

Department of Commerce Report On the Reduction in Mission-Critical Skill Gaps December 2004

BACKGROUND

The Department of Commerce (DOC) implemented a Five-Year Workforce Restructuring Plan for FY2003 to FY2007 that focused on strategic results, incorporated merit principles, and supported the mission of the Department. This approach aligned with guidance from and incorporated the tenets of the strategic management of human capital model of the Office of Management and Budget (OMB), the Office of Personnel Management (OPM), and the Government Accountability Office (GAO). Beginning with the Chief Human Capital Officer's leadership, comprehensive workforce analyses, consultation with OPM and the National Academy of Public Administration, and the active participation of all bureaus, the Department identified three critical crosscutting human capital challenges which, if not addressed, would seriously impact its capacity to perform.

- High rates of turnover in mission-critical occupations (MCOs),
- Projected surge of retirements among the Senior Executive Service (SES), and
- Need to strengthen competencies in technical, general and leadership areas to address mission changes, e-Government initiatives, and changes to the workforce such as competitive sourcing.

The Department's 2003-2007 Recruitment and Retention Plan is a companion document to the Workforce Restructuring Plan and outlines the strategies employed to address each of these crosscutting issues. We shifted from human resources "maintenance" activities, such as just filling vacancies and orienting new employees, and took a more proactive stance by implementing a workforce replenishment effort to rebuild competencies, redesign organizations and jobs, create and maintain a diverse workforce by identifying new pools of candidates for entry and mid-level positions, provide training to retool the workforce as needed, and create career pipelines.

METHODOLOGY

In the initial 5-year Workforce Restructuring Plan 2003-2007, the Department analyzed extensive workforce demographic data for the most populous occupations Department-wide to identify the MCOs. Specific attention was given to workforce trends such as hiring, attrition and diversity data. This analysis was aligned with emerging missions, revised budgets and Administration priorities. The bureaus validated the analysis and then produced a bureau specific list of MCOs, as well as requirements for current and future competencies. Twenty MCOs were identified (see Table A). Departmental and bureau workforce restructuring and recruitment plans were revised to reflect future business objectives, estimated occupational needs, and projected future competencies. Commerce designed the subsequent succession strategy against those occupations, workforce trends and demographics, in order to recruit, train, and retain talent to close identified skill gaps. The companion Recruitment and Retention Plan, which examined

workforce turnover and retirement over a five year period (FY 2003 through FY 2007) for each of the MCOs, serves as the baseline for this skill gap assessment.

We measured our progress in closing skill gaps by using a weighted scale. A closed gap ranges between 75 to 100%; a narrowed gap falls within 50 to 74%; a lessened gap measures from 25 to 49%; and below 25% is considered a prioritized gap as there is still much work to be done. Additionally, we prioritized the mission-critical occupations based on the success of closing the gap. For example, if a mission-critical occupation is at 95%, we consider it closed; however, if a mission-critical occupation is at 19%, it is a prioritized gap since there is still considerable work to be done in order to close it.

AN IMPORTANT FACTOR

Another important factor considered throughout our analyses are the potential implications competitive sourcing activities can have on our efforts to reduce skill gaps. As such, we considered the Department's competitive sourcing activities covering the three-year period from the FY 2003 to FY 2005. Of the studies completed or that will be underway during the current fiscal year, since none involved the 20 mission-critical occupations, there is no impact on this skill gap assessment.

KEY FINDINGS

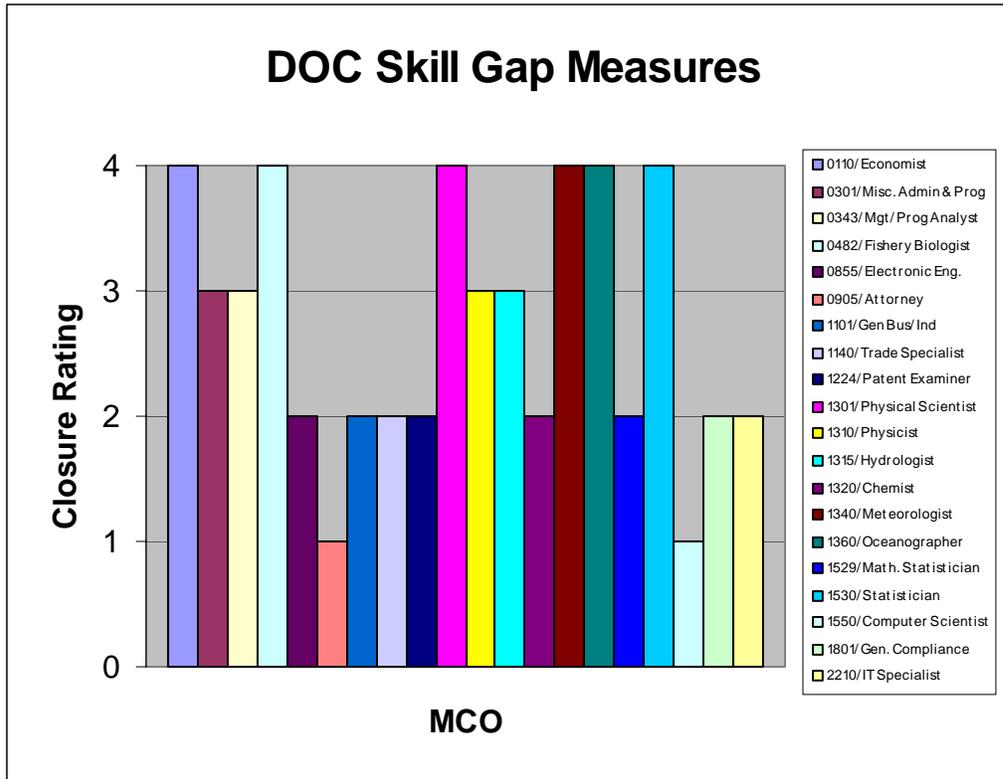
As depicted in the chart on the next page and in Table C, Commerce accomplished the following in closing skill gaps:

- Closed 30% of the gap for MCOs (6 of the 20)
 - Economist, Fishery Biologist, Physical Scientist, Meteorologist, Oceanographer, and Statistician
- Narrowed the gap for 10% of MCOs (2 of the 20)
- Lessened the gap for 50% of the MCOs (10 of the 20)
- Prioritized 10% of the MCOs as requiring significant effort and resources to close the gap (2 of the 20)

Our aggressive strategies demonstrate results that attain and in some instances surpass our goal ahead of schedule since we had projected to close the gaps by FY 2007. For instance, for the Economist, Physical Scientist, and Meteorologist, we closed the gaps as well as exceeded the margin at 104%, 118% and 107%, respectively, to accommodate emerging mission and budget priorities, as well as any unexpected attrition. Descriptions and guidance explaining Table C is in the Appendix.

Additionally, several bureaus closed their skill gaps by 100% or more in a few MCOs and in some instances, have surpassed their targeted goal. Among these mission-critical categories are the Economist, Management and Program Analyst, Physical Scientist, Physicist, Chemist, and IT Specialist occupational series.

Chart of DOC Skill Gap Measures



* 4 = Closed, 3 = Narrowed, 2 = Lessened, 1 = Prioritized

ACTIONS TAKEN TO MITIGATE SKILL GAPS

The Department of Commerce employed a four-pronged strategy for reducing mission-critical gaps, which consisted of:

- Using Voluntary Early Retirement Authority (VERA) and Voluntary Separation Incentive Payments (VSIPs) to eliminate obsolete or redundant competencies and prepare to acquire emerging competencies.
- Using HR flexibilities such as recruitment and relocation bonuses, and retention allowances to strengthen the pipeline by hiring at the entry and mid-levels.
- Delivering advanced training opportunities to retain talented employees.

While the Office of the Secretary took the lead devising and implementing strategies for closing leadership and general competencies, the bureaus were charged with addressing strategies to close specific technical competencies for their MCOs. In some instances, bureaus used VERA and VSIPs to rebalance and reshape the workforce with newly identified and desired competencies. Other strategies employed were the use of human resource flexibilities to be able to acquire new talent through the use of recruitment/relocation bonuses and retention allowances (the 3Rs). At both the Departmental level and the bureau operating unit level, training and development programs were designed and implemented to retain quality employees by providing needed or new skills due to obsolete competencies, and succession planning to close leadership gaps.

Strategy 1: Reshaping Workforce Competencies by the Use of VERAs and VSIPs

Summary Analysis

The Department consulted with bureaus and approved for transmittal to OPM, 12 requests for VERA and VSIPs to reshape workforce competencies. Through workforce analyses, bureaus recognized that in some instances retraining efforts and normal attrition would not be enough to meet their requirements for different skill mixes. Additionally, with the advent of sophisticated information technology and evolving missions, an emerging trend of new skill sets was evident. Through the aggressive use of the VERA and VSIPs, the Department reshaped its workforce by redeploying mid-level managers to provide front-line services, retraining or separating employees who possessed obsolete skills, reengineering work processes, and implementing portal technology to improve service delivery to the customers.

RESULTS

Approximately 83 VERA/VSIPs were actually used to aid Commerce in depleting obsolete skills and restructuring work to capture needed competencies. By examining the variances between FY 2007 future hiring goals and current hires, then evaluating the number of VERA/VSIPs used, we assessed how this strategy helped close and narrow skill gaps.

Strategy 2: Use of Human Resource Flexibilities

Summary Analysis

The use of human resource flexibilities has been instrumental towards achieving the Department's goal to "recruit and hire a diverse, highly qualified workforce." Hiring flexibilities such as recruitment and relocation bonuses and retention allowances have played a key role in helping to close and narrow skill gaps. Based on the outcome of extensive analyses of workforce and demographic data, hiring and attrition trends, bureau workforce restructuring and recruitment plans, future business objectives, estimated occupational needs, projected future competencies, potential recruitment sources and the effectiveness of current recruitment activities, it became evident that greater emphasis needed to be placed on stronger entry level recruitment through college outreach, improved mid-level recruitment from professional organizations and development of employees.

Aggressive strategies were implemented to strengthen the diversity representation throughout the Department. Examples include:

- The Department Augmented the Five Year Recruitment and Retention Plan with a targeted 90-day High Impact Recruitment and Retention Plan under the leadership of the Deputy Assistant Secretary for Administration.
- Hired 40 Hispanics Department-wide during the first three quarters of FY 2004. After launching the 90-day High Impact Recruitment and Retention Initiative in the fourth quarter, an additional 21 Hispanics were hired, increasing the overall representation to 4.02%, up from 3.27%.
- Used the Post Secondary Intern Program to host 60 diverse summer interns, of which 5 were hired through the Student Career Employment Program (formerly cooperative education) authority.
- Established extensive college relationships and executed Memoranda of Understanding with Minority Serving Institutions (MSIs) and focused targeted recruitment initiatives on tribal colleges and Hispanic Serving Institutions (HSIs). Hired 14 Hispanic students for statistician, accounting and other mission-critical disciplines, for the summer intern program, which directly ties to under-representation in the Department.
- On-Campus Student Ambassador Program, which is being piloted by the Office of the Secretary, where we innovatively combined Student Career Experience Program (SCEP) authority and workforce flexibility (telework) to promote Commerce's interests while simultaneously targeting diversity sources in mission critical areas. We currently have four Student Ambassadors attending various MSIs and HSIs, who have established ties with faculties at universities that can aid with our targeted recruitment efforts, e.g., student-held information sessions, compilation of diversity resources' materials/books, etc.

RESULTS

As depicted in Table A, for the period FY 2003 through FY 2004, Commerce has paid 785 recruitment bonuses for the MCOs. The largest number of bonuses paid was recruiting for Patent Examiners. For the same period, 13 relocation bonuses and 39 retention allowances were paid. Among the MCOs, the job series with the greatest number of relocation bonuses paid was Meteorology with 8; the largest number of retention allowances paid was for the Trade Specialist with 11.

Table A. Recruitment and Relocation Bonuses and Retention Allowances

Recruitment and Relocation Bonuses, and Retention Allowances for FY03 – FY04				
MCO Series	Job Title	Rec Bonus	Rel Bonus	Ret Allowance
0110	Economist	12	0	1
0301	Misc. Admin. & Program	7	1	2
0343	Program & Mgmt. Analyst	0	0	0
0482	Fishery Biology	2	0	1
0855	Electronics Engineer	2	0	3
0905	Attorney	20	0	1
1101	General Bus & Industry	1	0	2
1140	Trade Specialist	0	0	11
1224	Patent Examining	651	0	0
1301	Physical Science	3	1	4
1310	Physics	1	2	5
1315	Hydrology	2	0	0
1320	Chemistry	0	0	1
1340	Meteorology	4	8	0
1360	Oceanography	1	0	0
1529	Mathematical Statistician	29	0	0
1530	Statistician	1	0	0
1550	Computer Science	2	0	0
1801	General Insp., Invest. & Compliance	0	0	4
2210/0334	Info. Tech. Spclst. (formerly Computer Spclst.)	47	1	4
Totals		785	13	39

Strategy 3: Training and Development

Summary Analysis

Since closing specific technical competencies was deemed the responsibility of the bureaus, the Department took the lead in addressing leadership and general administrative competencies such as human resources, project management, acquisition, IT security, and leadership and supervisory development. With the Office of the Secretary leading this effort, below are the results of implementing this training and development strategy.

RESULTS

- Commerce deployed the Learning Management System (LMS) Department-wide, offering over 1,100 online courses to provide an immediate tool to all employees to build their skills. Commerce headquarters focused on human resources, project management, acquisition and contract representation, IT security, and leadership and supervisory development. At bureau levels, competency models for MCOs

- were developed, employee assessments conducted, and training commenced. By the end of FY 2004, 17,265 employees had successfully completed at least one course using the LMS.
- The Office of Human Resources Management (OHRM) conducted and piloted a thorough top-down competency assessment and workload inventory of its current employees. From its research, OHRM chose the Bureau of the Census Competency Model as the model most aligned with its OHRM needs. First, OHRM conducted a survey to determine the competencies that the OHRM workforce possesses. Based on the results and competency gaps identified, OHRM is piloting a Human Resources Certification Program and a Certified Pilot through the Society for Human Resource Management (SHRM). The Certification Program works with the Department of the Interior University and the latter prepares staff members to be SHRM certified in the human resources profession.
- The Office of Acquisition partnered with the Office of General Counsel to strengthen the skills needed to prepare agency Memorandum of Understandings by providing interactive training, posting sample agreements to the website and conducting approximately 8 mandatory training sessions to bureau Contracting Officer Technical Representatives, office directors, and analysts.
- The CIO's office developed, assessed and implemented IT project manager qualification guidelines resulting in a core of certified project managers at Commerce and developed and validated project management IT guidelines and administered surveys to all project managers. Department-wide approximately 600 employees have been trained in project management. Six employees from the Office of the Secretary achieved PMP certification as a direct result of training, and 20 are completing the preparation course for the certification exam in FY 2005. Thirty-eight employees have achieved IT Project Manager Validation to meet DOC and the CIO Council project management standards.
- Conducted Department-wide IT security awareness training, and initiated bureau-by-bureau contract management and acquisition management training to close identified skill gaps. Below are comparative performance metrics for IT Security showing significant improvements from FY 2003 to FY 2004.

Table B. Performance Metrics for IT Security

Performance Metric	Q1, FY03	Q4, FY04
Number of systems assessed for risk and assigned a level or risk	97%	100%
Number of systems that have an up-to-date IT security plan	99%	100%
Number of systems certified and accredited	79%	97%
Number of systems with security control costs integrated into the life cycle of the system	99%	100%
Number of systems for which security controls have been tested and evaluated in the last year	80%	100%
Number of systems with a contingency plan	96%	100%
Number of systems for which contingency plans have been tested	68%	91%

- OHRM piloted an automated Competency Suite (Competency Plus) by GeoLearning, which allows supervisors/managers to self assess leadership, core and technical competencies, which are subsequently validated against the HR competency model for the supervisor/manager and reconciled with the rating official.

Strategy 4: Succession Planning to Close Leadership Gaps

Summary Analysis

While the Department’s turnover rate affects the viability of the entire workforce, the potential surge in retirement in its SES ranks has been especially concerning. By FY 2007, 71% of the Department’s existing SES and equivalents are expected to retire. There is also the possibility of the Department losing approximately 75% or more of current supervisors and managers to turnover and retirements at all grade levels above GS-10 and equivalent by FY 2007. This prospect is particularly alarming as this pool of employees, at least at the GS-14 and GS-15 levels typically serve as the “recruiting pool” for future senior executives.

Employing careful analyses of the pipeline for leadership of the 20 mission-critical occupations, the Department pinpointed and prioritized succession needs based on projected separations from turnover and retirements. The analyses examined separation trends, retirement projections, and disposition of women and minorities in technical and leadership positions. The Department also examined applicant pools and assessed the movement of Commerce employees through internal promotions and developmental assignments. Through open dialogue with managers and the cultural affinity groups, the Department invested in a series of leadership development programs and related training and developmental opportunities to build an environment that supports continuous learning and contains the necessary leadership to ensure a high-performing organization.

The leadership development programs focused on MCOs and used multiple assessment criteria for each of the programs to include rating and ranking of the application package, structured competency-based interviews and use of the OPM Assessment Center process for the SES Candidate Development Program (CDP) and the Executive Leadership Development Program (ELDP). The Aspiring Leaders Development Program (ALDP) focused on those occupations that feed into the MCOs and used the rating and ranking of applications and structured interviews as the primary selection tools.

RESULTS

Implementation of these three Department-wide programs will provide a cadre of leadership talent from which to tap and as such, is a result in itself. By establishing these programs to cover a broad spectrum of talent throughout the Department, will provide a true pipeline of future leaders at all organizational levels. A very important factor for our anticipation of success in these programs and their enabling the Department to reduce the leadership gap, is that there was buy-in from the bureaus. All bureaus actively participated in the Departmental leadership development programs by providing senior executives to serve on interviewing panels, providing funding resources, serving as mentors, and identifying developmental assignments. Below are details of how we anticipate these programs closing leadership gaps throughout the Department in the next 18 to 24 months:

- SESCDP, a 24-month program, revamped and launched in FY 2004 with 35 selected candidates; the prior SESCDP had 21 participants with a 100% graduation rate; 20 of these graduates have been placed in leadership positions (95% success rate). Based on this high success rate, we confidently anticipate that the current SESCDP will have a 100% graduation rate by the end of FY 2006 and 100% placement rate by FY 2007.
- The ELDP kicked off FY 2005 and has 35 participants. The ELDP which consists of participants at the GS-13, GS-14 and equivalent grade levels, is a 24-month program. Due to the competitiveness of the program's selection process (we processed 158 applications) and the high-caliber of the selectees, we anticipate a 95 to 100% graduation rate by FY 2007.
- The ALDP kicked off in FY 2004 and has 30 participants. This program is geared for GS-9 through GS-12 and equivalent grade levels and is an 18-month program. We anticipate a 90 to 100% graduation rate during FY 2005; these graduates will provide a feeder into GS-13 and equivalent level positions, which will ultimately feed into higher grade levels.

CONCLUSION

We have made tremendous strides in closing and narrowing skill gaps in the 20 MCOs. While we are proud of our progress, we recognize the criticality in continuing to evaluate the strategies used, enhancing efforts where and as needed, and focusing our activities on the "lessened" and "prioritized" gaps. The methodology employed and engagement of all of the bureaus, have been key elements in our progress and will be instrumental in our ongoing accomplishments.

Appendix. Table Descriptions and Guidance for Closing Workforce Gaps

- **Column A** – DOC Baseline (Number of Incumbents in FY 02): Data derived from the DOC FY 03 through FY 07, Recruitment and Retention Plan baseline data estimates.
- **Column B** – FY 04 Incumbents (as of 07/04): These are the numbers of incumbents DOC-wide, by MCO, as of the end of 07/04.
- **Column C** – FY 05 Incumbents (Current Fill as of 9/30/04): These are the numbers of incumbents DOC-wide, by MCO, as of the end of 09/04 and may be considered a current count (for the beginning of FY 05).
- **Column D** – Current Requirements (Hires thru FY 07): Data also derived from the DOC FY 03 through FY 07, Recruitment and Retention Plan and were originally calculated based on the total losses due to turnover during FY 03 through FY 07.
- **Column E** – Hires FY 03 & FY 04 to Date: Determined based on the number of hires during FY 03, FY 04 and thus far for FY 05.
- **Column F** – Current Gap or Variance: These show the difference between Columns D and E. A positive number reflects the actual number (gap) of hires still needed to reach the initial targeted requirements through FY 07. A negative number means there is no gap and in fact, we are ahead of schedule in meeting the target. It can also reflect instances of overfilling in order to meet projected attrition or unexpected separations.
- **Column G** - % Goal Complete After Hires: This column reflects Column E divided by Column D, specifically, where we are with respect to staffing to date against the Current Requirements through FY 07. For example, because we have hired 115 of the 115 Current Required, 0110 (occupational series), Economist, we have met 100% of our goal. However, we have met 50% of our goal in staffing 0343, Management & Program Analyst.
- **Column H** – VERA & VSIP: These represent the number of times VERA was used and VSIPs were granted during FY 03 and FY 04.
- **Column I** - % Goal Complete After VERA/VSIP: Data reflect the reduction in gap after inclusion of the VERA/VSIPs. For example, 2 were used/granted for the 0482 MCO series. There were 81 hires during FY 03 and FY 04; therefore, $81+2=83$. The 83 total represents our progress toward closing the gap. For instance, VERA/VSIPs can provide opportunities for restructuring the organization or work in order to capture redefined or new competencies needed to perform the work. In this example, the 83 is then divided by the 108 to arrive at 77%. This 77% represents how much we have closed the gap after the VERA/VSIPs.

- **Columns J & K – FY 06 & FY 07 Requirements:** This column shows the staffing requirements still needed up to FY 07. Because we are currently in FY 05, thereby leaving FY 06 and FY 07 to make up the gap, we divided Column H by 2 (two) to determine our needs for FY 06 and FY 07.
- **Column L – Rec/Ret/Rel:** This data represents the number of recruitment and relocation bonuses and retention allowances for each of the MCOs during FY02, 03 and FY 04.