

Presentation to the Human Resources Management and Training Workshop

- Align business needs with workforce competencies
- Provide insights into changing nature of the work and the related occupations
- Provide foundation for all human capital management functions, including training, recruitment, succession management, and contracting

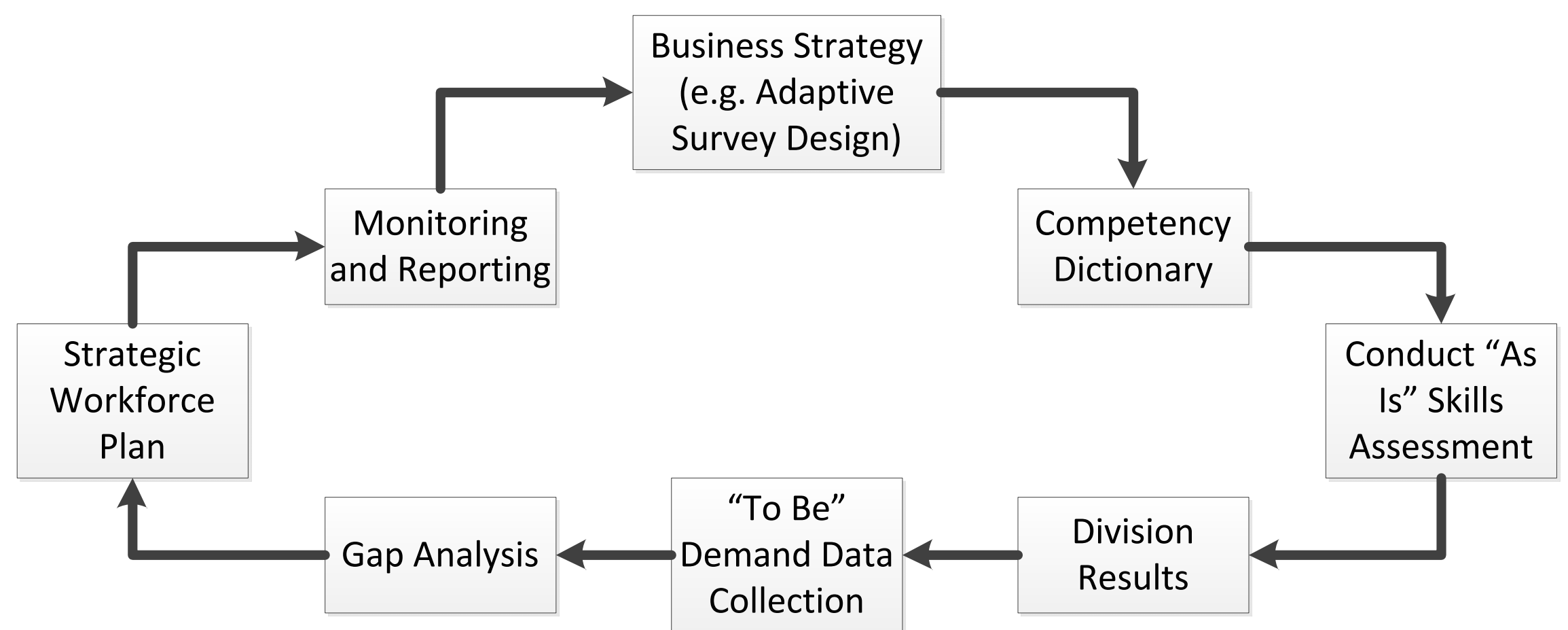


Figure 1: Strategic Workforce Planning Process

Competency: a skill, knowledge, ability, or behavior that defines successful work performance, including both *technical* and *interpersonal* skills

Census Bureau competency model is based on the work of the organization instead of specific occupational series (most assessments focus on one or more Mission Critical Occupations)

- Competencies cover all Headquarters professional work
- Competencies align with the work across organization, not just mission-critical occupations, to develop an enterprise-level competency picture

Basic infrastructure such as an organizational framework or work breakdown structure are required for competency dictionary and strategic workforce planning to be useful as a corporate approach to closing competency gaps

- For the Census Bureau, the emergence of the organizational framework was tightly coupled with enterprise change initiatives such as activity based costing, cost estimation, and shared services
- We identified and validated competencies associated with key strategic initiatives serve as proxy for changing work and workforce

Competency Assessment: data from employees and supervisors on the current set of workforce competencies (including both federal and contractor workforce). Assessments included 342 technical competencies linked, 22 interpersonal competencies, and 269 products, systems, and technology areas.

- Few U.S. federal organizations conduct skills assessments and gap analysis at the enterprise level
- No standard to define “high” demand; results establish a baseline for future demand assessments
- Relative demand for competencies based on count of organizations (divisions) underrepresented in a competency, as well as eight strategic initiatives

Mandating supervisor responses was necessary to obtain a near 100% response rate critical to preclude response bias

- About 1,000 supervisors assessed over 3,500 (97%) of Headquarters employees in professional job series so the enterprise results represent a big picture strategic view
- About 2,600 employees (75% response rate) provided voluntary self-assessments in addition to the supervisor assessments

Data were valid for determining competency gaps but not for other uses such as a skills bank

SLC 70: Data Review, Analysis, and Correction-Related Competencies

Work in this area includes review and analysis conducted prior to developing data products, including both micro and macro data review and analysis.

Sub-Component/Competency Area	Core	Con-Acq	Emerge	Decline
SLC 7001 Microdata Review and Analysis				
SLC 7001.1 Microdata Review — preparing and following review procedures to identify problems and to take corrective actions with the survey or census or other statistical data micro data using estimates and tools; resolving edit failures or errors, as well as resolving referrals.			x	
SLC 7001.2 Edit Review — validating edits were applied according to specifications and ensuring that programming resulted in accurate output.	x			
SLC 7001.3 Peer Reviews — providing micro data to other subject matter experts to check for face validity using other sources for the microdata estimates or values.			x	

Figure 2: Example from U.S. Census Bureau functional competency dictionary

Version: 2.1.2		TOP LEVEL: Survey Lifecycle (1)					Last Updated: August 2, 2013	
		← Components →						
Survey Design		Frame Development	Instrument Development	Sample Design and Implementation	Data Collection	Data Editing Imputation and Estimation	Data Review Analysis and Correction	Data Products and Dissemination
10		20	30	40	50	60	70	80
Subcomponents →	Census/Survey/Program (Project) Planning (all phases)	Frame Creation and Maintenance	Paper Instruments	Sample Design	Data Collection Preparation	Data Editing	Microdata Review and Analysis	Data Product and Documentation Preparation
	1001	2001	3001	4001	5001	6001	7001	8001
	Survey Objectives, Scope, Coverage and Requirements	Geospatial Activities	Internet Instruments	Sample Selection and Validation	Respondent Contact Strategies and Materials	Data Imputation	Macrodata Review and Analysis	Disclosure Avoidance Methods, Processing and Review
	1002	2002	3002	4002	5002	6002	7002	8002
	Design and Development		CAPI Instruments	Sample Maintenance	Response Monitoring and Analysis	Data Estimation		Data and Documentation Dissemination
	1003		3003	4003	5003	6003		8003
	Foreign Trade Regulations (FTR)		CATI Instruments		Paper			Data and Documentation Archiving
	1004		3004		5004			8004
			Instruments for Other Collection Modes		Internet			
			3005		5005			
					CAPI (Panel)			
					CATI (Telephone Center)			
					Other Modes			
					Administrative Records (Third Party Data)			
					Follow-up Operations			
					Data File Transfers Processing and Closeout			
					5001			
Version: 2.1.2		TOP LEVEL: Mission Enabling and Support (9)					Last Updated: August 2, 2013	
		← Components →						
Program (Project) Management		Human Capital Management	Stakeholder Relations	Financial Management / Acquisitions	IT System Development and Operation	Enterprise Enabling IT Services	Research and Evaluations	Administration Support Services
10		20	30	40	50	60	70	80
Subcomponents →	Schedule Management	HR Strategy	Outreach and Marketing	Budget Formulation (Budget for Future Year)	IT Requirements Analysis	IT Security	Program or Function Specific Applied Research	Facility Operations and Support
	1001	2001	3001	4001	5001	6001	7001	8001
	Risk Management and Mitigation	Staff Acquisition	Congressional Support	Budget Execution (Current, Actual and Past Year Costs)	IT System Analysis and Design	Data Center Operations and Support	Corporate Applied Research (benefits more than one program or directorate)	Accountable Property Management
	1002	2002	3002	4002	5002	6002	7002	8002
	Communication and Management (Internal)	Compensation and Benefits Management	Inter-governmental and Tribal Affairs	Cost Estimation, Cost Accounting and ABC	IT System Development (coding)	Storage Area Network Services	Evaluations	Physical and Personnel Security
	1003	2003	3003	4003	5003	6003	7004	8003
	Email	Workforce Development and Training	Correspondence Management	Accounts Payable	IT Testing	Telecommunications Support	Historical Applied Research	Records Management
	1004	2004	3004	4004	5004	6004	7005	8004
	Portfolio Investment	Labor Relations and Union Activities	Print Media	Accounts Receivable	IT Implementation (Deployment)	Desktop Services and Support		Mail Delivery Support Services
	1005	2005	3005	4005	5005	6005		8005
Subcomponents →	IOE (Including development Projects)	Performance Management	Digital and Web Media	Financial Reporting and Financial Audit Support	IT Maintenance (operations)	Enterprise Architecture		Enterprise Publication and Copy Support Services
	1006	2006	3006	4006	5006	6006		8006
	Strategic Planning and Program Performance Measurement (Balanced Scorecard)	Employee Relations	Radio and TV Media	Non-IT COB/Task Managers	IT Disposition (Retirement)	Middleware Services		Travel and Conference Support
	1007	2007	3007	4007	5007	6007		8007
	IAAs and MOUs	Health, Safety, and Workers' Compensation	Overnight (Data Calls, Support and Response)	Sourcing and Acquisitions	IT Contract Program Management	Help Desk Services (Providing and Receiving Services)		
	1008	2008	3008	4008	5008	6008		
	Business Process Definition and Modeling	Census Goodwill (K-1, Affinity Groups etc.)	International Program Support		Math Stat, Researcher, Subject Matter Programming	IT Innovation and Research		
	1009	2009	3009			6009		
	Language Service	Organization and Position Management						
	1010	2010						
		Separation Management						

Figure 3: Census Bureau enterprise work breakdown structure – the Survey Lifecycle/Mission Enabling Support Framework

Division Results and “To-Be” Demand Assessment

Divisions conducted quality checks of competency results to validate the scope of work for each part of the organization. We collected demand data at the division level by identifying whether each competency, product, system, and technology area is:

- Under-represented by current federal employees,
- Adequately-represented, or
- Over-represented by having too many proficient employees for the current or anticipated workload

We recommend a **qualitative approach to demand data collection**. The results will reveal a quantitative picture. This reduces the problem of managers focusing on numbers of full-time employees when that is often difficult to do.

Gap Analysis

We analyzed competency and demand results by:

- Survey Lifecycle/Mission Enabling and Support Framework components
- Enterprise and directorate levels
- Relationship of strategic initiatives

Distributed proficiency, demand, and succession planning data such as retirement eligibility to Associate Directors. Associate Directors provided their top gap priorities for immediate closure as input for enterprise priorities. The final determination was made by our Deputy Director.

Strategic Workforce Plan

Our Action Plan template includes generic strategies, specific actions, teams, measures, targets, costs, and reporting. We developed a Strategic Workforce Plan for closing priority competency gaps. Success depends on turning generic strategies into discrete steps/action items with quantifiable measures and realistic targets. We recommend being strategic on competencies and targets for closure – select 3-5 to be successful and adjust the plan as needed.

- Incorporate succession management into strategic workforce planning by using both workforce and competency data to determine priority gaps
- Succession planning data provides indicator of “action plan risk” such as attrition or bench strength risks
- Provide ranked competency gaps to executives to determine overall priorities
- Strategies for closing gaps incorporate succession management and characteristics of the workforce, which focuses succession management on competencies and mission priorities

Monitoring and Reporting

Quarterly monitoring and reporting resides with the action plan. We created an additional “Implementation Plan” that defines roles and responsibilities for implementing action items and ongoing processes.

- Roles include competency gap owners, organizational leads, executive management, HR functional areas, and workgroups
- Plan incorporates organizational change methods into major programs and initiatives, including a communications strategy and appropriate levels of training
- Monitoring includes periodic environmental scan to determine if sufficient change has occurred to warrant updating overall plan or re-assessing the workforce
- Build overall strategic workforce planning capability by aligning policies and processes with competencies (e.g., hiring, training)

Project Outcomes

Repeatable process that obtains information about our organization’s present and future workforce needs

- Established a Headquarters workforce assessment baseline
- Aligned enterprise work with competencies strategic initiatives
- Established strategies that can be used for any assessment to incorporate workforce data into HR functions
- Incorporated succession management, leadership and project management competencies into strategic workforce planning
- Provided insights into changing nature of the work and the related occupations via new position descriptions for systems engineering, cost estimation, program and project management
- Provided workforce results to help employees and managers make career and professional development decisions

BOTTOM LINE: Building a new capability is difficult and time consuming, requiring an iterative approach--build a little, test, adjust.

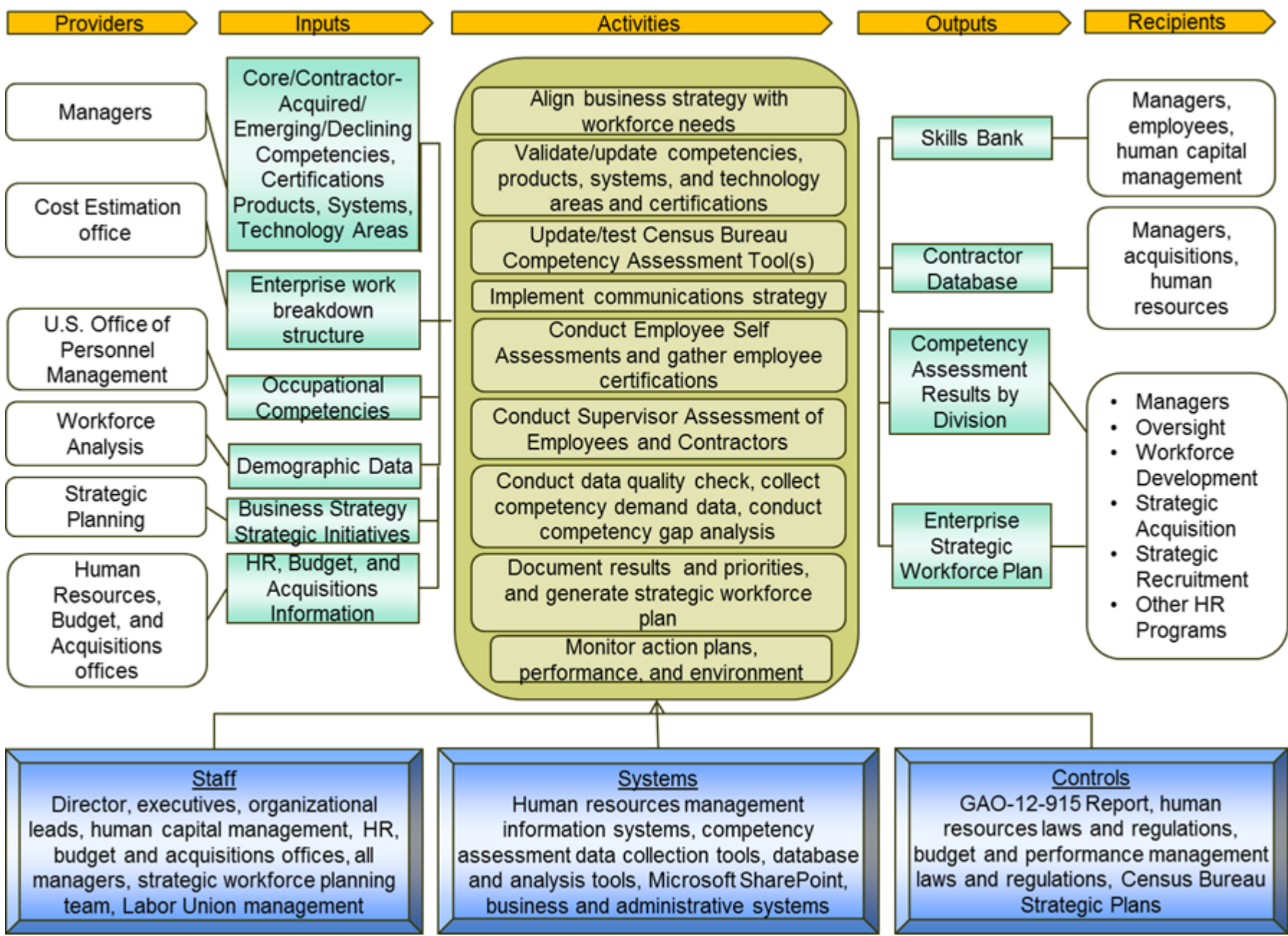


Figure 4: Strategic workforce planning context model

Time-Frame	Strategy	Human Capital Policies and Processes
Short-term	Use internal resources to close competency gaps and develop current employees	Job rotations and merit hiring based on competencies
	Use external sourcing to close competency gaps through recruitment and hiring to fill vacancies	Corporate hiring program in current format Vacancy management Applicant rating criteria Job analysis/position descriptions (project managers, cost estimators, systems engineers)
	Build key competency capability through training and professional development	Linking competencies to training Leadership and developmental competency models
	Acquire competencies through contracting/ service level agreements	Use existing contract vehicles Develop template for strategic sourcing that links to SLC/MES
Mid-term	Use external sourcing to close competency gaps through recruitment and hiring to fill vacancies	Strategic recruitment Internships Mission-critical occupations
	Build key competency capability through training and professional development	Individual development plans Strategic curriculum development
	Acquire competencies through contracting/ service level agreements	Modify existing contracts when possible
Long-term	Use internal resources to close competency gaps and develop current employees	Resource balancing Reorganizations Change management
	Build key competency capability through training and professional development	Mentorship Technical competency model New Learning Management System
	Acquire competencies through contracting/ service level agreements	Develop long-term acquisition strategy

Figure 5: Potential strategies for action plans

Description: The strategic workforce planning capability defines the organization’s present and future workforce requirements based on the mission, strategic direction, challenges, resource distributions, and funding and implementing strategies to meet those requirements.		
Key Supporting Competencies: <ul style="list-style-type: none">• Program/Project Management• Strategic Planning• Business Analysis• Strategic Workforce Planning• Performance Management and Measurement• HR Policies and Business• Human Capital Management• Strategic Workforce Planning• Workforce Development	High-level Processes: <ul style="list-style-type: none">• Strategic planning• Competency identification and validation• Competency assessment• Contractor documentation• Demand data/gap analysis• Strategy development• Monitor strategies, costs, and environmental changes	Supporting Technologies: <ul style="list-style-type: none">• Data Collection Tools (E-CAT, S-CAT, B-CAT, D-CAT)• Database (MYSQL)• Applications (CHRIS, HR Connect)• Analytic Software (e.g., report generator)
Supporting Information: <ul style="list-style-type: none">• Strategic Plan/Business Plan• Functional Competency Dictionary• Employee occupations and demographics• Strategic initiatives project documentation and validated competencies• Validated technical competencies• Contractors assigned to divisions• Certifications• Products, Systems, and Technology Areas• Strategies for closing gaps	Operational Metrics: <ul style="list-style-type: none">• Supervisor response on employees and contractor assessment is at least 95 percent;• 95 percent of divisions conduct quality checks;• 95 percent of divisions provide demand data;• At least 3 directorates develop action plans;• Workforce Demand and Supply for enterprise priorities are brought into alignment;• Training aligns with current and future needs; and,• Hiring and contractor acquisition strategies address the demand.• Estimated strategy costs align to projected	

Figure 6: Strategic workforce planning capability summary

Additional Success Factors

Executive champion with invested commitment from senior leadership is number one along with involvement and direct support from all levels of management including mandatory supervisory assessment of their direct reports to ensure of a balanced picture of workforce skillsets.

Tight alignment to organization’s business strategy; the resulting strategic workforce plan should reflect the HR response to the business strategy, rather than just looking as an incremental increase in the “as is”. We used transformative initiatives as the proxy for the “to be” work. Strategic workforce planning is about the “to be” future state.

Building the SWP capability requires a team that includes members with HR subject matter knowledge, data analytic proficiency, database and application developers, strategic knowledge; having the lead working for the Director provides visibility and access.

