

# 2013 Annual Update to the Core Competencies and Recommended Curriculum for Federal Buildings Personnel

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This document summarizes the results of efforts to review or test the FBPTA Competency Model and Curriculum by Federal personnel in several agencies and the discussions of the FBPTA Competency Advisory Group which was formed by GSA to gather Federal input. It seeks to clarify how the Model should be applied to organizations and individuals and tie that to qualifications that are available through the Federal government, industry associations and academia.

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[Appendix 1 – FBPTA Core Competencies and Recommended Curriculum – 2013 Update](#)

[Appendix 2 – FBPTA Core Competencies – 2013 Update \(Abridged Version\)](#)

## Overview – Update to the Competency Model

The Federal Buildings Personnel Training Act (FBPTA) requires GSA to develop and maintain a set of Core Competencies or “Model.” Federal personnel must comply with the parts of Model that apply to them. In order to do this each Federal agency must decide how to assign competencies to individuals. Given the diverse approaches to facility management, human resource planning, and labor agreements it is not possible to provide uniform instructions. However, stakeholders have asked GSA to outline an approach they can use to determine who the Act pertains to and what is required of them. Additionally, they agree that human capital planning staff must play a role in carrying out this approach. This update provides high level guidance for this and evaluates training resources that meet the Act’s requirements. The FBPTA and the Competency Model apply to contractor personnel performing functions covered by the Act. However, agencies are encouraged to focus their efforts on applying the Act’s requirements to federal personnel before implementing with contractor staff.

GSA developed this update with the FBPTA Competency Advisory Group, an informal body of facilities representatives from various landholding agencies. A list of the group’s membership is maintained at [this link](#). The Group will continue to meet on a regular basis to provide further guidance and clarification as needed. Its priorities are discussed throughout the Update.

## Apply the FBPTA to Organizations and Individuals

This update makes few changes to the structure and content of the original Model. However, to understand how to apply it to organizations and individuals, the update discusses:

- 1) “Roles” or parties generally responsible for each competency
- 2) “High Priority / High Value,” competencies that most influence operating costs
- 3) Competencies important early in a career
- 4) Competencies important for general or cross-functional awareness
- 5) “Federal References, Local Knowledge and Agency-Specific Training”
- 6) Other minor points to clarify in the Model

These should guide and prioritize training efforts. Focusing on high-impact, early career competencies will yield greater benefit and a longer-lasting return on investment. Figure 1 summarizes the Update at a high level. [Appendix 1](#) provides a much more granular level of detail.

### **Assign Competencies to “Roles”**

The Model covers a wide range of skills. No individual is expected to demonstrate every competency. Nor will every competency will be found at every site every day. Compliance will be achieved by many people across an organization. In many cases this will include regional experts responsible for a large number of buildings. The Advisory Group identified three broad “roles” or categories of personnel for which consistent guidance could be described. These roles are defined as follows.

**Facility Management (FM):** Professionals with broad skills that coordinate space, resources, infrastructure, people and organizations in buildings and structures. Strategically, they advise how decisions impact facilities, services and risk. Operationally, they manage corporate and regulatory compliance and ensure proper operation of the building systems by technical staff. They create a safe and cost-effective environment to accomplish mission and business objectives. They coordinate Energy Management and Operations and Maintenance personnel, and hold positions like Facility Manager, Building Manager, Property Manager, Asset Manager, and Project Manager.

**Energy Management (EM):** Professionals with deep technical skills responsible for reducing costs for energy, water, and other resources without compromising mission or business objectives. They assess, develop, and carry out energy conservation measures and other resource efficiency opportunities. They create project requirements and provide energy performance goals for the Facility Management organization. They hold positions like Energy Manager, Sustainability Manager, and Resource Efficiency Manager.

**Facilities Operations and Maintenance (O&M):** Diverse trades and professions that perform operations and maintenance for real property. They take direction and get resources from the Facility Management organization. They hold positions like Stationary Engineer, Technician, and Operator. Their competencies often require hands-on experience with equipment and processes specific to a site. The qualifications listed in the Curriculum may not provide the level of detail needed. Future updates will provide greater depth.

Figure 1 shows how competencies were assigned to each Role in dark blue. The diversity of Facility Management organizations across the government requires a broad and fairly general approach. It is likely that individuals in one agency will be required to perform different functions than a similar position in another agency. Some individuals will wear multiple “hats” and be proficient in areas that cross the boundaries defined above. Some individuals will have local responsibilities and some organizations will cover competencies at a regional level. This is understood and anticipated. Agencies will define how their staff will work together to cover all the competencies.

### **Develop Cross-Functional Knowledge**

Cross-functional training is important. While roles have assigned responsibilities, they must be able to work together. Doing so means knowing something about how other roles do their jobs. For example, Facility Managers benefit from knowing generally how O&M personnel should operate HVAC Systems. Both benefit from understanding Demand Reduction strategies that can help meet the goals set by Energy Managers. Areas to emphasize for cross-functional training are shown in Figure 1 in light blue.

### **Focus on High-Priority / High Value Competencies**

The Model attempts to describe all the competencies needed by facility management organizations. For this reason, many are routine, or, perhaps already well ingrained in daily work. The Advisory Group identified competencies with significant impact on the quality and cost of facility operations. This information can be used by agencies to focus and prioritize their efforts. For example, GSA used the

rating to study whether existing human resource documents, training programs and development plans address these priority areas. The study found the Property Manager Position has sufficient focus on customer service and contract management but lacks sufficient technical knowledge of building operations. This position is being adapted to address:

- Building systems and their design intent.
- Predictive maintenance strategies.
- Trends in facility management “technology systems.”
- Oversight of sustainability programs.
- Life cycle assessments and life cycle cost analysis and applying them to planning and budgeting.

High priority / High Value competencies are indicated in Figure 1 by red text. The Advisory Group will focus future efforts on these priority competencies.

Competency Area (12)	Core Competency (43)	Responsibility			Competency Area (12)	Core Competency (43)	Responsibility			Competency Area (12)	Core Competency (43)	Responsibility		
		FM	EM	O&M			FM	EM	O&M			FM	EM	O&M
Management of Facility O&M	<b>Building Systems</b>	■	■	■	Energy Management	<b>Demand Reduction</b>	■	■	■	Project Management	Initiate	■	■	■
	Building Interior	■	■	■		<b>Assess Initial Conditions</b>	■	■	■		Execute	■	■	■
	Building Exterior	■	■	■		Commissioning and ESPC	■	■	■		Closeout	■	■	■
	Other Facility Systems	■	■	■		Coordinate with Public Utilities	■	■	■		Training	■	■	■
Performance of Facility O&M	<b>HVAC Systems</b>	■	■	■	Safety	Basic Requirements	■	■	■	Business, Budget & Contracting	<b>Total Cost of Ownership</b>	■	■	■
	<b>Electrical / Mechanical Systems</b>	■	■	■		Infrastructure	■	■	■		<b>Life Cycle Assessment</b>	■	■	■
	Life Safety Systems	■	■	■		Contractor Program Oversight	■	■	■		Contracting	■	■	■
	General Building Maintenance	■	■	■		Occupant Interface	■	■	■		<b>Budget Formulation, Execution</b>	■	■	■
Technology	<b>Best Practices &amp; Innovation</b>	■	■	■	Design	Planning	■	■	■	Leadership & Innovation	Communication	■	■	■
	<b>Technology Solutions</b>	■	■	■		<b>Infrastructure</b>	■	■	■		Personnel	■	■	■
	Building Automation Systems	■	■	■	Sustainability	Regulations and Requirements	■	■	■		<b>Innovation</b>	■	■	■
Maintenance Management Systems	■	■	■	<b>Implementation</b>		■	■	■	<b>Enterprise Knowledge</b>	■	■	■		
						Regulations, Goals, Best Practices	■	■	■	Performance Measures	<b>FBPTA</b>	■	■	■
					<b>Water Audits</b>	■	■	■	Acquiring Data		■	■	■	
					Water Efficiency	■	■	■	Establishment and Implementation	■	■	■		
<b>Red Text = High Priority, High Value Competencies</b>				Primary responsibility for FM, EM or O&M roles				■	Not primary responsibility, but, awareness beneficial				■	

Figure 1: Assignment of Functional Roles, Cross Functional awareness and High-Priority / High-Value Competencies

### Distinguish Early-Career vs. Master-Level Requirements

The Model defines competencies at a certain level. However, employees will have less breadth and depth of knowledge early in their career than when they reach a level of mastery. Professional associations identify skills that have a large impact at the beginning of a career. Frequently, they offer Certificates that address these important early-career skills. The Advisory Group and the Better Buildings Workforce Guidelines committee created by the Department of Energy and National Institute of Building Sciences will develop an entry-level certificate focused on the high-priority / high-value

competencies and federal references. This certificate will be based in part on the existing Curriculum of free, online courses. It will provide a baseline or foundation for all employees involved in federal buildings. It will also provide a clear path to more advanced training programs by academic institutions and professional associations.

### **Federal References, Local Knowledge, and Agency-Specific Training**

The Model lists many “Federal References.” These represent trends and best practices produced by Federal experts, as well as, unique requirements placed on Federal buildings. Some examples include:

- The Federal Energy Management Program’s O&M Best Practices Guide.
- The Laws, regulations and executive orders governing federal energy and water conservation.
- The National Institute of Building Science’ Whole Building Design Guide.
- Knowledge of the FBPTA.

Additionally, the Model requires individuals to have specific local knowledge like the location of a utility meter and the rate structure of the local utility company. Finally, competencies in project management, project requirements development and contracting involve individual agency or Federally-mandated training such as GSA’s Global Project Management certificate, or, DAU and FAI’s certificates for Contracting Officer, Contracting Officer’s Representative, and Program and Project Management. These references are identified by yellow highlight in [Appendix 1](#). At present they cannot be completed through any of the qualifications listed in the Curriculum, they must be directly verified by an individual’s supervisor.

### **Clarifications / Future Priorities**

As mentioned above, the original Model has been left largely intact. This update does, however, provide several important clarifications.

Minor changes were made to the wording of individual competencies and performances to enhance clarity. Additionally, the level of detail expressed at the performance level has been made consistent with other competency models in common use. Supporting detail is now contained in background comments rather than in the text of the performances themselves.

Substantive changes to the “Design” Competency Area have been made which should make its application clearer. Specifically, the Advisory Group has focused the Design Planning competencies on the coordinative role played by the facility management organization rather than on the skills required of architects and engineers who provide design services. This competency area has been assigned primarily to Facility Managers for this reason. However, the Group believes that cross functional training in the design intent behind various building systems, and, participation in integrated design by the other Roles is extremely beneficial.

Similarly, the competencies under “Safety” have been assigned to both the Facility Management and Operation and Maintenance Functional Roles. These competencies are the responsibility of all Federal Facility Management and Operations and Maintenance personnel.

The Advisory Group will continue to meet and address the following priorities:

- Define agency-level strategies to cover the FBPTA competencies.
- Form working groups to address “Sector” or specialized facilities. (For example healthcare, laboratories, special collections, high-security, etc.)
- Distinguish between requirements for each performance at the early-career and master levels
- Identify requirements for practical experience.

## **Update to the Recommended Curriculum**

The Curriculum from June 2012 contained twelve excellent, government-developed courses. They provide no-cost, on-line training in specific topics. In many cases these include or are complementary to the “Federal References” in the Model. These courses provide a solid foundation for personnel to build upon. Since 2012, the constraints to time and training budgets have only become more severe making it more important for agencies and individuals to fully understand the full spectrum of resources available and to have a basis for comparison. The 2013 Update expands the Curriculum to include all qualifications reviewed by GSA and allows a side-by-side comparison of them.

### **Align Qualifications to the Model**

Federal buildings personnel can comply with the FBPTA by completing various “qualifications.” Qualifications are defined as courses, certificates, certifications, degrees, licenses and professional registrations. [Appendix 1](#) lists all the qualifications that GSA has mapped in one place to allow an analysis of the benefits each provides. The process of aligning qualifications to the Model, and, of evaluating the quality and consistency of delivery is similar to accreditation. This is a [link to the process](#) GSA uses for these reviews. It will be followed for new qualifications to the Curriculum, as well as stakeholder requests for update, modification, or correction to the evaluations shown in the Update.

### **Non-Federal Entities – Membership, Certificates, Certifications and Degrees**

GSA and the Facility Management Institute suggest that federal employees seek advanced credentials where feasible. These qualifications often provide peer-reviewed standards, consistent evaluation, and rigorous enforcement. Using them shifts the cost and risk of maintaining the credentialing systems away from the government. That said each qualification has unique focus and strength. Each agency or employee must decide the best path to follow. GSA will work with providers to align their products with the Model to provide a wide range of targeted training options for Federal employees.

Professional associations and academic institutions are venues for federal personnel to meet other professionals in their line of work. The benefits include networking, sharing best practices, and alternative perspectives that come when junior staff associates with their more senior peers. GSA and the Facility Management Institute encourage participation in such groups by all personnel subject to the FBPTA’s requirements. Federal personnel are further encouraged to follow the recommendations of these entities for continuing education

## Navigate the 2013 Curriculum Update

The 2013 Update translates the FBPTA Model and Curriculum into spreadsheet format. This is provided as [Appendix 1](#). The competencies are contained in columns A-K and all the qualifications approved by GSA to date are shown in the columns to the right. Combining these documents allows readers to make an easy comparison each qualification, and determine the following:

- 1) Which qualifications align with each of the three “roles?” (Qualification X meets 80% of Facility Management but only 30% of Energy Management competencies.)
- 2) Do the qualifications address high priority / high value competencies? (Qualification X addresses all the high-priority competencies.)
- 3) Are the qualifications geared toward early career or master level staff? (Qualification X addresses more advanced requirements than qualification Y.)

Additionally, the updated Curriculum identifies the Federal References, Local knowledge and Agency-Specific training and provides links to the information online.

### Find Out How Qualifications Align to “Roles”

The Model shows how individual performances align to Roles with color coding and abbreviations. Performances aligned with Facility Management are marked in red and have an “FM” symbol in Column H. Energy Management is marked in green with an “EM.” Facility Operations and Maintenance is shown by blue and “O&M.” Those assigned to more than one role are shown in brown.

Percentages in rows 6 through 8 of each column tell how much of each Role a Qualification covers. There are three percentages listed in each row (e.g. 5% / 6% / 10%). The first shows the share of all competencies assigned to the role. The second shows the share if the “Safety” related performances are removed. The third shows the share counting only the Early-Career performances covered. This allows a quick comparison of the focus and breadth of coverage offered by each qualification. This is not an indicator of quality or consistency of delivery. Agencies should decide which qualifications to pursue based on their actual experiences. To assist in this process, GSA’s Skills Assessment Web Tool, [located here](#), can now capture end-user and comments and quality ratings.

*Note: In 2012, GSA’s review of the qualifications provided by professional associations found few with a focus on safety at the level required by the Competency Model. For this reason the comparisons of coverage are shown both with and without the safety performances. This does not mean that Safety is not important for Federal personnel. Indeed, it is critical. Many safety programs and certifications exist both in the government and private sectors and the Advisory Group will make adding these qualifications a priority for the coming year. Where practical, GSA will work with professional associations and academic institutions to place more emphasis on these competencies.*

### Find Qualifications that Focus on High Priority / High Value Competencies

High value competencies are labeled in red text in column D. This information may be used as guidance to prioritize time and funding available for training on competencies with significant impact on costs.

### **Find Qualifications that Focus on Early Career Qualifications**

Early Career focused competencies are designated in Column K with the word “Yes.” This information can be used to prioritize training efforts where they will have lasting impact.

### **Identify the Federal References, Local Knowledge and Agency-Specific Training**

These competencies are listed in Column J. Federal References are marked by a title that includes, where applicable, a link to the website containing the reference or training required. The rows are also highlighted in yellow indicating that they belong in this category.

### **Request Evaluation of New or Revisions to Existing Qualifications**

The Curriculum is intended to be a living document that will change and grow as new qualifications are identified and as the Model evolves over time. GSA developed a consistent approach to allow submission, receipt and evaluation, feedback and public comment on all requests for new Qualifications. This process is managed by a third party and conducted in an open forum. Providers can also use this process to request GSA update or modify its evaluation of Qualifications already in the Curriculum. A description of the process and the form required for submission may be found at [this link](#). All such requests will be received electronically through FMI at the email address [AskFMI@gsa.gov](mailto:AskFMI@gsa.gov). No submissions will be accepted outside this channel. Submissions will be evaluated in priority order based on demand from Federal agencies, breadth of focus, and alignment with high-priority / high-value competencies. Addition of new qualifications will be made on an ongoing basis as reviews are completed. Updates or corrections will be considered semi-annually in January and July.

### **Conclusion**

GSA intends for this Update to help Federal agencies and individuals plan their approach to comply with the FBPTA. The Advisory Group that was formed to develop the Update will continue to meet to refine the Model and Curriculum and to help agencies implement their approach. Questions and comments on this Update may be directed to Brian Gilligan, PE at [AskFMI@gsa.gov](mailto:AskFMI@gsa.gov).