payment (My Real Estate Contracts) by RE Contract

## % Savings from Audits by RE Contract report

Data that is related to the % Savings from Audits by RE Contract metric, including module, business object, and display details.

Field name	Field value
Title	% Savings from Audits by RE Contract
ID	2066-01-R
Order by	RE Contract Name
Display Columns	<ul> <li>RE Contract Name</li> <li>Amount Billed per Landlord</li> <li>Payment Difference</li> <li>RE Contract Type</li> <li>Address</li> <li>City</li> <li>State/Province</li> <li>Country</li> <li>% Savings</li> </ul>
Module	triMetricFact
Business Object	triREPaymentReconciliationFact
Metric Queries	triREPaymentReconciliationFact - Related Report - % Savings from Audits by RE Contract

## Average Days Outstanding by Organization report

Data that is related to the Average Days Outstanding by Organization metric, including module, business object, and display details.

Field name	Field value
Title	Average Days Outstanding by Organization
ID	2069-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	RE Contract Type
	• Name
	• Address
	• City
	State/Province
	Country
	Average Days Outstanding
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - Average Days Outstanding by Organization

#### Average Days Outstanding by Payment Type report

Field name	Field value
Title	Average Days Outstanding by Payment Type
ID	2072-01-R
Order by	Payment Type, RE Contract Name
Display Columns	• Payment Type
	RE Contract Name
	• RE Contract Type
	• Name
	• Address
	• City
	State/Province
	• Country
	Average Days Outstanding
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - Average Days Outstanding by Payment Type

Data that is related to the Average Days Outstanding by Payment Type metric, including module, business object, and display details.

# Average Days Outstanding by RE Contract report

Data that is related to the Average Days Outstanding by RE Contract metric, including module, business object, and display details.

Field name	Field value
Title	Average Days Outstanding by RE Contract
ID	2070-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	RE Contract Type
	• Name
	• Address
	• City
	State/Province
	• Country
	Average Days Outstanding
Module	triMetricFact
Business Object	triREPaymentFact
Metric Queries	triREPaymentFact - Related Report - Average Days Outstanding by RE Contract

# **Building Summary – Imperial report**

Data that is related to the Building Summary – Imperial metric, including module, business object, and display details.

Field name	Field value
Title	Building Summary - Imperial
ID	2024-01-R
Order by	Building
Display Columns	<ul> <li>Building</li> <li>Property</li> <li>Gross Area</li> <li>Rentable Area</li> <li>Usable Area</li> <li>Building R/U Ratio</li> <li>People Count</li> <li>FCI Level 1</li> <li>Cost of Operations</li> </ul>
Module	triMetricFact
Business Object	triBuildingFact
Metric Queries	triBuildingFact - Related Report - Building Summary - Imperial (Building Fact)

#### **Building Summary – Metric report**

Data that is related to the Building Summary – Metric metric, including module, business object, and display details.

Field name	Field value
Title	Building Summary – Metric
ID	2025-01-R
Order by	Building
Display Columns	<ul> <li>Building</li> <li>Property</li> <li>Gross Area</li> <li>Rentable Area</li> <li>Usable Area</li> <li>Building R/U Ratio</li> <li>People Count</li> <li>FCI Level 1</li> <li>Cost of Operations</li> <li>Area/Person</li> </ul>
Module	triMetricFact
Business Object	triBuildingFact
Metric Queries	triBuildingFact - Related Report - Building Summary - Metric (Building Fact)

# **Building Summary report**

Field name	Field value
Title	Building Summary
ID	2026-01-R
Order by	Building
Display Columns	<ul> <li>Building</li> <li>Property</li> <li>Building Class</li> <li>Primary Use</li> <li>City</li> <li>State/Province</li> </ul>
	<ul> <li>Country</li> <li>In Service Date</li> <li>Current Replacement Value</li> <li>Facility Condition Index Level 1</li> </ul>
Module	triMetricFact
Business Object	triBuildingFact
Metric Queries	triBuildingFact - Related Report - Building Summary (Building Fact)

Data that is related to the Building Summary metric, including module, business object, and display details.

## Change Order to Budget report

Data that is related to the Change Order to Budget metric, including module, business object, and display details.

Field name	Field value
Title	Change Order to Budget
ID	2017-01-R
Order by	Project Name
Display Columns	• Program
	Project Name
	Original Budget
	Current Budget
	Change Orders
	• Project ID
	Potential Change Orders
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Change Order to Budget

#### **Change Order to Contract report**

Data that is related to the Change Order to Contract metric, including module, business object, and display details.

Field name	Field value
Title	Change Order to Contract
ID	2018-01-R
Order by	N/A
Display Columns	Contract ID
	Contract Name
	Project Name
	Original Commitment
	Change Orders
	CO Percent of Contract
Module	triMetricFact
Business Object	triCapitalProjectContractFact
Metric Queries	triCapitalProjectContractFact - Related Report - Change Order to Contract

#### **Checklist Items report**

Data that is related to the Checklist Items metric, including module, business object, and display details.

Field name	Field value
Title	Checklist Items
ID	2078-01-R
Order by	Location Name
Display Columns	Location Name
	• Name
	• Туре
	Checklist Category
	• Score
	• Point Range (Minimum)
	Point Range (Maximum)
Module	triMetricFact
Business Object	triChecklistItemFact
Metric Queries	triChecklistItemFact – Related Report – Checklist Items

#### **Condition Indicators report**

Data that is related to the Condition Indicators metric, including module, business object, and display details.

Field name	Field value
Title	Condition Indicators

Field name	Field value
ID	2011-01-R
Order by	Building Name, Building System, Building System Item
Display Columns	Building Name
	Building System
	Building System Item
	Condition Index Level 1
	Condition Index Level 2
	Replacement Cost
	Total Deficiency Cost Level 1
	Total Deficiency Cost Level 2
	In Service Date
	Life Expectancy
	Remaining Life
	% of Building Cost
Module	triMetricFact
Business Object	triBuildingSystemItemFact
Metric Queries	triBuildingSystemItemFact - Related Report - Condition Indicators

# **Contact Center Communication report**

Data that is related to the Contact Center Communication metric, including module, business object, and display details.

Field name	Field value
Title	Contact Center Communication
ID	2010-01-R
Order by	Building Name, Building System, Building System Item
Display Columns	<ul> <li>Building Name</li> <li>Building System</li> <li>Building System Item</li> <li>Property Name</li> <li>Request Class</li> <li>Agent Name</li> </ul>
Module	triMetricFact
Business Object	triContactCenterFact
Metric Queries	triContactCenterFact - Related Report - Contact Center Communication

#### **Contract On-Time Completion Rate report**

Field name Field value Title Contract On-Time Completion Rate ID 2023-01-R Order by Days Variance **Display Columns** • Days Variance • Contract ID Contract Name • Project Name • Contract Start Date • Contract End Date Module triMetricFact **Business Object** triCapitalProjectContractFact **Metric Queries** triCapitalProjectContractFact - Related Report - Contract **On-Time Completion Rate** 

Data that is related to the Contract On-Time Completion Rate metric, including module, business object, and display details.

#### **Cost Code Summary report**

Data that is related to the Cost Code Summary metric, including module, business object, and display details.

Field name	Field value
Title	Cost Code Summary
ID	2001-01-R
Order by	Building Name, Service Type
Display Columns	Building Name
	• Service Type
	• Cost Type
	Cost Code ID
	Cost Code Name
	Actual Cost
Module	triMetricFact
Business Object	triBuildingCostFact
Metric Queries	triBuildingCostFact - Related Report - Cost Code Summary (Building Fact)

#### Cost per Area - Leased report

Data that is related to the Cost per Area - Leased metric, including module, business object, and display details.

Field name	Field value
Title	Cost per Area - Leased

Field name	Field value
ID	2076-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	• RE Contract Type
	RE Contract Name
	Total Cost
	Total Gross Rentable Area
	Cost per Area
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Cost Per Area

## Cost per Area - Owned report

Data that is related to the Cost per Area - Owned metric, including module, business object, and display details.

Field name	Field value
Title	Cost per Area - Owned
ID	2075-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	<ul> <li>RE Contract Type</li> <li>RE Contract Name</li> <li>Total Cost</li> <li>Total Gross Rentable Area</li> <li>Cost per Area</li> <li>Address</li> <li>City</li> <li>State/Province</li> </ul>
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Cost Per Area - Owned Property

# Cost per Seat by Organization report

Data that is related to the Cost per Seat by Organization metric, including module, business object, and display details.

Field name	Field value
Title	Cost per Seat by Organization

Field name	Field value
ID	2042-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	Total Cost
	Total Seats
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Cost per Seat by Organization

#### Cost per Seat by RE Contract Type report

Data that is related to the Cost per Seat by RE Contract Type metric, including module, business object, and display details.

Field name	Field value
Title	Cost per Seat by RE Contract Type
ID	2043-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	• RE Contract Type
	RE Contract Name
	Total Cost
	Total Seats
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Cost per Seat by RE Contract Type

# Current Budget to Forecast and Original Budget to Forecast reports

Data that is related to the Current Budget to Forecast and Original Budget to Forecast metrics, including module, business object, and display details.

Field name	Field value
Title	Current Budget to Forecast, Original Budget to Forecast
ID	2013-01-R

Field name	Field value
Order by	Project Name
Display Columns	• Program
	Project Name
	Original Budget
	Current Budget
	Change Orders
	• Committed
	• Actual
	• Forecast Final
	Variance Amount
	Project ID
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Current Budget to Forecast
	triCapitalProjectFact - Related Report - Original Budget to Forecast

## Move Log Summary report

Data that is related to the Move Log Summary metric, including module, business object, and display details.

Field name	Field value
Title	Move Log Summary
ID	2027-01-R
Order by	Building, Floor
Display Columns	• Building
	• Floor
	Organization
	• Moves
	• Area
Module	triWorkerFact
Business Object	triSpaceAllocationFact
Metric Queries	triSpaceAllocationFact - Related Report - Move Log Summary

## My Average Transaction Cycle Time by Project Type report

Data that is related to the My Average Transaction Cycle Time by Project Type metric, including module, business object, and display details.

Field name	Field value
Title	My Average Transaction Cycle Time by Project Type
ID	2058-01-R
Order by	Project Type, Project Name

Field name	Field value
Display Columns	<ul> <li>Project Type</li> <li>Project Name</li> <li>RE Project Planned End Date</li> <li>RE Project Actual End Date</li> <li>Mu Transaction Cuala Time (daua)</li> </ul>
	in the (days)
Module	triMetricFact
Business Object	triREProjectFact
Metric Queries	triREProjectFact - Related Report - My Average Transaction Cycle Time by Project Type

# My Project Budget report

Data that is related to the My Project Budget metric, including module, business object, and display details.

Field name	Field value
Title	My Project Budget
ID	2014-01-R
Order by	Variance Amount
Display Columns	• Program
	Project Name
	Budget Class
	Current Budget
	Forecast Final
	Variance Amount
	Project ID
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - My Project Budget

## **New Construction Cost report**

Data that is related to the New Construction Cost metric, including module, business object, and display details.

Field name	Field value
Title	New Construction Cost
ID	2015-01-R
Order by	Geography

Field name	Field value
Display Columns	• Program
	• Geography
	Project Name
	Actual Cost
	Project Gross Construction Area
	Project Usable Area
	Project ID
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - New Construction Cost (USD / GSF), triCapitalProjectFact - Related Report - New Construction Cost (USD / USF)

## **Organization Financial Summary report**

Data that is related to the Organization Financial Summary metric, including module, business object, and display details.

Field name	Field value
Title	Organization Financial Summary
ID	2077-01-R
Order by	Building
Display Columns	<ul> <li>Building</li> <li>Cost Type</li> <li>Service Type</li> <li>Organization ID</li> <li>Organization Name</li> <li>Organization Type</li> <li>Budget Cost</li> <li>Actual Cost</li> <li>Forecast Cost</li> </ul>
Module	triMetricFact
Business Object	triBuildingCostFact
Metric Queries	triBuildingCostFact - Related Report - Organization Financial Summary

### **Overall Customer Satisfaction by Portfolio Manager report**

Data that is related to the Overall Customer Satisfaction by Portfolio Manager metric, including module, business object, and display details.

Field name	Field value
Title	Overall Customer Satisfaction by Portfolio Manager
ID	2050-01-R
Order by	Portfolio Manager

Field name	Field value
Display Columns	<ul> <li>Portfolio Manager</li> <li>Transaction Name</li> <li>Total Survey Possible Score</li> <li>Total Survey Response Score</li> <li>Response By</li> <li>Transaction Close Date</li> </ul>
Module	triMetricFact
Business Object	triSurveyFact
Metric Queries	triSurveyFact - Related Report - Overall Customer Satisfaction by Portfolio Manager

# **Overall Customer Satisfaction by Preferred Provider report**

Data that is related to the Overall Customer Satisfaction by Preferred Provider metric, including module, business object, and display details.

Field name	Field value
Title	Overall Customer Satisfaction by Preferred Provider
ID	2051-01-R
Order by	Preferred Provider
Display Columns	Preferred Provider
	Transaction Name
	Total Survey Possible Score
	Total Survey Response Score
	• Response By
	Transaction Close Date
Module	triMetricFact
Business Object	triSurveyFact
Metric Queries	triSurveyFact - Related Report - Overall Customer Satisfaction by Preferred Provider

#### **Overall Transaction Score by Portfolio Manager report**

Data that is related to the Overall Transaction Score by Portfolio Manager metric, including module, business object, and display details.

Field name	Field value
Title	Overall Transaction Score by Portfolio Manager
ID	2052-01-R
Order by	Project Name
Display Columns	• Project Name
	Overall Sigma
	QFD Score
	CTQ Score
Module	triMetricFact

Field name	Field value
Business Object	triREProjectFact
Metric Queries	triREProjectFact - Related Report - Overall Transaction Score by Portfolio Manager

# Percent Projects Over Budget report

Data that is related to the Percent Projects Over Budget metric, including module, business object, and display details.

Field name	Field value
Title	Percent Projects Over Budget
ID	2012-01-R
Order by	N/A
Display Columns	<ul> <li>Program</li> <li>Project Name</li> <li>Original Budget</li> <li>Current Budget</li> <li>Change Orders</li> <li>Committed</li> <li>Actual</li> <li>Forecast Final</li> <li>Variance</li> <li>Project ID</li> </ul>
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Percent Project Over Budget

## **Percent Projects Over Schedule report**

Data that is related to the Percent Projects Over Schedule metric, including module, business object, and display details.

Field name	Field value
Title	Percent Projects Over Schedule
ID	2019-01-R
Order by	Days Variance
Display Columns	• Program
	Project Name
	Days Variance
	Project ID
	Planned Start
	• Planned End
	Projected Complete
	Actual Start

Field name	Field value
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Percent Project Over Schedule

# **Project On-Time Completion Rate report**

Data that is related to the Project On-Time Completion Rate metric, including module, business object, and display details.

Field name	Field value
Title	Project On-Time Completion Rate
ID	2022-01-R
Order by	Days Over
Display Columns	<ul> <li>Program</li> <li>Days Over</li> <li>Project ID</li> <li>Project Name</li> <li>Actual Start</li> <li>Planned End</li> <li>Actual End</li> </ul>
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Project On-Time Completion Rate

## **Project Schedule Variance report**

Data that is related to the Project Schedule Variance metric, including module, business object, and display details.

Field name	Field value
Title	Project Schedule Variance
ID	2020-01-R
Order by	Days Variance
Display Columns	• Program
	• Days Variance
	• Project ID
	• Project Name
	Planned Start
	• Planned End
	• Projected End
	Actual Start
Module	triMetricFact
Business Object	triCapitalProjectFact

Field name	Field value
Metric Queries	triCapitalProjectFact - Related Report - Project Schedule Variance

# Project Summary report

Data that is related to the Project Summary metric, including module, business object, and display details.

Field name	Field value
Title	Project Summary
ID	2079-01-R
Order by	N/A
Display Columns	Project Name
	• Program
	• Budget Class
	Current Budget
	• Forecast Final
	Variance Amount
	Project ID
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact – Related Report – Project Summary

#### **RE Contract Headcount by Organization report**

Data that is related to the RE Contract Headcount by Organization metric, including module, business object, and display details.

Field name	Field value
Title	RE Contract Headcount by Organization
ID	2036-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	• Total Headcount
	Total Gross Rentable Area
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - RE Contract Headcount by Organization

#### **RE Contract Headcount by RE Contract Type report**

Field name Field value Title RE Contract Headcount by RE Contract Type ID 2037-01-R Order by RE Contract Type, RE Contract Name **Display Columns** • RE Contract Type • RE Contract Name Total Headcount • Total Gross Rentable Area • Address • City • State/Province • Country Module triMetricFact **Business Object** triREContractFact **Metric Queries** triREContractFact - Related Report - RE Contract Headcount by RE Contract Type

Data that is related to the RE Contract Headcount by RE Contract Type metric, including module, business object, and display details.

# **RE** Contract Utilization – Space Use Agreements by Organization report

Data that is related to the RE Contract Utilization – Space Use Agreements by Organization metric, including module, business object, and display details.

Field name	Field value
Title	Real Estate Contract Utilization – Space Use Agreements by Organization
ID	2059-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	RE Contract Type
	SUA Total Rentable Area
	Total Gross Rentable Area
	• Address
	• City
	State/Province
	Country
	% RE Contract Utilization
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Real Estate Contract Utilization - Space Use Agreements by Organization

# **RE** Contract Utilization – Space Use Agreements by **RE** Contract Type report

Field name	Field value
Title	Real Estate Contract Utilization – Space Use Agreements by RE Contract Type
ID	2060-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	<ul> <li>RE Contract Type</li> <li>RE Contract Name</li> <li>SUA Total Rentable Area</li> <li>Total Gross Rentable Area</li> <li>Address</li> <li>City</li> <li>State/Province</li> <li>Country</li> <li>% RE Contract Utilization</li> </ul>
Module	triMetricFact
Business Object	triREContractFact

Data that is related to the RE Contract Utilization – Space Use Agreements by RE Contract Type metric, including module, business object, and display details.

### **RE Contract Vacancy by Organization report**

**Metric Queries** 

Data that is related to the RE Contract Vacancy by Organization metric, including module, business object, and display details.

triREContractFact - Related Report - Real Estate Contract

Utilization - Space Use Agreements by RE Contract Type

Field name	Field value
Title	RE Contract Vacancy by Organization
ID	2033-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	RE Contract Type
	Total Vacancy Rate
	Total Gross Rentable Area
	% Vacancy Rate
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - RE Contract Vacancy by Organization

# **RE Contract Vacancy by RE Contract Type report**

Field name	Field value
Title	RE Contract Vacancy by RE Contract Type
ID	2034-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	RE Contract Type
	RE Contract Name
	Total Vacancy Rate
	Total Gross Rentable Area
	% Vacancy Rate
	• Address
	• City
	State/Province
	Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - RE Contract Vacancy by RE Contract Type

Data that is related to the RE Contract Vacancy by RE Contract Type metric, including module, business object, and display details.

# **RE Costs by Organization report**

Data that is related to the RE Costs by Organization metric, including module, business object, and display details.

Field name	Field value
Title	RE Costs by Organization
ID	2038-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	Total Cost
	Total Headcount
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - RE Costs by Organization
# **RE Costs by RE Contract Type report**

Data that is related to the RE Costs by RE Contract Type metric, including module, business object, and display details.

Field name	Field value
Title	RE Costs by RE Contract Type
ID	2039-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	• RE Contract Type
	RE Contract Name
	Total Cost
	Total Headcount
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - RE Costs by Contract Type

## **Renovation Cost report**

Data that is related to the Renovation Cost metric, including module, business object, and display details.

Field name	Field value
Title	Renovation Cost
ID	2016-01-R
Order by	Geography
Display Columns	<ul><li>Project Group</li><li>Program</li></ul>
	Geography
	Actual Cost
	Project Gross Construction Area
	• Project Usable Area
	Project ID
	Project Name
	Renovation Cost (USD / USF)
Module	triMetricFact
Business Object	triCapitalProjectFact
Metric Queries	triCapitalProjectFact - Related Report - Renovation Cost (USD/ GSF), triCapitalProjectFact - Related Report - Renovation Cost (USD/ USF)

## **Revenue Weeks to Target by Portfolio Manager report**

Field name	Field value
Title	Revenue Weeks to Target by Portfolio Manager
ID	2053-01-R
Order by	Project Name
Display Columns	Project Name
	Revenue Weeks Calculated
	Revenue Weeks Planned
	RE Project Planned End Date
	RE Project Calculated End Date
Module	triMetricFact
Business Object	triRETransactionPlanFact
Metric Queries	triRETransactionPlanFact - Related Report - Revenue Weeks to Target by Portfolio Manager

Data that is related to the Revenue Weeks to Target by Portfolio Manager metric, including module, business object, and display details.

## **RFI Response Time and Percent RFI Overdue reports**

Data that is related to the RFI Response Time and Percent RFI Overdue metrics, including module, business object, and display details.

Field name	Field value
Title	RFI Response Time, Percent RFI Overdue
ID	2021-01-R
Order by	Days Response Time, Days Late
Display Columns	<ul> <li>Days Response Time for the RFI Response Time report</li> <li>Days Late for the Percent RFI Overdue report</li> <li>RFI Name</li> <li>Project Name</li> <li>RFI Status</li> <li>RFI Date Entered</li> <li>RFI Date Required</li> <li>RFI Cost Impact</li> <li>RFI Schedule Impact Days</li> <li>RFI Response Time:</li> </ul>
Module	triMetricFact
Business Object	triRFIFact
Metric Queries	triRFIFact - Related Report - RFI Response Time triRFIFact - Related Report - Percent RFI Overdue

## Seat Occupancy % by Organization report

Field name	Field value
Title	Seat Occupancy % by Organization
ID	2044-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	RE Contract Type
	Total Headcount
	Total Seats
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Seat Occupancy % by Organization

Data that is related to the Seat Occupancy % by Organization metric, including module, business object, and display details.

## Seat Occupancy % by RE Contract Type report

Data that is related to the Seat Occupancy % by RE Contract Type metric, including module, business object, and display details.

Field name	Field value
Title	Seat Occupancy % by RE Contract Type
ID	2045-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	• RE Contract Type
	RE Contract Name
	• Total Headcount
	Total Seats
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Seat Occupancy % by RE Contract Type

## Seats per Person by Organization report

Data that is related to the Seats per Person by Organization metric, including module, business object, and display details.

Field name	Field value
Title	Seats per Person by Organization
ID	2040-01-R
Order by	RE Contract Name
Display Columns	RE Contract Name
	• RE Contract Type
	Total Cost
	Total Headcount
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Seats per Person by Organization

## Seats per Person by RE Contract Type report

Data that is related to the Seats per Person by RE Contract Type metric, including module, business object, and display details.

Field name	Field value
Title	Seats per Person by RE Contract Type
ID	2041-01-R
Order by	RE Contract Type, RE Contract Name
Display Columns	RE Contract Type
	RE Contract Name
	• Total Cost
	• Total Headcount
	• Address
	• City
	State/Province
	• Country
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Seats per Person by RE Contract Type

## Service Survey Listing report

Data that is related to the Service Survey Listing metric, including module, business object, and display details.

Field name	Field value
Title	Service Survey Listing
ID	2008-01-R
Order by	Question Category, Request Class
Display Columns	<ul> <li>Question Category</li> <li>Request Class</li> <li>Survey Response</li> <li>Comment</li> </ul>
Module	triMetricFact
Business Object	triSurveyFact
Metric Queries	triSurveyFact - Related Report - Service Survey Listing

## Service Task Analysis by Building report

Data that is related to the Service Task Analysis by Building metric, including module, business object, and display details.

Field name	Field value
Title	Service Task Analysis by Building
ID	2003-01-R
Order by	Building
Display Columns	<ul><li>Building</li><li>Count of Tasks</li></ul>
Module	triMetricFact
Business Object	triTaskResourceFact
Metric Queries	triTaskResourceFact - Related Report - Service Task Analysis by Building

#### Service Task Analysis by Request Class report

Data that is related to the Service Task Analysis by Request Class metric, including module, business object, and display details.

Field name	Field value
Title	Service Task Analysis by Request Class
ID	2002-01-R
Order by	Request Class
Display Columns	Request Class
	Count of Tasks
Module	triMetricFact
Business Object	triTaskResourceFact

Field name	Field value
Metric Queries	triTaskResourceFact - Related Report - Service Task Analysis by Request Class

## Service Task Cost Analysis by Building report

Data that is related to the Service Task Cost Analysis by Building metric, including module, business object, and display details.

Field name	Field value
Title	Service Task Cost Analysis by Building
ID	2005-01-R
Order by	Building
Display Columns	<ul> <li>Building</li> <li>Count of Tasks</li> <li>Avg \$/Task</li> <li>Min \$/Task</li> <li>Max \$/Task</li> </ul>
Module	triMetricFact
Business Object	triTaskResourceFact
Metric Queries	triTaskResourceFact - Related Report - Service Task Cost Analysis by Building

## Service Task Cost Analysis by Request Class report

Data that is related to the Service Task Cost Analysis by Request Class metric, including module, business object, and display details.

Field name	Field value
Title	Service Task Cost Analysis by Request Class
ID	2004-01-R
Order by	Request Class
Display Columns	<ul> <li>Request Class</li> <li>Task \$</li> <li>Avg \$/Task</li> <li>Min \$/Task</li> <li>Max \$/Task</li> </ul>
Module	triMetricFact
Business Object	triTaskResourceFact
Metric Queries	triTaskResourceFact - Related Report - Service Task Cost Analysis by Request Class

## Service Task Listing by Building report

Field name	Field value
Title	Service Task Listing by Building
ID	2007-01-R
Order by	Location
Display Columns	Location
	Responsible Organization
	Customer Organization
	Responsible Person
	Request Class
	• Task ID
	Baseline Start
	• Baseline End
	Baseline Duration
	Actual Start
	• Actual End
	Actual Duration
	• Status
Module	triMetricFact
Business Object	triTaskDetailFact
Metric Queries	triTaskDetailFact - Related Report - Service Task Listing by Building

Data that is related to the Service Task Listing by Building metric, including module, business object, and display details.

## Service Task Listing by Responsible Org report

Data that is related to the Service Task Listing by Responsible Org metric, including module, business object, and display details.

Field name	Field value
Title	Service Task Listing by Responsible Org
ID	2006-01-R
Order by	Responsible Organization

Field name	Field value
Display Columns	Responsible Organization
	Location
	Customer Organization
	Responsible Person
	• Request Class
	• Task ID
	• Baseline Start
	• Baseline End
	Baseline Duration
	Actual Start
	• Actual End
	Actual Duration
	• Status
Module	triMetricFact
Business Object	triTaskDetailFact
Metric Queries	triTaskDetailFact - Related Report - Service Task Listing by Responsible Org

# Space Capacity report

Data that is related to the Space Capacity metric, including module, business object, and display details.

Field name	Field value
Title	Space Capacity
ID	2031-01-R
Order by	Building, Floor
Display Columns	<ul> <li>Building</li> <li>Floor</li> <li>Space Name</li> <li>Area SF</li> <li>Area SM</li> <li>Space Capacity</li> <li>Headcount Primary</li> <li>Headcount Other</li> <li>Remaining Capacity</li> </ul>
Module	triMetricFact
Business Object	triSpaceAllocationFact
Metric Queries	triSpaceAllocationFact - Related Report - Space Capacity (Set 3)

## **Space Class Summary report**

Field name	Field value
Title	Space Class Summary
ID	2032-01-R
Order by	Building, Floor
Display Columns	<ul> <li>Building</li> <li>Floor</li> <li>Space Class</li> <li>Area SF</li> <li>Area SM</li> </ul>
Module	triMetricFact
Business Object	triSpaceAllocationFact
Metric Queries	triSpaceAllocationFact - Related Report - Space Class Summary (Mobility Space Rate Metric)

Data that is related to the Space Class Summary metric, including module, business object, and display details.

#### **Time Card Summary report**

Data that is related to the Time Card Summary metric, including module, business object, and display details.

Field name	Field value
Title	Time Card Summary
ID	2009-01-R
Order by	N/A
Display Columns	Organization
	• Person
	• Task ID
	• Pay Period
	Time Category
	Labor Class
	• Hours
	Total Cost
Module	triMetricFact
Business Object	triTimeEntryFact
Metric Queries	triTimeEntryFact - Related Report - Time Card Summary

#### Vacancy – Non-Allocated Space report

Data that is related to the Vacancy - Non-Allocated Space metric, including module, business object, and display details.

Field name	Field value
Title	Vacancy- Non-Allocated Space

Field name	Field value
ID	2030-01-R
Order by	Building, Floor, Space Class
Display Columns	<ul> <li>Building</li> <li>Floor</li> <li>Space Class</li> <li>Space Name</li> <li>Area SF</li> <li>Area SM</li> <li>Capacity</li> </ul>
Module	triMetricFact
Business Object	triSpaceAllocationFact
Metric Queries	triSpaceAllocationFact - Related Report - Vacancy - Non-Allocated Space (Set 3)

# Vacancy Cost by Organization report

Data that is related to the Vacancy Cost by Organization metric, including module, business object, and display details.

Field name	Field value
Title	Vacancy Cost by Organization
ID	2046-01-R
Order by	RE Contract Name
Display Columns	<ul> <li>RE Contract Name</li> <li>RE Contract Type</li> <li>Vacancy Cost</li> <li>Total Vacant</li> <li>Total Gross Rentable Area</li> <li>Address</li> <li>City</li> <li>State/Province</li> <li>Country</li> </ul>
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Vacancy Cost by Organization

# Vacancy Cost by RE Contract Type report

Data that is related to the Vacancy Cost by RE Contract Type metric, including module, business object, and display details.

Field name	Field value
Title	Vacancy Cost by RE Contract Type
ID	2047-01-R

Field name	Field value
Order by	RE Contract Type, RE Contract Name
Display Columns	<ul> <li>RE Contract Type</li> <li>RE Contract Name</li> <li>Vacancy Cost</li> <li>Total Vacant</li> <li>Total Gross Rentable Area</li> <li>Address</li> <li>City</li> <li>State/Province</li> <li>Country</li> </ul>
Module	triMetricFact
Business Object	triREContractFact
Metric Queries	triREContractFact - Related Report - Vacancy Cost by RE Contract Type

## Worker Type Summary by Bldg/Floor report

Data that is related to the Worker Type Summary by Bldg/Floor metric, including module, business object, and display details.

Field name	Field value
Title	Worker Type Summary by Bldg/Floor
ID	2028-01-R
Order by	Building, Floor
Display Columns	<ul> <li>Building</li> <li>Floor</li> <li>Organization</li> <li>Worker Type</li> <li>Paople Count</li> </ul>
Module	triWorkerFact
Business Object	triSpaceAllocationFact
Metric Queries	triWorkerFact - Related Report - Worker Type Summary by Bldg/Floor (Set 3)

# Worker Type Summary by Organization/Building report

Data that is related to the Worker Type Summary by Organization/Building metric, including module, business object, and display details.

Field name	Field value
Title	Worker Type Summary by Organization/Building
ID	2029-01-R
Order by	Organization, Building

Field name	Field value
Display Columns	<ul><li>Organization</li><li>Building</li></ul>
	• Floor
	• Worker Type
	People Count
Module	triWorkerFact
Business Object	triSpaceAllocationFact
Metric Queries	triWorkerFact - Related Report - Worker Type Summary by Organization/Building (Set 3)

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