

FBPTA Core Competencies & Curriculum

Overview of the 2013 Annual Update

**Federal Facilities Council
Committee on Workforce Development**

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Sustainability Program Manager, GSA***



What is the 2013 Annual Update?

Facilities Management Institute
**Implementing the Federal Buildings
Personnel Training Act (FBPTA)**

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**Update to FBPTA
Core
Competencies
and
Recommended
Curriculum**
2013

2013 FBPTA Annual Update
The 2013 update to the FBPTA Competencies and Curriculum is [here](#).

Calendar
July

S	M	T	W	T	F	S
		1	2	3	4	5
7	8	9	<u>10</u>	11	12	13
14	15	<u>16</u>	17	18	19	20
21	22	23	<u>24</u>	25	26	27
28	29	30	<u>31</u>			

News
Seeking Topics for an FMI Community of Practice
2013 FBPTA Annual Update is online
Training on FMI Web Tool
Brief on FBPTA Program
Recommended Curriculum - June 14, 2012

Upcoming Events
Overview of the 2013 FBPTA Annual Update - FFC - 09:00
07/24/2013
CECOS FM Week - 13:00
07/31/2013
Health in Buildings Discussion with GSA NCR Leadership - 11:30
08/13/2013

FBPTA - 2013 Annual Update
The attached document provides an overview and explanation for the 2013 annual update of the FBPTA Core Competencies and Recommended Curriculum.
[Read more](#)

FBPTA Training Resource Submission Form
Submitted by [brian.gilligan](#) on Fri, 05/03/2013 - 11:59
The Federal Buildings Personnel Training Act requires GSA to identify "qualifications" (i.e.



Agenda

- Competency Model guidance
- Recommended Curriculum approach
- Update on GSA's implementation efforts
- Future steps - Competency Advisory Group
- Get you to participate!



“Functional Roles” Defined by FBPTA

FMI: Federal Buildings Personnel
~50,000 Civil Servants; + Contractors
(Program – 1 FTE, \$200K Annual Budget)

GSA: Mostly GS-1176, Building Managers

Facility
Management

Energy
Management

GSA: Mostly O&M Contractors

Facility / Equipment
O&M

FAI: Federal Acquisition Personnel

~75,000 Civil Servants

(Program – 12 FTE, \$10M+ Annual Budget)

Specialized skills required to varying degrees by all





Overview of Competency Update

Competency Area (12)	Core Competency (43)	Primary Responsibility					Competency Area (12)	Core Competency (43)	Primary Responsibility				
		FM	EM	O&M	High Priority	Early Career			FM	EM	O&M	High Priority	Early Career
1) Management of Facility O&M	1a Building Systems				Yes	Yes	7) Sustainability	6a Planning					
	1b Building Interior				Yes*	Yes		6b Infrastructure					
	1c Building Exterior				Yes*	Yes		7a Regulations and Requirements					Yes
	1d Other Facility Systems					Yes		7b Implementation				Yes	Yes
2) Performance of Facility O&M	2a HVAC Systems				Yes	Yes	8) Water Efficiency	8a Regulations, Goals, Best Practices					Yes
	2b Electrical / Mechanical Systems				Yes	Yes		8b Water Audits				Yes	Yes
	2c Life Safety Systems				Yes*	Yes	9) Project Management	9a Initiate					Yes
	2d General Building Maintenance					Yes		9b Execute					Yes
	2e Best Practices & Innovation				Yes	Yes		9c Closeout					Yes
	3a Technology Solutions				Yes			9d Training					Yes
3) Technology	3b Building Automation Systems				Yes		10) Business, Budget & Contracting	10a Total Cost of Ownership				Yes	Yes
	3c Maintenance Management Systems				Yes			10b Life Cycle Assessment				Yes	
	4a Demand Reduction				Yes	Yes		10c Contracting					Yes
4) Energy Management	4b Assess Initial Conditions				Yes	Yes		10d Budget Formulation, Execution				Yes	Yes
	4c Commissioning and ESPC				Yes	Yes	11) Leadership & Innovation	11a Communication					Yes
	4d Coordinate with Public Utilities					Yes		11b Personnel					Yes
	4e Planning, Project Management					Yes		11c Innovation				Yes	Yes
	5a Basic Requirements					Yes		11d Enterprise Knowledge				Yes	
5) Safety	5b Infrastructure					Yes	12) Performance Measures	12a FBPTA				Yes	Yes
	5c Contractor Program Oversight					Yes		12b Acquiring Data					Yes
	5d Occupant Interface					Yes		12c Establishment and Implementation					



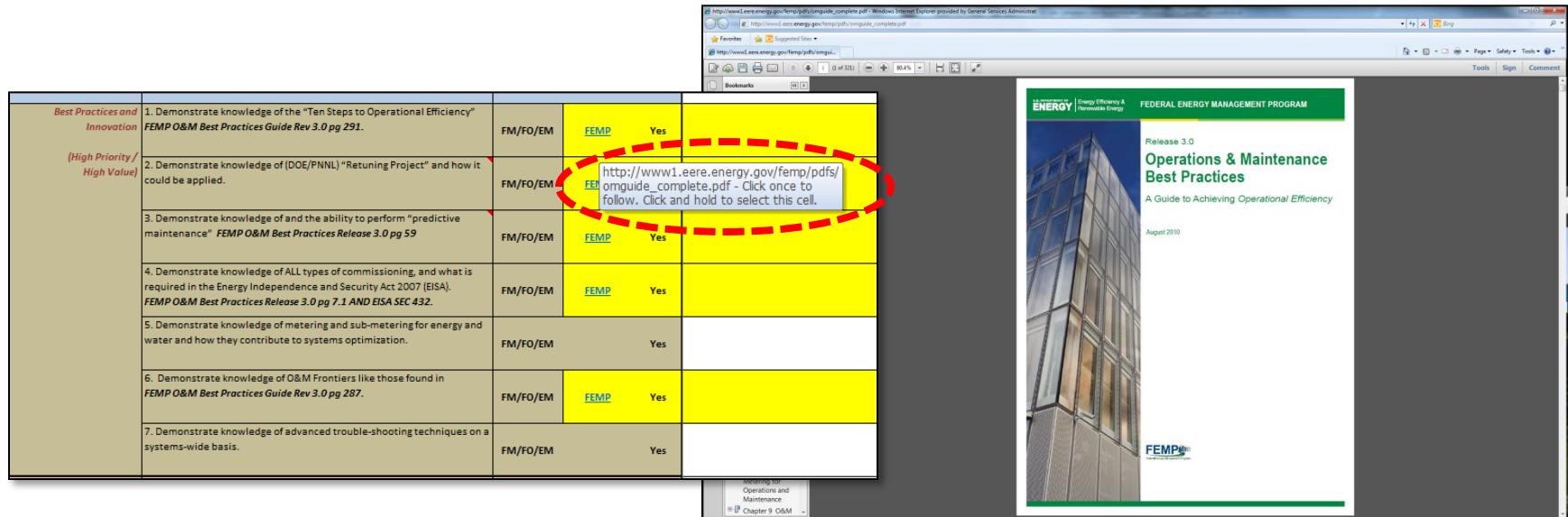
How the Update is Organized

Parent Organization						Certified Energy Manager (CEM)	Energy Manager in Training (EMIT)	Building Energy & Sustainability Technician (BEST)	Certified Measurement & Verification Professional (CMVP)
Qualification Name						http://www.eecenter.org/d1/pages/index.cfm?pageID=3330	http://www.eecenter.org/d1/pages/index.cfm?pageID=3353	http://www.eecenter.org/d1/pages/index.cfm?pageID=3338	http://www.eecenter.org/d1/pages/index.cfm?pageID=3666
Website									
Facility Management Role Competencies <small>Percentages indicate share of "Performances" covered (All FM / All FM less Safety / FM Early Career Only)</small>	FM					5% / 8% / 9%	0% / 0% / 0%	0% / 0% / 0%	28% / 40% / 47%
Energy Management Role Competencies <small>Percentages indicate share of "Performances" covered (All EM / All EM less Safety / EM Early Career Only)</small>	EM					85% / 85% / 100%	79% / 79% / 93%	79% / 79% / 93%	88% / 88% / 93%
Operations and Maintenance Role Competencies <small>Percentages indicate share of "Performances" covered (All O&M)</small>	FO					24%	0% / 0% / 0%	9% / 16% / 0%	24% / 43% / 47%
Inherently a shared responsibility of more than one role	FM/FO/EM								
Federal References, Local Knowledge, or Agency-Specific Processes; must be verified by supervisor <small>(Click on link to see website references)</small>		FED REF							
Competencies	(12)	Performance	(43)	Performance	(232)	Early Career			
1. Management of Facilities O&M		Building Systems <i>(High Priority / High Value)</i>							
		1. Demonstrate familiarity with Building Systems.			Systems include: HVAC, Electrical (and Standby Generators), Lighting, Mechanical/Plumbing (and Fire protection systems), Vertical transportation, Structural, Roofing, Building Envelope.				✓
		2. Demonstrate ability to work with Facilities team to assess a facility's need for building systems.							✓
		3. Demonstrate ability to oversee the acquisition, installation, and operation of building systems.	FM	Yes					✓
		4. Demonstrate ability to work with Facilities Team to establish practices and procedures.	FM	Yes					✓
		5. Demonstrate ability to work with Facilities Team to determine and administer the allocation of building systems' resources.	FM	Yes					✓
		6. Demonstrate ability to monitor and evaluate how well building systems perform.	FM	Yes					✓
		7. Demonstrate ability to manage corrective, preventive and predictive maintenance.	FM	Yes	✓				✓
		8. Demonstrate ability to work with Facilities Team to develop emergency							

Links: [Overview of FBPTA 2013 Annual Update](#), and [Competency Model & Recommended Curriculum](#)



Understanding “Federal References”



The screenshot shows a table titled 'Best Practices and Innovation' with 7 rows. The first column is 'High Priority / High Value'. The second column is 'Best Practices and Innovation'. The third column is 'FMP/FO/EM' and the fourth column is 'Yes'. The fifth column contains a link to a PDF document: 'http://www1.eere.energy.gov/femp/pdfs/fempomguide_complete.pdf - Click once to follow. Click and hold to select this cell.' A red dashed circle highlights this link. The table is overlaid on a window showing the 'FEMP Operations & Maintenance Best Practices' guide, Release 3.0, dated August 2010.

High Priority / High Value	Best Practices and Innovation	FMP/FO/EM	Yes
	1. Demonstrate knowledge of the "Ten Steps to Operational Efficiency" <i>FEMP O&M Best Practices Guide Rev 3.0 pg 291.</i>	FMP/FO/EM	Yes
	2. Demonstrate knowledge of (DOE/PNNL) "Retuning Project" and how it could be applied.	FMP/FO/EM	Yes
	3. Demonstrate knowledge of and the ability to perform "predictive maintenance" <i>FEMP O&M Best Practices Release 3.0 pg 59</i>	FMP/FO/EM	Yes
	4. Demonstrate knowledge of ALL types of commissioning, and what is required in the Energy Independence and Security Act 2007 (EISA). <i>FEMP O&M Best Practices Release 3.0 pg 7.1 AND EISA SEC 432.</i>	FMP/FO/EM	Yes
	5. Demonstrate knowledge of metering and sub-metering for energy and water and how they contribute to systems optimization.	FMP/FO/EM	Yes
	6. Demonstrate knowledge of O&M Frontiers like those found in <i>FEMP O&M Best Practices Guide Rev 3.0 pg 287.</i>	FMP/FO/EM	Yes
	7. Demonstrate knowledge of advanced trouble-shooting techniques on a systems-wide basis.	FMP/FO/EM	Yes

- Federal References – unique to Federal government
- Local knowledge – unique to an individual location
- Agency-specific – unique to an individual agency
- Cannot claim credit from qualifications alone



Recommended Curriculum

Parent Organization							
Qualification Name							
Website							
Facility Management Role Competencies <small>Percentages indicate share of "Performances" covered (All FM / All FM less Safety / FM Early Career Only)</small>	FM			Certified Measurement & Verification Professional (CMVP) http://www.aeecenter.org/ida/pages/1126.aspx?PageID=3000	28% / 40% / 47%	Description:	
Energy Management Role Competencies <small>Percentages indicate share of "Performances" covered (All EM / All EM less Safety / EM Early Career Only)</small>	EM				88% / 88% / 93%	Association of Energy Engineers, in cooperation with the Efficiency Valuation Organization (EVO), has established the Certified Measurement and Verification Professional program with the dual purpose of recognizing the most qualified professionals in this growing area of the energy industry, and raising the overall professional standards within the measurement and verification field.	
Operations and Maintenance Role Competencies <small>Percentages indicate share of "Performances" covered (All O&M)</small>	FO				24% / 43% / 47%		
Inherently a shared responsibility of more than one role	FM/FO/EM						
Federal References, Local Knowledge, or Agency-Specific Processes; must be verified by supervisor <small>click on links to see website references</small>				FED REF			
Competency Areas (12)	Core Competencies (43)	Performances (232)			Early Career?		
1. Management of Facilities O&M	Building Systems <small>(High Priority / High Value)</small>	1. Demonstrate familiarity with Building Systems.	FM		Yes	✓	✓
		2. Demonstrate ability to work with Facilities team to assess a facility's need for building systems.	FM		Yes	✓	✓
		3. Demonstrate ability to oversee the acquisition, installation, and operation of building systems.	FM		Yes	✓	✓
		4. Demonstrate ability to work with Facilities Team to establish practices and					



Defining a Recommended Curriculum

Vendor Evaluation Criteria

- Near-term: Process to confirm alignment
- Long-term goal: Formal conformity model

Accreditation: Given to a program or institution by an objective evaluating body as meeting a set of standards.

Provider Program Requirements

- JTA-based learning objectives
- Syllabus, lesson plan
- Assessment of results
- Adequate staff / facilities

Individual Credential: Given to an individual by an objective evaluating body as meeting a set of standards.

Competencies

- FBPTA
- Agency-specific

Accreditation
FBPTA or 3rd Party

FBPTA “Qualifications”
Certificate Programs / Certifications
Professional Registrations / Licenses

FBPTA Competency Model
Core Competencies and performances
Based on Job Task Analyses and community review



Qualification Review Process

Step 1

- Agency identifies a qualification

Step 2

- Qualification provider prepares [FBPTA Submission Form](#), and
- submits form and materials to AskFMI@gsa.gov

Step 3

- 3rd Party Contractor reviews and provides an evaluation
- Qualification provider allowed a response

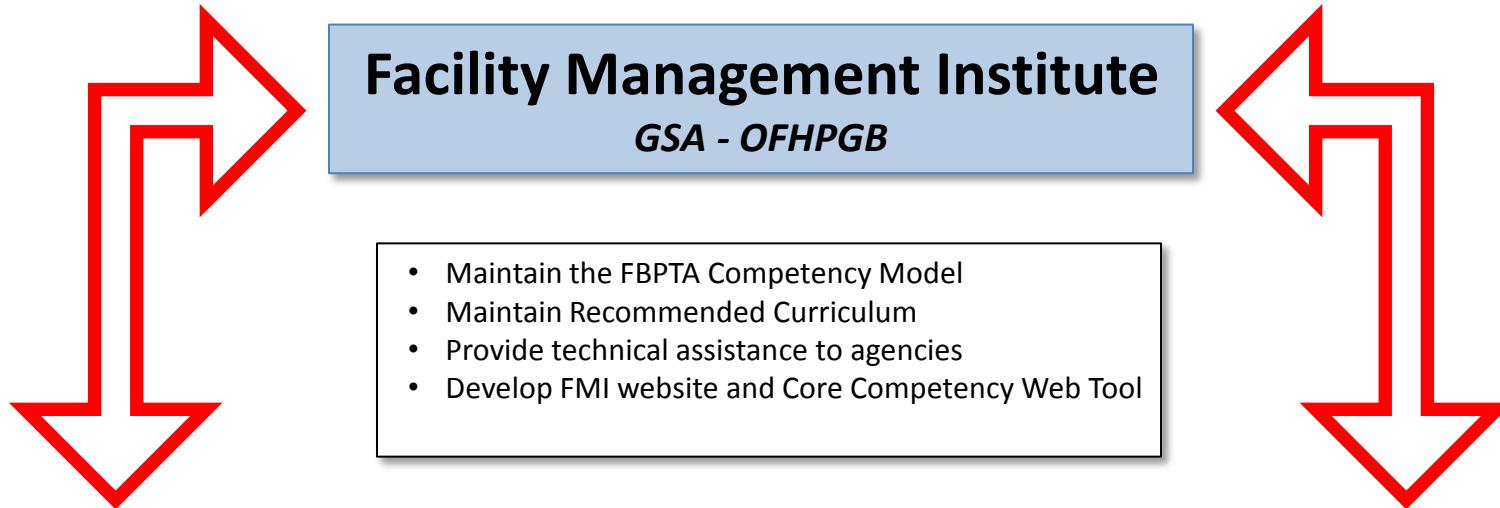
Step 4

- Submission and final evaluation are posted on FMI for comment

Step 5

- Updates are made to FBPTA Curriculum and Core Competency Web Tool

3rd Party evaluations to begin August 2013



- Maintain National GS-1176 Classification
- Implement PD / Performance Plan updates
- Coordinate with Collective Bargaining Units
- Coordinate with National CHCO Council



- Conduct baseline assessment of personnel
- Identify training priorities from assessment
- Establish and implement training plans
- Provide feedback on competency model, curriculum and tools

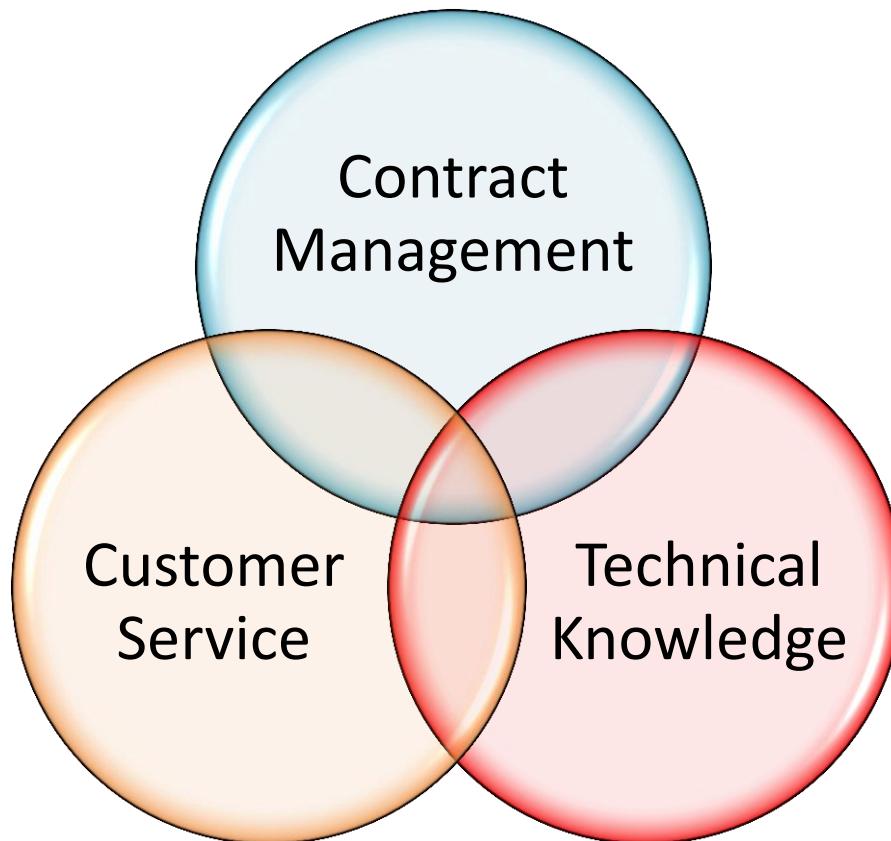




GSA - Organizational “Coverage”

Competency Area	Core Competency	Performance	Ref	Property Management			Energy Management			Environmental Compliance			Fire Life Safety			Asset Management			Project Management			Leasing Asset Manager			
				Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	Early GS 9-11	Journey GS 12-13	Master GS 14-15	
1. Management of Facilities O&M <i>(High Priority / High Value)</i>	a. Building Systems	1. Demonstrate familiarity with Building Systems.[1]		P				A								P									
		2. Demonstrate ability to work with Facilities team to assess a facility's need for building systems.		P				A							A			P							
		3. Demonstrate ability to oversee the acquisition, installation, and operation of building systems.		A	P			A							A			P							
		4. Demonstrate ability to work with Facilities Team to establish practices and procedures.		A	P			A										A							
		5. Demonstrate ability to work with Facilities Team to determine and administer the allocation of building systems' resources.		A	P			A										P							
		6. Demonstrate ability to monitor and evaluate how well building systems perform.		P				P										P							
		7. Demonstrate ability to manage corrective, preventive and predictive maintenance.		P				A										A							
		8. Demonstrate ability to work with Facilities Team to develop emergency procedures for building systems.		A	P										P			P							
		9. Demonstrate knowledge of how to implement disaster recovery plans for building systems as required.		A	P										P			P							
	b. Building Interior	1. Demonstrate knowledge of how to evaluate building structures and permanent interiors.		P														P							
		2. Demonstrate ability to manage the service/repair requests and maintenance and cleaning needs of building structures and permanent interior elements.		P														P							
		3. Demonstrate ability to evaluate furniture and equipment performance.		A														A							
		4. Demonstrate ability to manage the maintenance and cleaning of furniture and equipment.		A														A							
	c. Building Exterior	1. Demonstrate familiarity with managing grounds and exteriors, parking structures, site utilities, landscaping and grounds, exterior envelope (roof, brick, masonry, etc.).		P				A										P							
		2. Demonstrate ability to assess the effect of climate and extreme environmental conditions.		P				A										P							
		3. Demonstrate ability to evaluate the performance of grounds and exterior elements.		P														P							
		4. Demonstrate ability to assess the need for alterations in grounds and exterior elements.		A	P													P							
		5. Demonstrate ability to manage the maintenance and custodial needs of grounds and exterior elements.		P														P							
	d. Other Facility Systems	1. Demonstrate ability to manage equipment and infrastructure for vehicles and vehicle maintenance.		A														A							
		2. Demonstrate ability to work with Security Personnel as required.[2]		P														A							

To Drive Employee Requirements

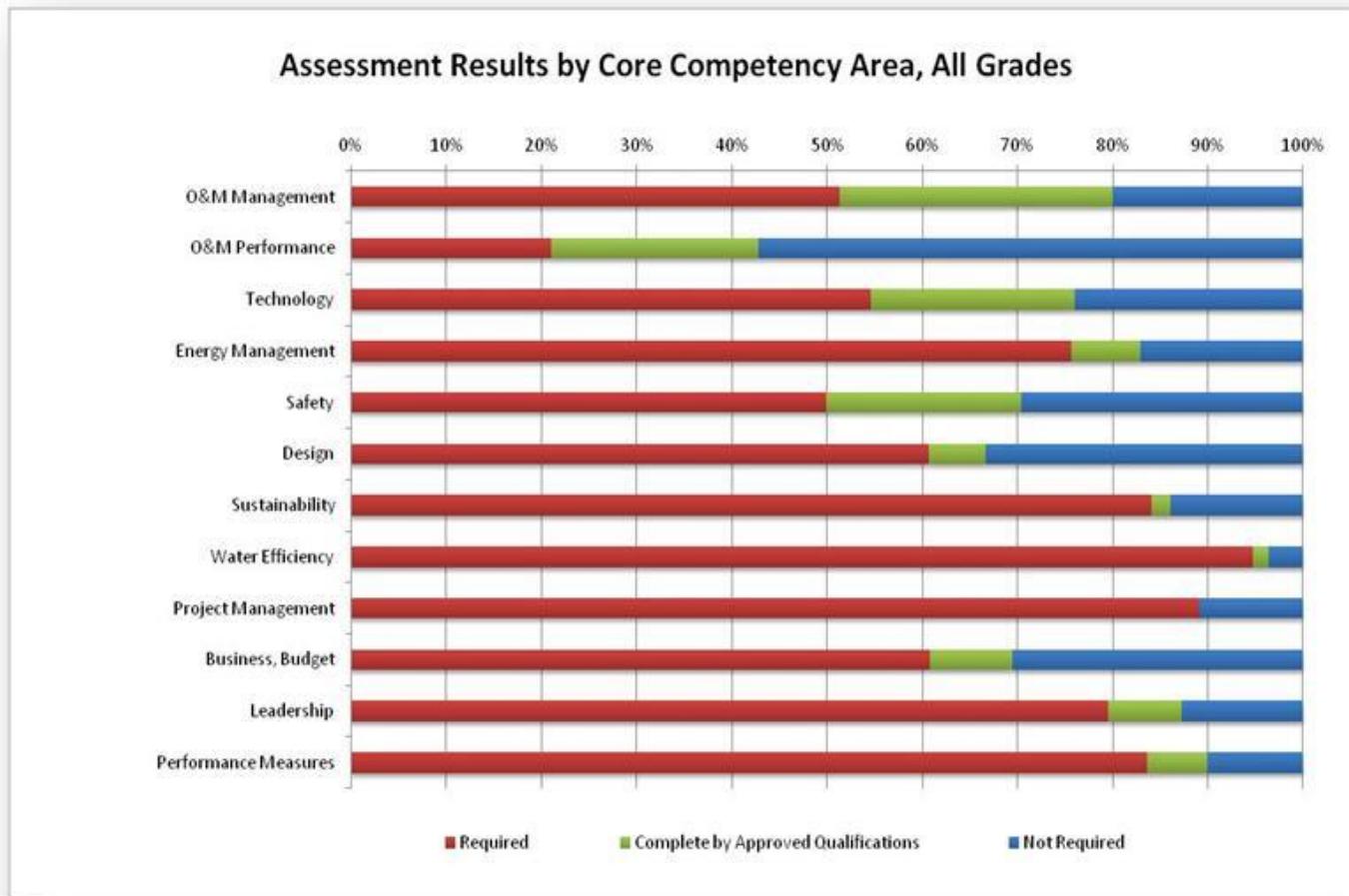


Position description and Performance Plans for GS-1176 property manager position need greater technical emphasis:

- Operate & maintain HVAC systems
- Technology - BAS, CMMS
- Demand reduction strategies
- Design “Infrastructure”
- Managing sustainability programs
- Life cycle cost analysis (LCCA)



Early Assessment Results



Early Assessment Results

Workforce Qualifications			
Certifying Entity	Qualification	Count	Percent of Workforce
BOMI	Real Property Administrator (RPA)	156	15%
BOMI	Facilities Management Administrator (FMA)	119	12%
LEED	Green Associate	65	6%
BOC	Building Operator Ceritification (BOC)	62	6%
IFMA	Facility Management Professional (FMP)	52	5%
BOMI	Facilities Management Certificate (FMC)	38	4%
GMU	FM Certificate	31	3%
BOMI	Systems Maintenance Technician (SMT)	24	2%
BOMI	Systems Maintenance Administrator (SMA)	24	2%
BOMI	Property Administrator Certificate (PAC)	21	2%
LEED	LEED AP Operations & Maintenance (O+M)	20	2%

Grade Band	Employees Claiming a Qualification	
	Count	Percent of Grade Band's Workforce
GS11 & Below	61	19%
GS12/13	317	43%
GS-14/15	3	13%
Total	381	37%



Competency Advisory Group

<u>Agency</u>	<u>FRPP Total SF</u>	<u>FRPP Total O&M Cost</u>
Department of Defense	2,130,004,000	\$14,628,672,000
General Services Administration	419,664,000	\$6,306,664,000
Veterans Affairs	154,616,000	\$1,018,566,000
Energy	129,000,000	\$2,144,370,000
Interior	104,158,000	\$1,418,388,000
State	74,074,000	\$1,095,874,000
Justice - JMD	70,401,000	\$614,316,000
Agriculture	58,780,000	\$889,943,000
Homeland Security	48,609,000	\$458,923,000
NASA	45,786,000	\$561,735,000
Health and Human Services	36,142,000	\$515,894,000
Transportation	28,050,000	\$430,856,000
Tennessee Valley Authority	26,939,000	\$77,329,000
Labor	25,228,000	\$127,580,000
Smithsonian	12,053,000	\$256,411,000
Commerce	7,850,000	\$91,796,000
Treasury	6,128,000	\$139,717,000
National Archives and Records Administration	5,270,000	\$54,296,000
State (USAID)	5,227,000	\$74,932,000
Environmental Protection Agency	4,293,000	\$55,388,000
National Science Foundation	2,369,000	\$34,552,000
	3,394,641,000	\$ 30,996,202,000

- Comprised of reps from major landholding agencies
- Updated [membership list](#) maintained on FMI.gov



Advisory Group - Tasks

- Priority on developing “High-Priority / High-Value” competencies
- Differentiate performances:
 - Distinctions between early career and master proficiency?
 - Distinctions where functional roles overlap?
 - When / what experience is necessary for proficiency
- How do we address small, distributed locations?
- Consider “sector” working groups
 - Healthcare, specialized labs, secure locations, collections
- Better define continuing education, contractor compliance



FBPTA - Next Steps

- Stakeholder input on Competency Model – Aug 12th
- Start 3rd Party Qualification Reviews – Aug 15th
- Advisory Group Meetings – Aug 28th
- Curriculum update submissions – Aug 31st
- Final updates to Model and Curriculum – Sep 30th



Community of Practice

- Beginning in September 2013
- Present topics of interest to Facility Managers
- Start with a focus on “Federal References”
- Develop a constituency, build a resource library
- Please suggest topics!



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FEDERAL HIGH-PERFORMANCE GREEN BUILDINGS

Conclusion

- Questions / discussion?
- Give feedback
 - Competency model and recommended curriculum are drafts
 - Post comments on [FMI thread](#), or, email AskFMI@gsa.gov
- Get involved - visit www.fmi.gov and register!
- My contact information: brian.gilligan@gsa.gov

