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National Institute of Building Sciences

Facility Transition Planning:

An Integrated Approach with Asset Management & Service Level Funding

Provider Number: **G168**

Course Number: **TU3C**

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Meet our Presenters:



Eric Dillinger
Vice President,
Managing Director Strategic Consulting
817.832.6630
eric.dillinger@woolpert.com



Casey Martin, AIA, AICP, LEED AP
Buildings & Infrastructure
817.781.1300
casey.martin@jacobs.com





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Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.





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Course Description

If not planned well in advance, the transition of a new facility from construction to operation can be chaotic and costly to the owning organization. For the long-term operational success and viability, operational efficiencies require attention and development during the design and construction phase. A predictable opening day is dependent on having critical success factors in place, such as an operational readiness transition plan, an asset management strategy and an understanding of maintenance costs.

This presentation will address how aligning expectations between the facility management (FM) organization and customers can make life easier for both sides. Funding levels can fluctuate with customer expectations for response times, quality, service frequencies, level of effort and services included in the agreement.

Developing a structured service menu with levels of associated funding requirements can set the stage for exceeding expectations without exceeding the FM budgets and controlling for quality. Measurements and metrics can be established that are fair and understood by both the delivery organization and the customer. The speakers also will review the new ISO Facility Management Standard 41012 for best practices on developing service level agreements.





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Agenda

1. Facility Transition
Planning - Overview
2. Use of Service Levels for
Planning & Budgeting
3. Integrated Asset
Management Strategy





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Facility Transition Planning - Overview





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Facility Transition Planning can encompass:

- ✓ Workforce Transition Planning
- ✓ Operational Readiness
- ✓ Training and Familiarization
- ✓ Trials and Simulations
- ✓ Risk Mitigation and Contingency Planning
- ✓ Move and Relocation





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Facility Transition Planning can encompass:



- ✓ Concept of Operations
- ✓ Public Relations
- ✓ Opening Day Requirements
- ✓ Post Occupancy Evaluations
- ✓ Asset Management preparedness
- ✓ Facility Management preparedness



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Commissioning is not Facility Transition Planning

Commissioning – prepares a facility for *static* readiness

Facility transition planning – the process used to bring a new or rejuvenated facility *from the state of static completion to normal ongoing operations*



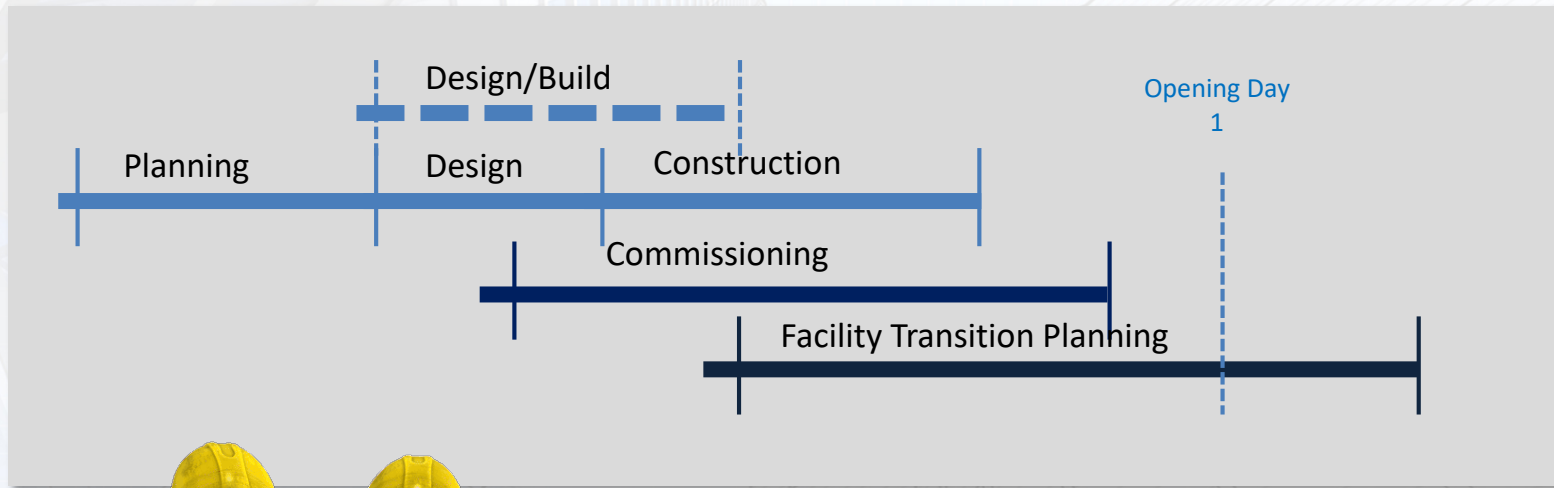


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Planning through Operational Readiness Timeline





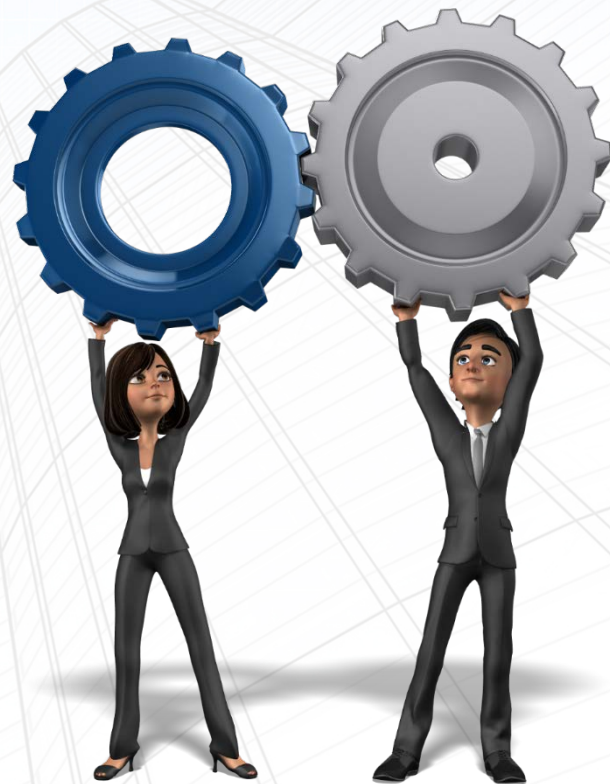
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3 Key Components to Facility Transition Planning

Ensuring an opening day that delivers stable and reliable building performance is dependent on:

1. People readiness
2. Facility readiness
3. Information readiness





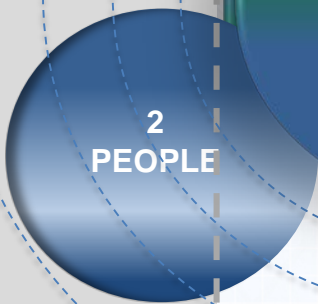
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CONSTRUCTION

Operational Readiness



3
ASSET MANAGEMENT

COMMISSIONING

OPENING DAY

OPERATIONAL
READINESS

DATA

INFORMATION



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Service Levels for Planning & Budgeting





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Facility management — Guidance
on strategic sourcing and the
development of agreements

*Facility management — Directives sur le procédé
d'approvisionnement stratégique et d'élaboration des accords*



About ISO 41012

- ✓ Step-by-step guidance on the strategic sourcing process
- ✓ Guidance of how to prepare and implement adequate internal or external Facility Service agreements.
- ✓ Annex D: Service level agreements
 - Benefits, preparation and structure of an agreement

INTERNATIONAL
STANDARD

ISO
41012

First edition
2017-04

**Facility management — Guidance
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development of agreements**

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ISO 41012: Facility Management – Guidance on strategic sourcing and the development of agreements

Purpose:

- ✓ **Sourcing** – not just outsourcing
- ✓ Management model for owners and FM organizations
- ✓ Assist in determining outsource or insource organizational alignment





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ISO 41012: Facility Management – Guidance on strategic sourcing and the development of agreements

Supports the FM organization/owner:

- ✓ establishing expectations
- ✓ defining what services will be delivered
- ✓ overseeing the management of services
- ✓ measuring performance





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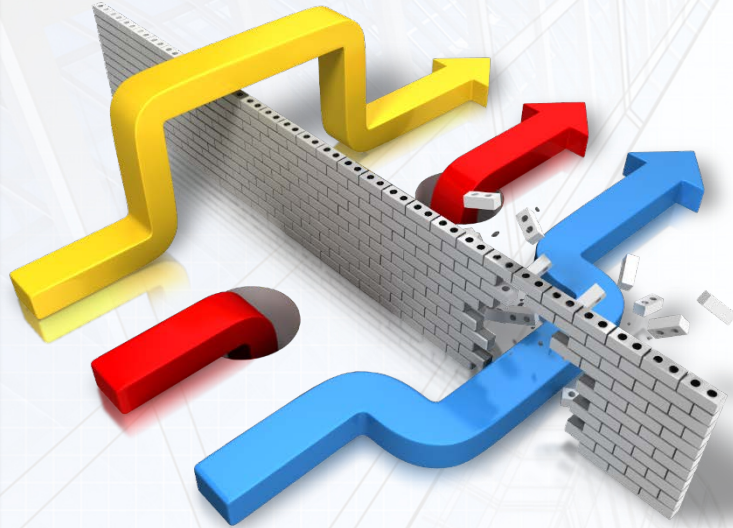
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FM Sourcing Strategy achieving core business objectives



- availability of in-house FM expertise
- availability and capability of supply options
- corporate policies
- regulatory compliance requirements
- organizational culture and management style
- reporting requirements and
- management information systems



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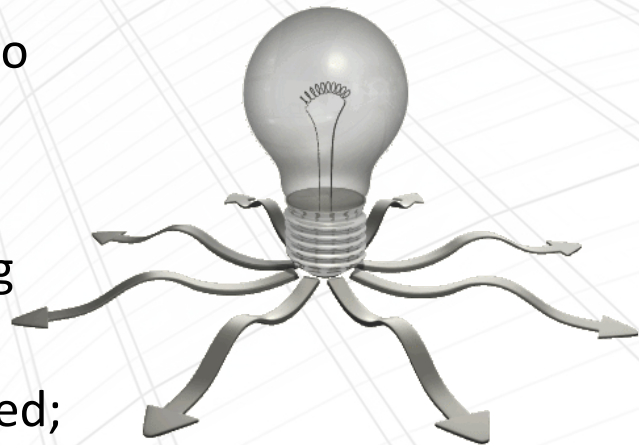
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ISO 41012 - Annex D

SLAs are critical in enabling the FM organization to align the appropriate services with the business requirements, strategy and objectives. Benefits of creating SLAs:

- ✓ cooperation and partnerships between the parties;
- ✓ accountability by clearly identifying roles and responsibilities;
- ✓ educated customers for work requirements to meet expectations;
- ✓ baseline for continuous improvement;
- ✓ consistency in service delivery and evaluating value;
- ✓ control over costs relative to services delivered;





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ISO 41012 - Annex D

SLAs should provide:

- ✓ information regarding **response times** to various work priorities;
- ✓ target times for deficiency or **service interruption resolution**;
- ✓ processes and guidelines for **problem escalation**;
- ✓ mechanisms for **managing expectations** and communication;
- ✓ criteria for **periodic reporting** of performance.





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ISO 41012 - Annex D

Key attributes of SLAs:



- ✓ scope of the services to be provided;
- ✓ boundary conditions / important parameters;
- ✓ level of service and/or quality of the output;
- ✓ performance measurement criteria and targets;
- ✓ acceptable delivery times / cost of delivery;
- ✓ conflict resolution processes;
- ✓ emergency & non-compliance procedures and results.



Service Level Agreements:

SLA - levels of intensity example:

Service	Level 1	Level 2	Level 3	Level 4
Project Management	<ul style="list-style-type: none"> Coordinates, negotiates and manages full suite of site services, including (but not limited to): <ul style="list-style-type: none"> Parking Security Cleaning Landscaping Building system maint. Fire/life safety Emergency response 	<ul style="list-style-type: none"> Landlord interface Emergency response E&M services for requests not covered by landlord: Supplemental cleaning Regulatory compliance oversight-support Manages property management company for sites with third party tenants 	<ul style="list-style-type: none"> Landlord interface Emergency response E&M services for requests not covered by landlord 	<ul style="list-style-type: none"> No site services
Facilities Management	<ul style="list-style-type: none"> Coordinates all aspects of facilities requests: <ul style="list-style-type: none"> Moves/adds/changes Project management for non-permitted work Furniture inventory, repair, and replacement Office services oversight Food vendor mgmt. E&M: medical support Coordinates applicable services that flow through FSP departments (e.g., E&M, EHS) 	<ul style="list-style-type: none"> Coordinates limited workplace environment requests: <ul style="list-style-type: none"> Moves/adds/changes Project management for non-permitted work Furniture inventory, repair & replacement E&M: medical support Coordinates applicable services that flow through FSP departments (e.g., E&M, EHS) 	<ul style="list-style-type: none"> Limited to Property Management service per the structure of the lease. Coordinates applicable services that flow through FSP departments) 	<ul style="list-style-type: none"> Annual inspection of the environment for licensor interface

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Integrated Asset Management Strategy





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Defined Ownership Strategy

Creating a “Defined Ownership Strategy”

- Identified regulatory requirements
- Clear connectivity to organizational outcomes
- Integrated Asset Management System
- Space management plan
- Warranty management
- Vendor procurement services
- Specialized skills and expertise



Don't confuse *data* with *information*

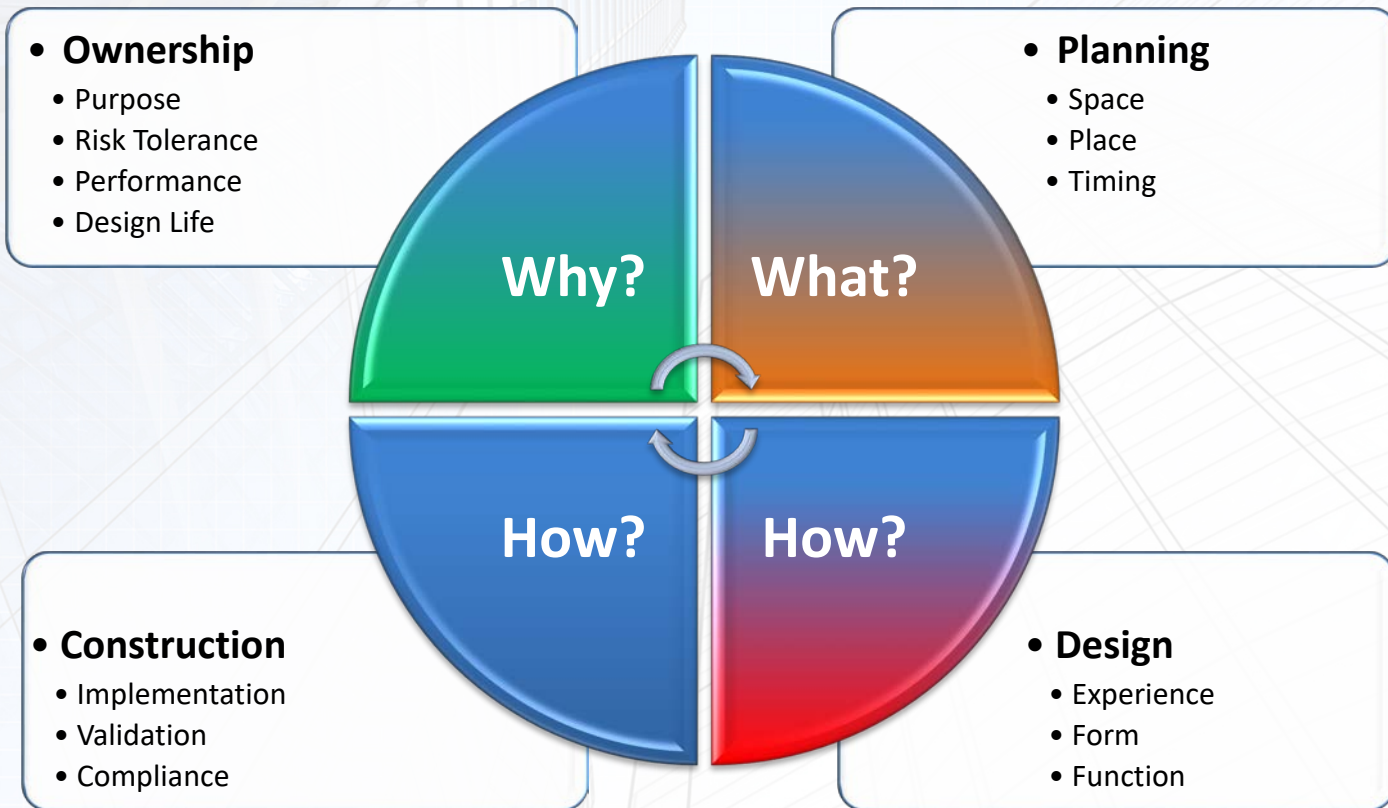


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Inverting the Decision Workflow

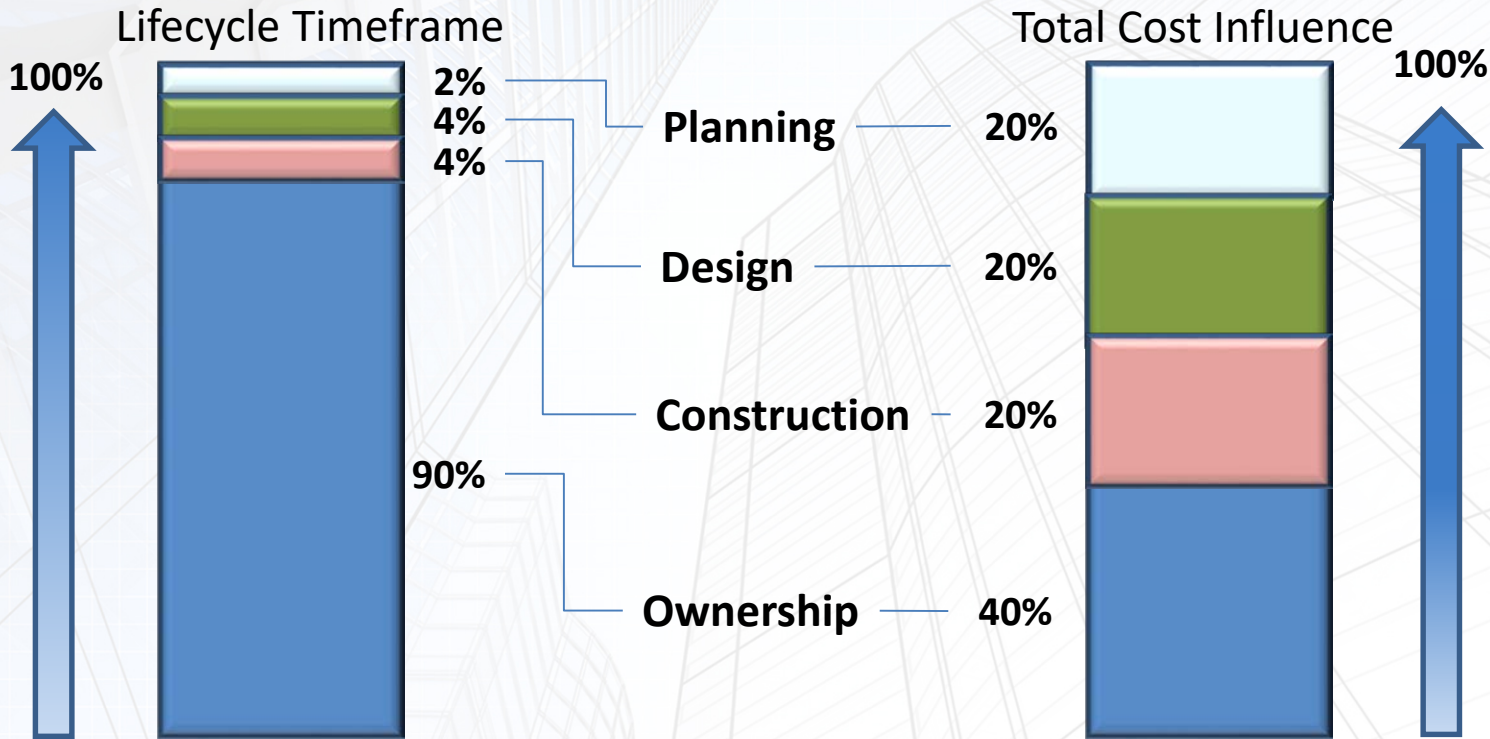




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Timeframes vs Influence



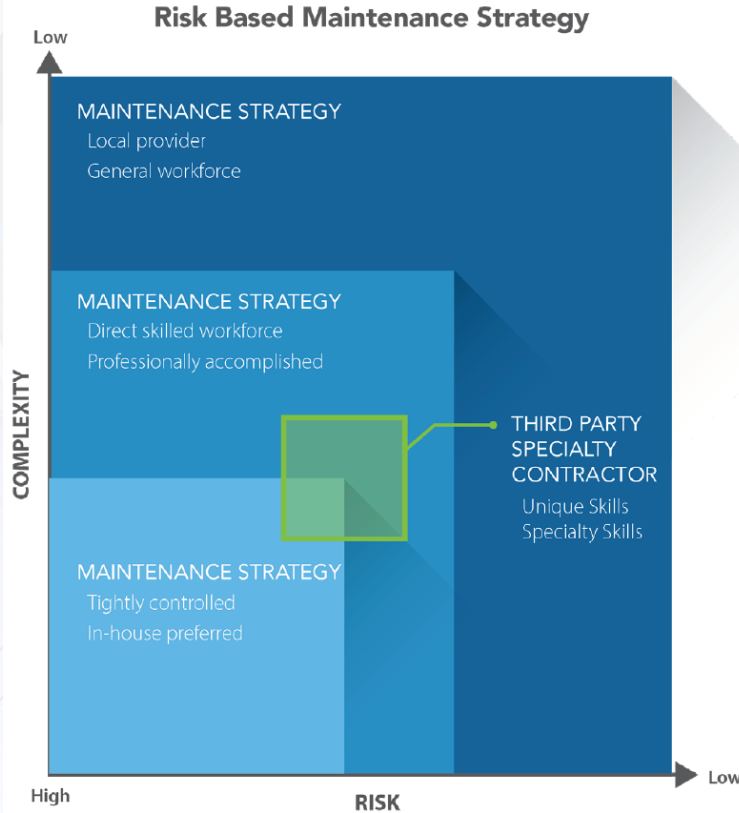


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Maintenance Strategy



A risk-based maintenance strategy addresses complexity and risk when making maintenance delivery decisions.



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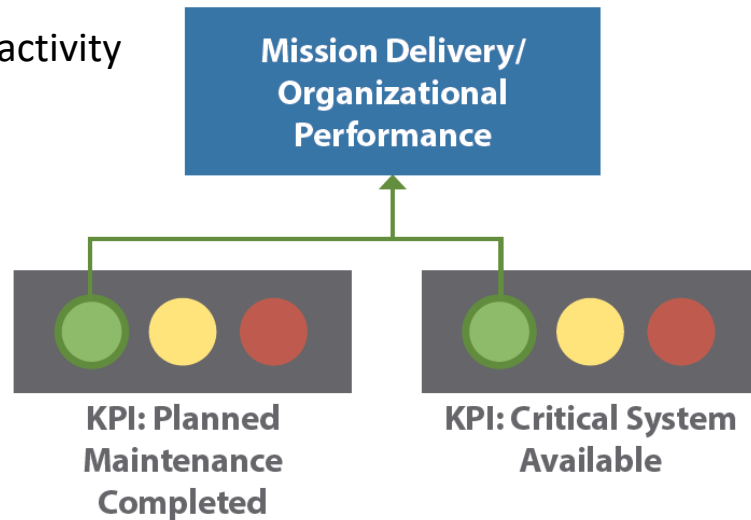
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Defining Success

Strategy Should Focus on:

Maximizing Organizational Benefit at the Lowest Total Cost

- Not Just “Total Cost of Ownership”
- **Outcomes** are more important than activity
- Too many KPIs can cause clutter





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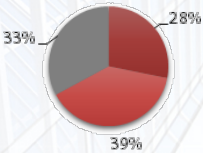
Key Performance Indicators

FACILITY METRICS



SHC Main Campus
Total Sq. Ft: 1.7 million
FIS: FY 2014 \$35.8 million

COST BREAKDOWN



■ Maintenance

FACILITY METRICS



Utility Cost
\$12.2 million

Utility Cost / GSF



Maintenance Cost
\$12.5 million

Planned / Unplanned Maintenance



Maintenance Cost / GSF



Maintenance Cost / C/M Adjusted Patient Day



Minor Construction
\$14 million

Minor Construction Cost / GSF



Minor Construction Cost / C/M Adjusted Patient Day



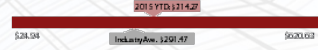
Facility Maintenance Cost / GSF



Facility Cost / Adjusted Patient Day



Facility Cost / Adjusted Patient Discharges



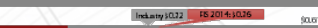
Energy / GSF



Gas / GSF



Water / GSF



Labor Cost / GSF



Service Cost / GSF



Material Cost / GSF



Indirect Cost / GSF



Labor Cost / GSF



Service Cost / GSF



Material Cost / GSF



Indirect Cost / GSF



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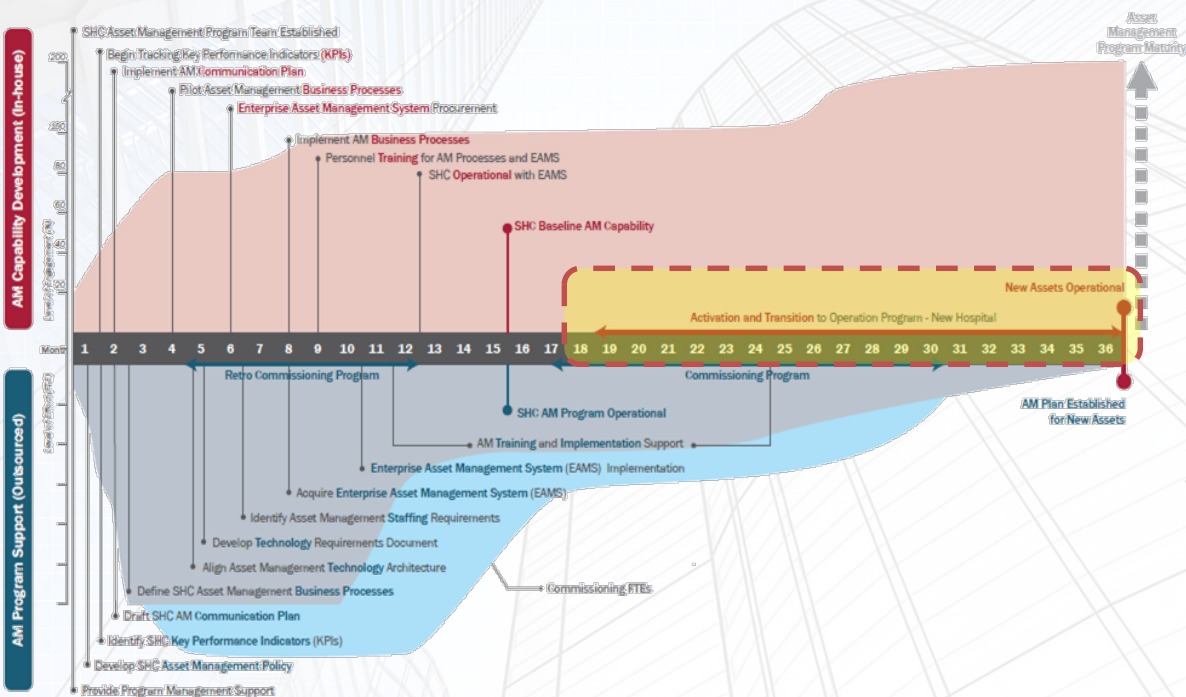


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AM Road Map



Asset Investment Model

Total Maintenance Cost by Frequency										Total Annualized Maintenance Cost			
	W	M	Tu	W	Th	F	S	A	C				
\$	-	4	\$	-	4	\$	-	4	\$	106.50	2	\$	106.50
\$	-	4	\$	-	4	\$	-	4	\$	61.50	2	\$	61.50
\$	-	4	\$	-	4	\$	-	4	\$	1,038.00	2	\$	1,038.00
\$	-	4	\$	-	4	\$	-	4	\$	180.24	3	\$	270.36
\$	-	4	\$	-	4	\$	-	4	\$	432.50	2	\$	432.50
\$	-	1	\$	-	1	\$	-	1	\$	2,016.33	1	\$	2,358.88
\$	-	4	\$	-	4	\$	-	4	\$	511.84	2	\$	3,916.84
\$	-	4	\$	-	4	\$	-	4	\$	186.50	2	\$	330.22
\$	-	4	\$	-	4	\$	-	4	\$	184.50	2	\$	330.22
\$	-	4	\$	-	4	\$	-	4	\$	75.12	2	\$	149.24
\$	-	4	\$	-	4	\$	-	4	\$	525.84	2	\$	525.84
\$	-	4	\$	-	4	\$	-	4	\$	11,109.00	3	\$	112.68
\$	-	4	\$	-	4	\$	-	4	\$	7,279.50	3	\$	7,481.24
\$	-	4	\$	-	4	\$	-	4	\$	9,452.04	3	\$	40,606.50
\$	-	4	\$	-	4	\$	-	4	\$	9,513.00	3	\$	9,513.00
\$	-	4	\$	-	4	\$	-	4	\$	1,135.00	2	\$	3,416.40
\$	-	4	\$	-	4	\$	-	4	\$	9,452.04	3	\$	28,356.12
\$	-	4	\$	-	4	\$	-	4	\$	219.28	3	\$	222.92
\$	-	4	\$	-	4	\$	-	4	\$	5,475.60	2	\$	74,904.40
\$	-	4	\$	-	4	\$	-	4	\$	162.36	2	\$	588.36
\$	-	4	\$	-	4	\$	-	4	\$	2,682.72	3	\$	7,385.52
\$	-	4	\$	-	4	\$	-	4	\$	54.86	2	\$	54.86
\$	-	4	\$	-	4	\$	-	4	\$	91.50	2	\$	91.50

Estimated Costs (time, labor, materials)

Sorted by Frequency and Level of Maintenance

[illegible]

- Assets sorted by system
- Estimated costs sorted by frequency and categorized by Level of Maintenance
- Total estimated cost by system and frequency
- Total cost by Level of Maintenance
- Annualized Estimated Cost by system, Frequency, and Level of Maintenance
- Total Estimated Cost

	1. Life Cycle Code	2. Minimum (annual)	3. Mfg Recommended	4. Top Tier (All)
Roof Construction	Level 1	Level 2	Level 3	Level 4
Exterior Enclosure	3	41,600	97,300	2,206,600
Interior	3	142,800	304,500	1,242,000
Interior	2	188,800	500,800	1,109,500
Plant	5	6,200	21,700	963,500
HVAC	10	10,600	10,600	215,300
Fine Print	3	300,000	300,000	3,779,600
Electrical	3	300,000	300,000	1,610,500
Site Improvements	5	294,900	294,900	294,900



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This concludes The American Institute of Architects Continuing Education Systems Course



Eric Dillinger
Vice President,
Managing Director Strategic Consulting
817.832.6630
eric.dillinger@woolpert.com



Casey Martin, AIA, AICP, LEED AP
Buildings & Infrastructure
817.781.1300
casey.martin@jacobs.com

