









# Appendix 1 DOD Strategic Human Capital Plan Update The Defense Acquisition Workforce April 2010





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# "Workforce size is important, but quality is paramount\*"

--- Ashton B. Carter

## A Message from the Under Secretary of Defense For Acquisition, Technology and Logistics



The importance of a right-sized, high quality, high performing acquisition workforce cannot be overstated. On March 4, 2009, President Obama signed his memo, "Government Contracting," with a mandate for the Federal Government to have sufficient capacity to manage and oversee its contracting process. On April 6, 2009, Secretary of Defense Robert M. Gates announced his intent and recommendations to change the Department's strategic direction and reform the DOD acquisition process. This heading change includes increasing the size of the organic Defense Acquisition Workforce (DAW) by 20,000 employees. Our hiring

initiatives are on track, and the acquisition workforce will grow from approximately 127,000 to 147,000 by 2015. This will return the acquisition workforce to above the 1998 level of approximately 146,000. About half, or 10,000 of the planned growth will result from in-sourcing selected acquisition support services and performing these services with government employees. This will help us to better address inherently governmental functions and ensure we have appropriate oversight of all acquisition activities. It will also improve the balance between our government workforce and contractor support personnel who will continue to play a vital role on the Department's Total Force team. To successfully accomplish the acquisition mission we will place greater emphasis on a high quality workforce having the right competencies and skill sets, at the right places at the right time.

While our hiring initiatives are on track, the Department must act now on its strategy to increase its acquisition management, technical and business capability and capacity to manage and oversee the acquisition process - from start to finish. Accordingly, I have made sustaining a high quality, high performing workforce one of my top priorities. The key to improving acquisition outcomes is our people. DOD depends on a diverse and knowledge-based workforce comprised of acquisition, technology, and logistics professionals. They are our greatest asset and are critical to our success. I have re-established the Defense Acquisition Workforce Senior Steering Board to sharpen our strategic focus and provide a forum for the acquisition senior leadership team to thoughtfully deliberate and advance our acquisition workforce initiatives. This dynamic and integrated process will build upon a highly effective, performance-based culture that attracts, retains, motivates, and rewards high-performing, top quality workforce members. We will build on our current accomplishments taking full advantage of existing authorities.

Finally, a very concerned Congress has been actively involved in shaping and supporting the Department's workforce initiatives. Their support with funding, expedited hiring authority, workforce recognition and incentives, and other human capital legislation has been very important for our current success. I appreciate the Congress' support and will work with each member as we continue to deploy and evolve our workforce strategy. Complete success will not be achieved overnight. As Secretary Gates has stated, "there are no silver bullets." This plan builds upon our accomplishments and positions the DOD acquisition workforce for the future. Emanating from Secretary Gates' overall strategic vision, this plan is based on the principles of leadership alignment, Service-unique force planning, and integrated component sharing and collaboration. I solicit all stakeholder support, and look forward to working together as we grow, re-shape and rebalance the workforce with special emphasis on improving workforce quality.

Celts Genter
Ashton B! Carter

# The President's Openness in Government Initiative Transparency on the Defense Acquisition Workforce

This Defense Acquisition Strategic Workforce Plan is provided online at https://acc.dau.mil/acquisitionworkforce. This living document is provided as part of improving transparency, facilitating a data-driven dialogue on the acquisition workforce, and supporting the President's Openness in Government initiative<sup>1</sup>.

"My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government.

President Obama January 21, 2009

Broadening access to defense acquisition information will strengthen a necessary, healthy dialogue on how to continuously improve planning, initiatives and support for the defense acquisition workforce. This important workforce supports over \$1.6 trillion in acquisition programs that provide for our national security. The 133,000 civilians and military, supplemented by contractor support personnel – the Total "Acquisition" Force - are an important national asset. As a living document, the information and analysis shared in this report will evolve and continue to be updated. Questions and comments regarding this plan are welcome and can be emailed to acquisitionworkforce@dau.mil.

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<sup>&</sup>lt;sup>1</sup> For more information go to http://www.whitehouse.gov/open/

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#### **Foreword**

This document presents the Department of Defense (DOD) acquisition workforce improvement strategy, FY2009 workforce analysis baseline, and key workforce initiatives. In addition, fifteen appendices are included which address: 1) workforce analysis for eight functional career fields; 2) major Component plans; and 3) other statutory reporting requirements. This document is Appendix 1 of the 2009 DOD Strategic Human Capital Plan Update.

The Secretary of Defense acquisition workforce improvement strategy announced April 6, 2009, places special emphasis on revitalizing the acquisition workforce. This includes right-sizing, re-shaping, and rebalancing the defense acquisition workforce capacity and capability. This strategy is critical for executing the Secretary's priority to "reform what we buy and how we buy it." As a whole, this document addresses requirements of section 851 of the fiscal year 2008 National Defense Authorization Act (NDAA), "Requirement for Section on Defense Acquisition Workforce in the DOD Civilian Strategic Human Capital Plan" and the recent requirements of section 1108 of the fiscal year 2010 NDAA, "Requirement for Department of Defense Strategic Workforce Plans." Funding matters are consolidated and addressed in the companion report required by 10 U.S.C section 1705, Defense Acquisition Workforce Development Fund. This document also addresses other statutory reporting requirements:

**Section 820** of the fiscal year 2007 NDAA, "Government Performance of Critical Acquisition Functions" established a goal that certain key leadership positions in major defense acquisition and automated information programs be filled by properly qualified DOD civilians and military members. The entire report documents deployed strategies for ensuring adequate numbers of properly qualified members are performing critical functions. Appendix 13 provides a specific progress report toward meeting that goal.

**Section 855** of the fiscal year 2008 NDAA, "Federal Acquisition Workforce Improvements," requires that each executive agency establish and operate training programs and do succession planning for the recruitment, development and retention of the agency's acquisition workforce. Succession planning is supported and addressed by the defense acquisition workforce improvement strategy, supporting analysis, initiatives, Appendix 13 regarding critical functions, and Appendix 14 which addresses the military.

**Section 834** of the fiscal year 2009 NDAA, "Career Path and Other Requirements for Military Personnel in the Acquisition Field," requires the DOD ensure proper development, assignment, and employment of military in acquisition. Details of this ongoing effort are presented in Appendix 14 of this document.

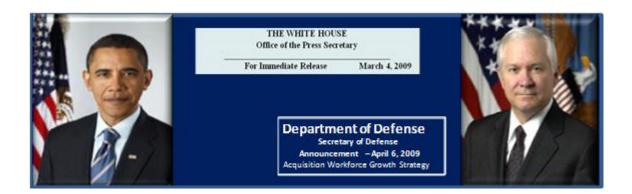
**Section 301** of the Weapons Systems Acquisition Reform Act of 2009, "Awards for Department of Defense Personnel for Excellence in the Acquisition of Products and Services," requires that the DOD "commence carrying out a program to recognize excellent performance by individuals and teams of members of the Armed Forces and civilian personnel of the Department of Defense in the acquisition of products and services for the Department of Defense." In addition to ongoing team award programs, the Department established a Department-level individual awards program and the first awards were presented in November 2009. Team and individual acquisition workforce awards are discussed in Section 1. A list of DOD-level and Component awards is provided at Appendix 15.

This report directly responds to the House Committee on Appropriations Report, 110-279, Department of Defense Appropriations Bill 2008 Report, July 30, 2007. The House committee requested the DOD report on enhancing the Department's acquisition workforce.

This document provides an FY2009 workforce analysis baseline for eight functional career fields and major DOD Components. Ongoing analysis will continue to be improved and expanded.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at https://acc.dau.mil/acquisitionworkforce.

# Section 1 Defense Acquisition Workforce Strategy



#### Restoring the Defense Acquisition Workforce - Leadership Alignment

The President and the Secretary of Defense directed the unprecedented restoration of the defense acquisition workforce. This initiative includes both increasing the size and improving the quality of the organic workforce. Since the Secretary's April 2009 announcement DOD has made significant progress.

In his March 4, 2009 memorandum (Figure 1-1) the President communicated his intent that the federal acquisition workforce have the capacity and ability to develop, manage, and oversee acquisitions appropriately. On April 6, 2009, the Secretary of Defense announced three principal objectives that are key for improving the Department of Defense (DOD). The three objectives are to:

1) Take care of the all-volunteer force which represents America's greatest strategic asset:



Figure 1-1 President's Memo, Government Contracting, March 4, 2009

2) Rebalance the department's programs and enhance capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years

<sup>&</sup>lt;sup>1</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

ahead, while at the same time providing a hedge against other risks and contingencies; and

3) Reform how and what we buy, meaning a fundamental overhaul of our approach to procurement, acquisition, and contracting.

The objective to reform how and what we buy includes Secretary Gates' initiative to significantly improve the quality and readiness of the defense acquisition workforce. The objective is dependent upon having adequate numbers of capable personnel on the job, in the right place at the right time. The February 2010 Quadrennial Defense Review (QDR) Report identified this priority as well as the priority to develop the total defense workforce by establishing a balanced workforce that appropriately aligns functions to the public and private sector.

"To operate effectively, the acquisition system must be supported by an appropriately sized cadre of acquisition professionals with the right skills and training to successfully perform their jobs. To address personnel deficiencies, (DOD) will increase the number of acquisition personnel by 20,000 positions by 2015. (DOD) will continue to significantly enhance training and retention programs in order to bolster the capability and size of the acquisition workforce."

To achieve the Secretary's goal, DOD will hire approximately 10,000 new workforce members and hire another 10,000 as a result of in-sourcing initiatives to perform acquisition work that was previously performed by contractor personnel. These acquisition workforce improvement initiatives are part of DOD's High Priority Performance Goals included in the President's FY2011 Budget. These actions will create a better balance between the government workforce and contractor support personnel and strengthen DOD's capability to perform inherently governmental functions and provide appropriate oversight of all acquisition activities. The Department will grow its contracting and oversight workforce, to include the Defense Contract Management Agency and the Defense Contract Audit Agency. These resources will improve the Department's oversight capability and help ensure we get what we pay for, ferret out waste, and more aggressively combat contract fraud. To get best value for taxpayers, DOD will enhance our cost-estimating and pricing capability to improve program estimates and ensure we price our contracts appropriately.

The Secretary's initiatives also implement provisions of the Weapon Systems Acquisition Reform Act of 2009. The Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L))(the Under Secretary) will appropriately increase organic capability such as program management, systems engineering, and contracting. In addition, the Department has deployed a robust recognition program to improve emphasis on recognizing and communicating the value of the defense acquisition workforce.

<sup>&</sup>lt;sup>2</sup> QDR Report February 2010, pages 77-78

A critical foundation for the Department's strategy to improve acquisition workforce quality is the DOD-wide competency assessment of the acquisition workforce. This will identify gaps for improving training and human capital planning. The competency initiative supports DOD's effort to upgrade certification standards to sustain a high quality, high performance acquisition workforce. DOD will expand and improve training programs in critical risk areas such as leadership development, cost estimating, engineering management, program execution, source selection, risk management, pricing, and contracting. This will include expanded resident training and simulations. The Defense Acquisition University (DAU) enterprise will be leveraged for whole of government benefit to continue supporting the federal acquisition workforce.

The President, Congress, Secretary of Defense, and DOD senior leaders are committed to restoring, shaping and improving the acquisition workforce. The Department's strategy is supported by workforce initiatives that will grow, enhance, and sustain a high quality workforce. This includes: 1) recruiting and hiring, 2) retention and recognition incentives, and 3) training and workforce development initiatives.

#### Restoring the Defense Acquisition Workforce

The case for restoring the defense acquisition workforce is compelling. The DOD acquisition mission represents the largest buying enterprise in the world. Today there are 102 major defense acquisition programs with an investment of more than \$1.6 trillion. The defense acquisition workforce has experienced a significant increase in workload demand and complexity: services contracting, counter-insurgency operations, and other critical missions, including responding to the overall increase in acquisition workload. In 2001, the Defense Department spent over \$138 billion on contracts, and in 2009 spending reached \$384 billion - \$208 billion was for services. During this period, the use of contractor support dramatically increased while the organic acquisition workforce (civilian and military) varied but decreased 2.6 percent by 2008.

Additionally, almost every study conducted on defense acquisition has cited the need to improve the quality of the defense acquisition workforce. Most of the studies indicated a need to grow the workforce. These studies include: the Defense Acquisition Performance Assessment (DAPA) report (Dec 2005); the Report of the Acquisition Advisory Panel ("1423" report)(Jan 2007); the Defense Acquisition Structures and Capabilities Review report (Jun 2007); and the Business Executives for National Security (BENS) report, "Getting to Best: Reforming the Defense Acquisition Enterprise" (Jul 2009). However, a Defense Science Board report, "Creating a Strategic Acquisition Platform" (Apr 2009), suggested there is no need to increase the size of the acquisition workforce. The Department agrees with the fundamental conclusions of these studies and has deployed leading edge strategies to thoughtfully address workforce capability and capacity shortfalls.

#### The Leadership and Governance Structure

Title 10 U.S.C., Section 1702, provides that the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)) shall carry out all powers, functions, and duties of the Secretary of Defense with respect to the acquisition workforce in the Department of Defense, to include ensuring that DOD acquisition workforce policies are implemented.



The Under Secretary of Defense for Acquisition, Technology, and Logistics, the Honorable Dr. Ashton Carter (hereafter referred to as the Under Secretary), and senior leaders across the Department are partnering to achieve the Secretary's strategy to grow and improve the quality of the acquisition workforce. To ensure integration and positive workforce outcomes, the Under Secretary re-instituted the Defense Acquisition Workforce Senior

Steering Board (SSB) to set overarching workforce strategy, policy and oversight. The SSB, chaired by the Under Secretary, includes a senior official from the Office of the Under Secretary of Defense (Comptroller), Component Acquisition Executives (CAEs), senior acquisition functional leaders, and the Deputy Under Secretary of Defense (Civilian Personnel Policy). This governance structure provides a strategic focus, facilitates alignment, problem resolution, and integration of workforce initiatives across the components. The SSB enables and facilitates cross-component sharing of workforce best practices; recruiting and hiring lessons learned; and workforce development strategies and opportunities. On October 26, 2009, Dr. Carter chaired his initial Defense Acquisition Workforce SSB. The Senior Steering Board reviewed Army, Navy, Air Force and DCMA acquisition workforce growth strategy planning and initial execution.

#### Strategic Sizing and Shaping of the Total Acquisition Workforce

**Strategic Sizing.** The DOD initiative to improve the acquisition workforce has started and is depicted in Table 1-1<sup>3</sup>. Increasing the size of the acquisition workforce is one element of improving overall quality and will help mitigate the imbalance that resulted from downsizing of the acquisition workforce, and the dramatic increase in acquisition workload since

Defense Acquisition Workforce Count							
DOD Component	FY2008	FY2009					
Army	40,269	40,356					
Navy/MC	43,066	46,972					
Air Force	24,827	27,174					
Defense Agencies	17,717	18,601					
Total	125,879	133,103					

Table 1-1. Defense Acquisition Workforce Count (FY2008 and FY2009) (Military and Civilian)

2001. The downsizing and workload increases have strained the organic acquisition workforce and increased risk of not successfully achieving desired

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<sup>&</sup>lt;sup>3</sup> Source: AT&L Workforce Data Mart

acquisition outcomes. In addition, the Department is also dealing with the dynamics of an aging workforce. Strategic sizing and rebalancing the multisector acquisition workforce are critical elements of the DOD acquisition improvement strategy. This strategy will rebalance the Department's organic and contractor workforce composition. The organic acquisition workforce will increase by approximately 20,000 members through 2015. This includes approximately 10,000 new hires using the Defense Acquisition Workforce Development Fund (DAWDF) and 10,000 additional new acquisition personnel through the DOD in-sourcing initiative. Initial results are encouraging. For FY2009, growth targets were exceeded and DOD is on track to meet or exceed FY2010 growth and rebalancing targets. This growth and rebalancing will help ensure the Department has appropriate control and oversight of all acquisition activities. By establishing a better balance between the government workforce and contractor support personnel, DOD will be positioned to better address inherently governmental and other critical functions.

**Strategic Shaping.** The strategic reshaping of defense acquisition career fields will be achieved through deliberate and targeted growth of selected career fields. Table 1-2 highlights where components and functional leaders have determined growth will contribute most to improving acquisition outcomes. For example, two major areas targeted for reshaping are the Contracting and Systems Planning, Research, Development and Engineering (SPRDE) (SE/PSE) career fields. Of the total planned growth, twenty-six percent is allocated to Contracting and will result in a 23 percent increase to the career field. Twenty-two percent of the total growth is allocated to SPRDE (SE/PSE), increasing that career field by 16 percent. This strategy supports implementation of the Weapon Systems Acquisition Reform Act of 2009, Section 102. Component workforce growth results in FY2009 and FY2010 are aligned with strategic priorities in contracting, systems engineering, program management, cost estimating, auditing and other critical functions.

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<sup>&</sup>lt;sup>4</sup> The baseline is the Component's President Budget Exhibit 23 inputs submitted to OSD in Aug 2008.

<sup>&</sup>lt;sup>5</sup> The Defense Acquisition Workforce Development Fund provided for by 10 U.S.C. 1705, enacted by section 852 of the National Defense Authorization Act for Fiscal Year 2008, is a key workforce enabler. Since enactment, funding has been targeted for improving the Defense acquisition workforce. Improvement initiatives are being deployed and are categorized in three major workforce categories: 1) recruiting and hiring, 2) training and development, and 3) retention and recognition. The purpose of the Defense Acquisition Workforce Development Fund is to ensure DOD has the capacity in both personnel and skills needed to perform its acquisition mission, provide appropriate oversight of contractor performance, and ensure that the Department receives best value for expenditure of public resources.

<sup>&</sup>lt;sup>6</sup> On April 6, 2009 the Secretary of Defense announced his intent to rebalance the workforce by establishing approximately 33,400 new civilian positions to perform work currently contracted. The new positions include 10,000 acquisition positions.

Defense Acquisition Workforce (DAW) Career Field/Career Path	FY09 - FY15 % of Total DAW Growth	FY09 - FY15 % Career Field Growth
Career Field/Career Fatti		
Contracting (includes Pricing)	26%	23%
Systems Planning, Research, Development &		
Engineering (SPRDE) (Program & Systems		
Engineering Career Paths)	22%	16%
Program Management	11%	19%
Life Cycle Logistics	9%	16%
Business (Cost Estimating & Financial		
Management Career Paths)	7%	23%
Production, Quality and Manufacturing	5%	13%
Audit	3%	20%
Information Technology (Acquisition)	2%	14%
Facilities Engineering	2%	10%
Test & Evaluation (Acquisition)	1%	5%
Industrial and/or Contract Property Management	0%	12%
SPRDE - Science and Technology Career Path	0%	10%
Purchasing	0%	3%
Other/Unallocated Growth	12%	

Table 1-2. Defense Acquisition Workforce: 1) Projected Percent of Total Workforce Growth by Career Field; and 2) Percent Increase in Career Field Growth through FY2015<sup>7</sup>

The Department's acquisition workforce improvement strategy also implements the Office of Management and Budget (OMB) Memorandum, July 29, 2009, "Improving Government Acquisition," which calls for planning to strengthen the acquisition workforce. This includes increasing the size of the acquisition workforce, making necessary investments in training, conducting trend analysis, and emphasizing the criticality of acquisition work to agency mission success. This growth strategy also supports implementation of the OMB Memorandum, July 29, 2009, "Managing the Multi-Sector Workforce." This memorandum requires agencies to begin developing and implementing policies, practices, and tools for managing the multi-sector workforce. Agencies are encouraged to use human capital planning, recruitment, hiring, and training to ensure a strong internal capacity as part of a strategically planned workforce mix.

#### **Improving Workforce Quality**

An equally important focus in restoring the Defense Acquisition Workforce is improving workforce quality. This is being achieved through a number of initiatives: reinventing the DAWIA certification structure, emphasizing individual

<sup>7</sup> Source: AT&L HCl generated from Component inputs to October 26, 2009 Defense Acquisition Workforce Senior Steering Board

certification requirements, investing in leadership development, increasing acquisition training capacity, and assessing workforce competencies.

#### **Reinventing the DAWIA Certification Structure**

The Department is improving the certification process with greater emphasis on experience and being fully qualified. Experience is a function of time and a key element for developing high quality employees. To ensure the acquisition workforce is fully qualified, all functional leaders have been asked to review their current functional experience and training requirements. For example, the certification experience requirement for the Systems Planning, Research, Development and Engineering - Program Systems Engineer career path has been expanded from 4 to 8 years. This places greater emphasis on experience as a critical element in improving workforce quality and capability. In establishing experience requirements emphasis will be placed on getting the right experiences for breadth and depth. Another example is the restructure of the Business career field into two distinct career paths, one for Cost Estimating and one for Financial Management. Cost estimating now requires 7 years of experience to achieve Level III and financial management 6 years. These new career paths reflect strong leadership emphasis on increased training, education and experience elements for meeting certification standards.

#### **Ensuring a Qualified Organic Workforce**

The Under Secretary and Component acquisition leaders closely monitor workforce quality. A key indicator is whether workforce members meet or exceed position certification requirements. Certification is tracked by the Deputy Secretary of Defense as part of the DOD Strategic Management Plan. Additional position requirements and management oversight apply commensurate with increased acquisition responsibility. DOD acquisition positions are classified in three categories: Critical Acquisition Positions (CAPs), Key Leadership Positions (KLPs)(a subset of CAPs), and non-CAP positions. KLPs are positions that entail significant levels of responsibility and are key to acquisition program success. This policy is a tool for ensuring a high quality workforce and addresses fiscal year 2007 National Defense Authorization Act (NDAA), Section 820, as amended. Section 820 requires that for each major defense acquisition program and each major automated information system program the Program Manager, Deputy Program Manager, Chief Engineer, Systems Engineer, Cost Estimator, and Product Support Manager positions be performed by a properly qualified member of the Armed Forces or full-time employee of the DOD. Section 820 (see Appendix 14) requires DOD to reach the goal by October 17, 2011. DOD added lead major program contracting officers and is adding additional key positions to the KLP construct.

The current DOD growth and in-sourcing initiatives will facilitate improved succession planning and provide appropriate organic resources for these positions. As an example, the organic cost estimating workforce, which declined

approximately 26 percent from 2001 to 2008, is targeted to grow by approximately 23 percent by 2015. An Air Force-sponsored RAND study found that contractor support personnel represent approximately 50 percent of the Air Force's cost estimating community. Additionally, the RAND study<sup>8</sup> indicated approximately 50 percent of cost estimating lead positions were filled by contractor support personnel. Current Air Force planning and actions are addressing this gap in organic capability.

Finally, as Level II and Level III certified employees depart the workforce, DOD is taking action to reduce the impact of certification shortfalls. First, DOD will improve demand management to ensure that entry and mid-level individuals are achieving appropriate certification to fill acquisition positions. Second, DOD will deploy appropriate retention strategies and leverage recently improved retention as individuals are staying in the workforce longer. Third, DOD will continue to improve recruiting and hiring initiatives to build overall workforce bench strength. Also, the Department will improve the current certification program which includes the acquisition competencies, AT&L Core Plus<sup>9</sup>, and the proposed Acquisition Qualification Standards initiatives<sup>10</sup>.

#### **Investing in Leadership Development**

The military services have lead responsibility for leadership training and workforce development and have created world-class training such as their exemplary professional military education programs. During the last four years the Department has significantly expanded its portfolio of Defense Acquisition University (DAU) executive and leadership courses available at the mid and senior grade levels for both civilian and military. These leadership courses provide an opportunity for the acquisition workforce to supplement component leadership programs and develop leadership abilities and qualifications to perform critical acquisition functions while responding effectively within the challenging acquisition environment. The following are examples of leadership and executive development training:

Army/DAU Senior Service College Fellowship (SSCF). This ten month
program provides high potential acquisition civilians with the intellectual
framework to effectively address leadership, acquisition and other challenges
that require creative solutions. The program is designed primarily for

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<sup>&</sup>lt;sup>8</sup> RAND report, "The Acquisition Cost-Estimating Workforce: Census and Characteristics," June 2009

<sup>&</sup>lt;sup>9</sup> The Core Certification Standards and Core Plus Development Guide in the DAU Catalog provides the acquisition workforce member a listing of Core Certification Standards by acquisition career field and level as well as "Core Plus" knowledge and skills that are delivered through coursework that targets functions or tasks directly related to specific types of job assignments. The online guide is available at http://icatalog.dau.mil/onlinecatalog/Careerl vl.aspx

of job assignments. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

10 The proposed AQS initiative targets increased supervisor and employee mentoring processes to validate and improve job performance qualifications.

leadership development of Army civilians that leads to higher levels of leadership responsibility. The SSCF program has graduated 43 fellows who have moved to higher levels of responsibility within the Army. Additionally, 24 students are expected to graduate from the SSCF Program in June 2010 – three are Air Force members.

- Coaching and Mentoring. An executive coaching capability has been established to support program managers and program executive officers. A cadre of very experienced and successful acquisition practitioners serving at the Defense Acquisition University have been trained and certified to be performance executive coaches. The coaching is an action learning approach which focuses on broadening the acquisition and leadership experience of acquisition leaders and improving acquisition outcomes. A new leadership course "Leaders as Coaches" is also now in development that will teach coaching skills to supervisors to increase their capacity and commitment to mission success and workforce development.
- "Leading in the Acquisition Environment" (ACQ 450). Students from various DOD components bring a leadership challenge they are facing and work with classroom facilitators and other student leaders to formulate courses of action and individual learning plans. Also included is completion and interpretation of a "360 degree" leadership assessment.
- The "Integrated Acquisition for Decision-makers" (ACQ 451). This course focuses on multidisciplinary management decisions and tradeoffs to achieve optimal program outcomes.
- "Forging Stakeholder Relationships" (ACQ 453). Students identify and assess the interests of the stakeholders who direct and influence acquisition planning, execution and outcomes, as well as strategies to communicate and influence those stakeholders to plan and manage for program success.
- The Senior Acquisition Course at National Defense University. The Senior Acquisition Course (SAC) prepares officers and civilian members of the defense acquisition workforce for advancement to positions of leadership in the acquisition community. Provided by the Industrial College of the Armed Forces of the National Defense University and in partnership with the Defense Acquisition University, the SAC is part of a master's degree program and part of DOD's professional military education framework. Students may elect to study program management in depth and in doing so earn equivalency credit for the mandatory program management course at DAU. Approximately 90 students complete the SAC each year of which half are military and half are civilian.

#### Meeting the Growing Demand for Acquisition Training

Certification training is a critical element for improving workforce quality. Driven by various factors, to include workforce turnover and new growth, training requirements have exceeded DOD's training capacity. Accordingly, DAU is expanding to meet forecasted training demand. Increased demand is driven by:

- 1) annual turnover of approximately 8,000 to 10,000 workforce members;
- 2) the Secretary's 2010 2015 growth initiative;
- 3) turnover related to Base Realignment and Closure (BRAC) movement to new locations;
- 4) acquisition of services and contracting supporting counter-insurgency and other contingency operations;
- 5) New initiatives that will expand Contracting Officer Representative (COR) training;
- 6) The new certification structure and training for requirements members of the "Big A" workforce<sup>11</sup>;
- 7) New training and enhancements for contract specialists and pricing personnel;
- 8) Enhanced job support assets;
- 9) Expanded training in program management and systems engineering; and
- 10) Other new curricula development for high impact and other emerging acquisition needs.

#### **Assessing Workforce Competencies**

The Department has deployed a DOD-wide competency assessment of the acquisition workforce to identify gaps and improve both training and human capital planning. The objective is to assess workforce capability using updated and validated enterprise-wide functional competency models. A common set of core and acquisition functional competencies promotes efficiency, effectiveness and consistency in workforce planning and development. Significant progress was achieved to include completion of over 22,000 assessments involving program management, life cycle logistics and contracting career fields. A community-wide assessment was conducted for contracting which resulted in an 87 percent participation rate and significant senior leader involvement across the DOD contracting community. Additional model updates and community assessments are underway -- the Business career field and the Systems Planning, Research, Development and Engineering career field are currently mid-way through the competency update process and will be completing community-wide assessments during FY2010. Competency assessments for additional career fields will also be conducted during FY2010 and FY2011.

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<sup>&</sup>lt;sup>11</sup> The activities within "Big A" include: workforce, acquisition, requirements, budget, industry, and organizations. See *Defense Acquisition Transformation Report to Congress, John Warner National Defense Authorization Act, Fiscal Year 2007, Section 804,* February 2007, p. 2–4.

Assessment results are used for high priority workforce applications such as gap assessments, training improvements, and human capital planning.

#### Retention and Recognition

An important element of workforce success is employee retention and recognition. The Department is creating a workplace environment where current and new employees view DOD as a great place to work. This environment must become an integral part of the Department's employee value proposition.

#### **Retention and Other Acquisition Workforce Incentives**

The Department is deploying a robust employee retention and talent management strategy to retain acquisition employees with expert knowledge in critical and shortage skill areas. These employees include, but are not limited to, individuals filling Key Leadership Positions such as program managers. engineers, senior contracting officers, life cycle logisticians, cost estimators, etc. (especially those in major defense acquisition programs) and other personnel possessing special expertise that is hard to find or retain. These initiatives include deliberately improving the technical and leadership capability of our military and civilians. Workforce funding is allocated for retention initiatives (student loan repayment, tuition assistance, retention bonuses, etc.) and recognition incentives, primarily for component career broadening and academic degree programs, which also promote retention. Noted is that for defense acquisition workforce civilians there was a 25 percent decrease in losses across the workforce lifecycle in FY2009 as compared to FY2008. Turnover, excluding administrative losses, decreased from 8.9 percent in FY2008 to 6.5 percent in FY2009. These decreases were most likely due to economic conditions.

#### **Recognizing Defense Acquisition Workforce Excellence**

Our military is the best equipped in the world. This is a great tribute to the dedication and contribution of the defense acquisition workforce. Top senior leaders have emphasized that acquisition is a highly valued core competency of the Department. DOD has deployed robust award programs to recognize acquisition excellence at the DOD, military department and agency, and local levels. Individuals are also recognized through professional association and federal awards programs.

Winning organizations and individuals for all DOD-level awards are publicized nationwide on major DOD acquisition web sites, the DAU web site, as well as in the Defense AT&L magazine. In addition to public recognition of individuals and teams, individuals are recognized in various other ways, to include monetary awards and selection for developmental and leadership programs.

#### Major DOD-Level Recognition and Awards

The Workforce Individual Achievement Awards were established in August 2009<sup>12</sup> as a result of the Weapon Systems Acquisition Reform Act of 2009 to encourage and recognize individuals who demonstrate performance excellence in the acquisition of products and services for the Department of Defense. These awards complement the existing DOD recognition programs. The first awards were presented November 2009 in the following categories:

- 1. Program Management
- 2. Contracting and Procurement
- 3. Contract Audit
- 4. Business, Cost Estimating and Financial Management
- 5. Management, Contracting Oversight and Quality Assurance
- 6. Life Cycle Logistics
- 7. Systems Planning, Research, Development and Engineering (including Test and Evaluation, Production and Manufacturing)
- 8. Acquisition in the Expeditionary Environment

The *David Packard Excellence in Acquisition Award* was established in 1997 to recognize organizations, groups, and teams who have demonstrated exemplary innovation using best acquisition practices to achieve excellence in DOD acquisition. It is the Department's highest acquisition team award.

The *USD(AT&L)* Workforce Development Award was established in 2004 to recognize organizations that have achieved excellence in learning and development for their employees. Winners, in small and large organization categories, are selected based on their workforce development program's objectives, best practices, and the benefits realized. Nominated organizations are also ranked on workforce development climate, training offered, academic affiliations and partnerships, and alignment of workforce initiatives with the organization's mission.

The link at <a href="https://acc.dau.mil/workforceawards">https://acc.dau.mil/workforceawards</a> contains information on recent winners of DOD-level acquisition awards.

Finally, robust recognition programs exist within the military services and defense agencies. See Appendix 15 for a detailed description of the DOD acquisition workforce recognition structure.

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<sup>&</sup>lt;sup>12</sup> See USD (AT&L) memo, August 3, 2009, "2009 Under Secretary of Defense for Acquisition, Technology and Logistics Workforce Achievement Award Program." Memo includes nomination and evaluation guidance.

#### **Summary**

The President, the Secretary of Defense, and Congressional leaders agree decisive action must be taken to build the right capability and capacity in the acquisition workforce. Deliberate action has started as a result of unparalleled leadership support. Significant and collaborative partnering is taking place among the Office of the Under Secretary of Defense (USD) (AT&L), the Office of the USD (Personnel & Readiness) (P&R), the Office of the USD (Comptroller), the Military Departments, and the Defense agencies.

The Deputy Secretary of Defense, the Honorable William J. Lynn III, recently emphasized that the acquisition workforce rebalancing plan is a vital piece of the Department's sweeping acquisition reform efforts. He, along with the Under Secretary, is closely monitoring the acquisition workforce quality improvements, including increases in the size of the acquisition workforce.

As reported in the Armed Forces Press Service on December 3, 2009, the Deputy Secretary of Defense made the following points:



- DOD outsourced many of its functions during the 1990's, resulting in a shortage of in-house expertise in cost estimating, systems engineering and program management capabilities that allow us to be a very informed buyer.
- The additional employees will focus on awarding more competitive contracts and providing more contract oversight. Others will be hired across the Department to improve business management, logistics management, systems engineering, and program management functions.<sup>13</sup>

The initiatives described in this plan are a major leap forward in deploying a strategic framework to deliberately manage the defense acquisition workforce. This plan represents major progress in building a robust predictive analytic capability for the acquisition workforce.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at https://acc.dau.mil/acquisitionworkforce. The following Section 2 provides enterprise workforce analysis as of the end of FY2009. Section 3 describes specific defense acquisition workforce initiatives.

<sup>&</sup>lt;sup>13</sup> Excerpts derived from Armed Forces Press Service news release of Deputy Secretary Lynn's comments at the Aerospace and Defense Conference (December 3, 2009)

# Section 2 Defense Acquisition Workforce Analytics

#### Introduction

The DOD strategy to improve the quality of the acquisition workforce is supported by a comprehensive and evolving workforce analytic capability. This section provides data-driven insight on acquisition workforce size, count, composition, tools, and other analyses<sup>1</sup>. It provides a foundation and starting point for deliberate workforce planning and decisions in executing the defense acquisition workforce human capital strategy. This is a living, dynamic document that is vital for improving transparency, facilitating a data-driven dialogue, and supporting the President's initiative for Openness in Government. The outcome of thoughtful workforce analytics is better workforce planning and decision making. The following is the FY2009 Human Capital Fact Sheet<sup>2</sup> with key summary data for the DOD organic<sup>3</sup> acquisition workforce.

Human Capital Fact Sheet FY2009							
Defense Acquisition Workforce	Civilian (Civ)	Military (Mil)	Total (Civ+Mil)				
Size & Composition							
FY09 Workforce Organic Size	118,445	14,658	133,103				
Change in size 2008-2009	6%	-2%	5%				
Civilian/Military Composition	89%	11%	-				
DOD DAW 2015 Growth Goal			~15%				
Educational Attainment							
Bachelor's Degree or Higher	78%	83%	79%				
Graduate Degree	27%	44%	29%				
Certification (Cert)							
Level I or Higher	73%	63%	72%				
Level II or Higher	62%	43%	60%				
Level III	38%	20%	36%				
Position Cert Requirement Met	60%	45%	59%				
Planning Considerations							
% Baby Boomer/Traditional Generations	63%	13%	58%				
Average Age	46.2	36.0	45.0				
Workforce Life-Cycle Model	32/33/35						
% Future/Mid-Career/Senior	(%)(Civ)	-	-				
Average Years of Service	16.6	13.2	16.3				
Retirement Eligible	19,395(16%)	-	-				
Retirement Eligible w/i 5 Years	21,567(18%)	-	-				
Gains/Losses	19,786/13,042	-	-				
Training Statistics	2007	2008	2009				
DAU Course Graduates (Classroom)	33,191	35,861	39,568				
DAU Course Graduates (Web)	90,600	118,391	154,399				
DAU Continuous Learning Completions	244,072	333,332	494,568				

<sup>&</sup>lt;sup>1</sup> The following referenced RAND report is a companion to this defense acquisition workforce Appendix of the 2009 DOD Civilian Strategic Human Capital Management Plan Update. (The Defense Acquisition Workforce: An Analysis of Personnel Trends Relevant to Policy, 1993 – 2006. Santa Monica, CA: RAND Corporation/TR-572-OSD, Gates, Susan M., Edward G. Keating, Adria D. Jewell, Lindsay Daugherty, Bryan Tysinger, Albert A. Robbert and Ralph Masi.)

<sup>&</sup>lt;sup>2</sup> Source: The Human Capital Fact Sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

<sup>&</sup>lt;sup>3</sup> The word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

A comprehensive and accurate understanding of the workforce is best achieved by performing both vertical and horizontal analyses as portrayed by Figure 2-1. DOD-level analyses for eight acquisition career fields (horizontal profiles) represent 90 percent of the defense acquisition workforce (Appendices 1 through 8). Major component appendices (vertical profiles) for the Army, Department of the Navy, Air Force, and Defense Contract Management Agency are also included.

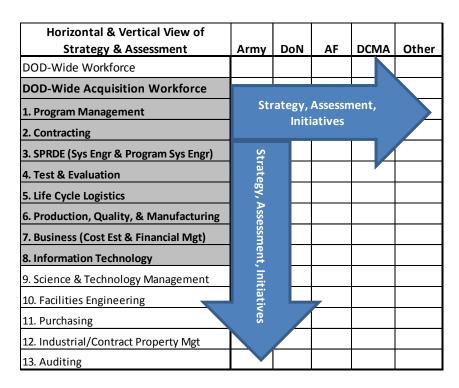


Figure 2-1. Horizontal & Vertical Acquisition Workforce Analysis View

#### **Defense Acquisition Workforce Analytics**

Effective workforce planning and decision-making requires accurate data and analysis tools. OUSD (AT&L), the military departments, and defense agencies have made significant progress towards improving data quality. As an example, the Acquisition Workforce Data Improvement Tool (AWDIT) has been deployed in the Defense agencies. This web-based tool allows individuals, supervisors and acquisition career managers an easier way to review and update acquisition unique workforce data such as career field, certification levels achieved, and whether an individual holds a contracting officer warrant and/or supports a major defense acquisition program. OUSD (P&R) has led joint Department efforts to leverage workforce analysis tools and best practices across the enterprise. Components are also evolving analytic tools to ensure their workforce initiatives are data driven. These collaborative initiatives are critical for enabling the

Department to successfully right-shape, right-size, and improve the quality of the defense acquisition workforce.

Today, there are various analytical approaches and assessment strategies throughout the Department. An initial set of analytical tools has been deployed. The objective is to continuously improve a comprehensive, real-time workforce analysis capability. This will facilitate deployment of best practices, tools, and metrics.

The Component's force planning is a multi-faceted process, guided by DOD Instruction 1100.22, Guidance for Determining Workforce Mix. This instruction provides guidance for determining the appropriate mix of civilian, military and contractor support personnel. Mission needs, budget constraints, and other internal and external factors are considered. The Instruction provides guidance for a risk-based approach in making workforce mix decisions. These enterprise decisions are fiscally informed and support the Department's readiness and workforce management needs.

The DAW analysis used enterprise level tools and inputs provided by the components in support of the defense acquisition workforce growth initiative.

The following identifies several of the evolving tools used for analysis:

- The Defense Acquisition Workforce Data Mart. The AT&L workforce data mart is the foundation for building a predictive analytic capability. The data mart enables significantly improved, real-time analysis of the workforce. The key is the ability to quickly perform real-time analysis and accurately report both historical and forward looking trends. This includes workforce count, certification levels, etc. OUSD (Personnel and Readiness) (P&R) and OUSD (AT&L) are working to improve acquisition workforce data quality, tools and metrics significant progress has been achieved.
- The "PB23" Planned/Budgeted Acquisition Workforce. The Presidential Budget Exhibit 23, AT&L Workforce Transformation Program (PB23), is a tool, which indicates, by acquisition function, the planned/budgeted organic acquisition workforce size through the Future Years Defense Program (FYDP). It displays active-duty military endstrength and civilian full-time equivalents (FTEs) by career field for each fiscal year, along with associated funding. Components submit updated PB23s as part of DOD budget and planning processes. The most recent submission was in January 2010.
- 3) **Inventory Projection Model.** AT&L has partnered with RAND to further develop a workforce inventory projection tool, which facilitates analysis of various changes in potential workforce composition. This analytic tool

allows the user to adjust planning factors to develop estimates of workforce size changes, to include estimates of the levels of gains and losses that support target end strengths.<sup>4</sup> AT&L is partnering with OUSD (P&R) to adapt and leverage use of emerging enterprise workforce analysis tools.

- 4) Acquisition Workforce Lifecycle Model. The Workforce Lifecycle Model (WLM) provides a visual display of the workforce in three cohort groups Future (early career) workforce, Mid-career, and Senior career groups. It provides a framework for additional discreet analysis of these three cohort groups and facilitates assessment of recent new hires, bench strength, experience, turnover, certification, cohort migration and retirement risk. This model organizes data in a manner that reduces masking and confusion.
- Competency Models and Assessments. The defense acquisition workforce competency initiative seeks to improve use of structured, management science to update and validate enterprise-wide acquisition functional competency models. The resulting models enable workforce assessments; skill set gap analysis; updating training and performance support assets; and other workforce applications.

In addition to the tools above, the USD (AT&L), through the DOD acquisition Functional Leaders has established certification requirements that apply to the defense acquisition workforce. As part of managing DOD acquisition positions, components assign a required certification level for each position. DOD components are responsible for ensuring personnel meet experience, training and education requirements. New incumbents on acquisition positions have 24 months to meet position certification level requirements or to obtain a position requirements waiver.

Identifying the Acquisition Workforce and Acquisition Positions. The DOD approach and best indicator of organic acquisition workforce size is the Defense Acquisition Workforce Improvement Act (DAWIA) count which is the number of incumbents on acquisition positions. The DAWIA count, initiated in the early 1990s, is based on 10 U.S.C. Chapter 87, section 1721, which establishes the requirement to designate acquisition positions. Individuals are counted as part of the workforce based on their position responsibilities being predominantly acquisition, irrespective of occupational series. For example, if position responsibilities are predominantly program management, then the position is designated DAWIA—Program Management, and the incumbent is counted in the acquisition workforce.

<sup>5</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

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<sup>&</sup>lt;sup>4</sup> RAND Report TR-572-OSD, Chapter 4, "An Application: Acquisition Workforce Inventory Projections," pages 35-47. RAND Corporation was commissioned by the DOD to develop the RAND model exclusively for the DOD.

Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by career path/functional career field category (program management, contracting, etc.). The acquisition workforce management framework includes assigning certification standards to each designated acquisition position based on the position's function and level of responsibility. The assigned position requirement defines minimum experience, education, and training standards expected of an individual filling that position. Certification requirements for acquisition career fields, such as program management, engineering, contracting, etc., are assigned as: Level I - Basic; Level II - Intermediate; or Level III – Advanced. DOD uses a Position Category Description (PCD) as a standard to promote consistent identification of acquisition positions. DOD acquisition Functional Leaders, in partnership with the Components, maintain current PCDs for their respective career fields. PCDs are available at http://www.dau.mil/workforce/pages/pcds.aspx.

**DOD Workforce Functional Career Fields.** It is important to understand that some acquisition workforce functional career fields (e.g., program management and contracting) are entirely within the acquisition workforce while other communities, such as Business, Life Cycle Logistics and technical acquisition career fields, are part of larger DOD functional communities (see Figure 2-2). As an example, while the Life Cycle Logistics career field (14,852) is 11 percent of the defense acquisition workforce, it is 2 percent of the broader DOD logistics community, comprised of approximately 615,000 military and civilian members. Initiatives to develop and strengthen the capability of the broader community benefit those in career fields of the Defense acquisition workforce. The broader DOD communities represent a large, domain-experienced recruiting source for crossflow to acquisition positions. In addition, a significant number of acquisition workforce members crossflow from acquisition-designated positions to non-acquisition positions within DOD. Thirty-eight percent of losses<sup>6</sup> to the defense acquisition workforce in FY2009 were internal to non-acquisition DOD positions.

<sup>&</sup>lt;sup>6</sup> Losses excluding administrative losses. See Page 2-13 and 2-14 for an explanation of administrative gains and losses.

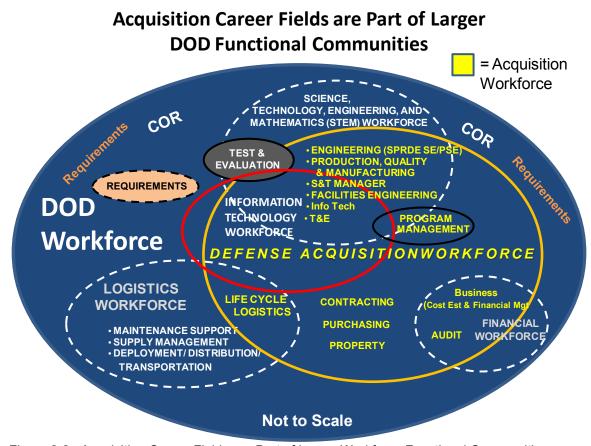


Figure 2-2. Acquisition Career Fields are Part of Larger Workforce Functional Communities

**Workforce Size Changes Since 1980.** Figure 2-3 displays DOD workforce changes over time. In general, acquisition organizations decreased in parallel with overall DOD workforce reductions after the Cold War. However, the drawdown in acquisition organizations<sup>7</sup> (blue line) exceeded that of DOD overall.

The DOD workforce (active military and civilian) reached a high point of 3,264,235 in 1987. The acquisition organization workforce (blue trend line) reached a high point in the same year at 622,132 (military and civilian) and decreased substantially between 1987 and 2004 (56 percent). The list of Acquisition Organizations used for the organization count was updated in FY2009 based on inputs from the Components and includes acquisition organizations not previously considered (e.g., Army Corps of Engineers). Based on the updated list of acquisition organizations the FY2009 count is 360,177.

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An acquisition organization is an organization and its subordinate elements, whose mission includes planning, managing and/or executing acquisition programs which are governed by DOD Directive 5000.1, DOD Instruction 5000.2 and related issuances. The acquisition organization count captures all military members and civilian employees assigned to an acquisition organization regardless of their occupation. It includes all members of the defense acquisition workforce as defined by the DAWIA count method.

Figure 2-3. Historical Size Comparison of DOD Acquisition Organization and Defense Acquisition Workforce (civilian + military).

The Refined Packard count, which was initiated in FY1998, measures the core acquisition workforce and is represented by the green trend line. The core acquisition workforce decreased approximately 14 percent from FY1998 through FY2008. In FY2004, through a process of assimilation the Refined Packard and DAWIA counts merged. Since then, the only count used in DOD is the DAWIA count. From FY2005 through FY2008, the acquisition workforce (black line) continued to decline. The workforce reached its lowest level since 1998 in FY2008 (125,879). As a result of the Secretary of defense acquisition workforce improvement strategy, robust replenishment hiring, deployment of the Defense Acquisition Workforce Development Fund, and improved retention, workforce size increased to 133,103 in FY2009 - an increase of 7,224. Table 2-1 provides detail on recent changes in the size (civilian and military) of the acquisition workforce.

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<sup>&</sup>lt;sup>8</sup> -Core acquisition workforce" is defined as all personnel whose responsibilities are predominantly acquisition and assigned to positions designated as acquisition.

<sup>&</sup>lt;sup>9</sup> For a more detailed discussion of workforce count, see the Chapter 814 Defense Acquisition Structures and Capability Report (June 2007). (http://www.dau.mil/pubscats/Pages/Acker%20Library.aspx)

AT&L Workforce by Functional					FY08 to FY09	FY08 to FY09
Career Field (Military + Civilian)	FY01	FY05	FY08	FY09	Change	Change
	Count	Count	Count	Count	(#)	(%)
SPRDE – Systems Engineering	34,899	34,752	34,537	36,704	2,167	6.3%
Contracting (Career Field 1102s +)	25,413	26,025	25,680	27,655	1,975	7.7%
Life Cycle Logistics	11,060	12,493	13,361	14,852	1,491	11.2%
Program Management	14,031	12,281	12,781	13,422	641	5.0%
Production Quality & Manufacturing	10,547	9,397	9,138	9,023	-115	-1.3%
Test & Evaluation (Acquisition)	5,113	7,384	7,420	7,892	472	6.4%
Business (Cost Estimating & Financial						
Management)	10,279	8,119	7,085	7,262	177	2.5%
Facilities Engineering	0	8,356	4,920	5,420	500	10.2%
Information Technology (Acquisition)	5,612	5,472	3,934	4,358	424	10.8%
Audit	3,457	3,536	3,638	3,777	139	3.8%
Purchasing	4,121	2,438	1,196	1,238	42	3.5%
SPRDE – Science & Technology Manager	0	314	480	623	143	29.8%
Industrial/Contract Property Management	620	571	451	475	24	5.3%
Other/Unknown	4,097	3,232	1,258	402	-856	-68.0%
TOTAL Count	129,249	134,370	125,879	133,103	7,224	5.7%

Table 2-1. Defense Acquisition Workforce Count (military and civilians) (FY2001-FY2009)<sup>10</sup>

Acquisition career field increases and decreases have been dynamic since FY2001. Examples include: 1) establishing the facilities engineering and science & technology manager career fields in FY2002; 2) continued assimilation of existing positions which increased workforce count for Test & Evaluation and Life Cycle Logistics during this period; and 3) decline in Purchasing (70.9 percent); 4) decline in Business (29.2 percent); decline in Industrial/Contract Property Management (26.8 percent); and decline in Information Technology (26.2 percent). The —nicrease" changes in FY2009 included the impact of the Secretary of Defense initiative announced in FY2009 to improve acquisition workforce capability and capacity by increasing the size of the workforce, Component initiatives, and improved retention which is likely a result of economic conditions.

The following is a list of factors that must be considered when assessing the impact of increases or decreases in the size of the acquisition workforce:

- Hires from outside or from within DOD involving an incumbent new to an acquisition position;
- Separations from DOD (e.g., retirements, those leaving DOD employment for another federal agency or to the private sector);
- Extent of replenishment hiring to fill vacancies on positions designated acquisition (this can also be impacted by availability of funding);

<sup>&</sup>lt;sup>10</sup> Source: FY2005 through FY2009 DAWIA Count Methodology/AT&L Workforce Data Mart.

- Transfer of an incumbent between DOD acquisition career fields (affects size of career field but not overall defense acquisition workforce count);
- Transfer of an incumbent from an acquisition position to a nonacquisition position within DOD (and vice versa);
- Increase, decrease, and/or re-categorization by Components of positions designated acquisition.

**Defense Acquisition Workforce Improvement Strategy.** Acquisition workforce size and composition is a key indicator of capacity and capability. The increase of approximately 20,000 will rebalance the organic acquisition workforce to better address inherently governmental and other critical functions. This will help mitigate the imbalance created by significant outsourcing of acquisition functions since the end of the Cold War. The DOD target to increase the size of the acquisition workforce was based on an integrated assessment of the following:

- 1) Alignment with the President's acquisition improvement initiatives and Department acquisition reform objectives;
- 2) Congressional engagement and perspectives on increasing the size of the defense acquisition workforce;
- 3) Senior leadership judgment relative to the need for a larger defense acquisition workforce to include Component and Functional Leader bottoms-up analysis;
- 4) The need to improve contract management and the Department's oversight capability;
- 5) Assessment of acquisition workforce decline since the mid 1990's;
- 6) The need to grow the organic workforce capability by rebalancing the Total Force mix:
- 7) An assessment of workload demand based on the dramatic increase in annual spend levels since 2001;
- 8) Results of the Dayton Aerospace SACOM reviews of major program offices in the Air Force and Navy;
- 9) Air Force assessment of their workforce assigned to major programs;
- 10) DOD competency assessment and bottoms-up review conducted by OSD and Component contracting leaders;
- 11) Internal DOD analysis of a variety of RAND studies on the acquisition workforce:

- 12) Numerous external studies, including GAO reports, which recommended DOD increase the size of the acquisition workforce;
- 13) The Defense Acquisition Workforce Structures and Capability review (Section 814, NDAA FY06);
- 14) Firsthand feedback from field level acquisition organizations.

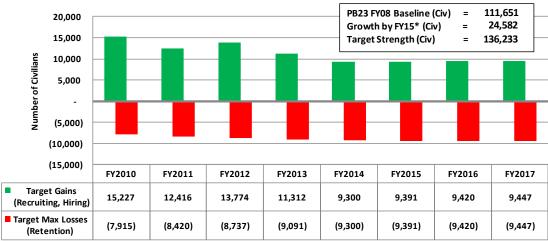
Assessment of Projected Workforce Growth. Workforce size is a function of the force planning process. It reflects deliberate enterprise decisions based on total mission needs, available resources, and budget considerations. Component's plans are aligned with the Department's acquisition workforce improvement strategy as well as component-unique objectives. The projected plans support DOD strategies to strengthen the program management, systems engineering, contracting, cost estimating, logistics, and other acquisition functions. In addition, these initiatives will directly address and improve contract oversight in the Department.

Workforce growth is underway and on target. Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 15,000 for FY2010 and 12,500 in FY2011. Corresponding retention needs require losses at levels below 8,000 for FY2010 and 8,500 in FY2011. In FY2009, the defense acquisition workforce experienced approximately 16,300 gains and 7,700 losses. This analysis, with projections through FY2017 (Figure 2-4), provides an enterprise level view of projected gains and losses. Detailed assessments are being conducted at the organization and functional level. Functional assessments are contained in Appendices 1 through 8 to this Section.

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<sup>&</sup>lt;sup>11</sup> Numbers based on FY2009 gains and losses from all pay plans (CSRS, FERS and other pay plans). Numbers exclude administrative gains (3,484) and losses (5,374) for FY2009.

## Gains and Losses to Achieve & Maintain Target Strength Defense Acquisition Workforce - DOD-Wide (Civilians)



\*Growth estimates are as of Oct 2009 Senior Steering Board Component Inputs and include DOD and Component inputs

Figure 2-4. Projected Gain/Loss Targets Supporting All DOD-wide Acquisition Workforce Improvement Initiatives <sup>12</sup>

Composition of FY2009 Workforce Count. As shown in Table 2-2, the count of the defense acquisition workforce, as of the end of FY2009, was 133,103 (the FY2008 count was 125,879). The FY2009 count is comprised of 89 percent civilian and 11 percent military. The defense acquisition civilian workforce constitutes approximately 16 percent of the total defense civilian workforce (appropriated funds). Table 2-3 shows the government civilian and military defense acquisition workforce composition by career field.

Defense Acquisition Workforce Count and Composition by Major Component (End of FY09)									
Component	FY09 FY09 (%) Civ Mil Civ (%) Mil (%)								
Army	40,356	30.3%	38,612	1,744	29.0%	1.3%			
Navy	46,972	35.3%	42,726	4,246	32.1%	3.2%			
Air Force	27,174	20.4%	18,506	8,668	13.9%	6.5%			
DCMA	7,909	5.9%	7,909	0	5.9%	0.0%			
DLA	3,970	3.0%	3,970	0	3.0%	0.0%			
Other Defense	6,722	5.1%	6,722	0	5.1%	0.0%			
Total	133,103	100.0%	118,445	14,658	89.0%	11.0%			

Table 2-2. Defense Acquisition Workforce Composition (By Component)<sup>13</sup>

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AT&L HCI and RAND analysis using DMDC data (end of FY09) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

<sup>&</sup>lt;sup>13</sup> AT&L Workforce Data Mart (End of FY2009)

Defense Acquisition Workforce Count and Composition by Acquisition Career Field (End of FY09)								
Career Field	FY09	FY09 (%)	Civ	Mil	Civ (%)	Mil (%)		
Audit	3,777	3%	3,777	0	100%	0%		
Business (Cost Est and Fin Mgt)	7,262	5%	7,059	203	97%	3%		
Contracting	27,655	21%	23,752	3,903	86%	14%		
Information Technology (Acquisition)	4,358	3%	4,034	324	93%	7%		
Life Cycle Logistics	14,852	11%	13,927	925	94%	6%		
Prod, Quality, Manuafacturing	9,023	7%	8,356	667	93%	7%		
Program Management	13,422	10%	8,789	4,633	65%	35%		
SPRDE (Program/Systems Engineering)	36,704	28%	34,511	2,193	94%	6%		
Test and Evaluation (Acquisition)	7,892	6%	6,152	1,740	78%	22%		
Other	8,158	6%	8,088	70	99%	1%		
Total	133,103	100.0%	118,445	14,658	89.0%	11.0%		

Table 2-3. Defense Acquisition Workforce Composition (By Career Field)<sup>14</sup>

**Contactor Support.** Contractor support is a vital supplement for the organic acquisition workforce. Improved identification and insight into the use of contractor support is a critical element of DOD's overall workforce strategy. This is a critical workforce improvement initiative and is being worked as a joint enterprise initiative. All acquisition Functional Leaders have been tasked to assess the extent and use of contractor support in their functional community. In addition, workforce composition studies have started and will be completed to assess and better understand the specific role contractors play in key functional communities.

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<sup>&</sup>lt;sup>14</sup> AT&L Workforce Data Mart (End of FY2009)

<sup>&</sup>lt;sup>15</sup> DOD Instruction 1100.22 (September 2006) provides guidance on determining workforce mix and considering risks

#### Defense Acquisition Workforce Lifecycle Assessment

A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The WLM provides a visual representation of the distribution of the workforce and assists in assessing trends, needs, and targeted strategies for improved workforce planning and management. The WLM depicts the distribution of workforce members in Future (early-career), Mid-career, and Senior career lifecycle groups. The visual display serves as a framework for additional discreet analysis of factors such as the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the type and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility, and retirement patterns. This information helps to assess risk and serves as part of a data driven foundation for decisions on hiring, development and retention initiatives. Figure 2-5 provides a view of the WLM for the civilian defense acquisition workforce as of the end of FY2009. From FY2008 to FY2009 the WLM distribution shifted from 29%/35%/36% to 32%/33%/35%. This reflects increased hires in the future (early career) workforce WLM category. Analysis without use of a WLM-type construct masks key trends and reduces the ability to perform predictive analysis.

### Defense Acquisition Workforce Lifecycle Model (WLM) by Years to Retirement Eligibility (YRE) - Civilians (FY09)

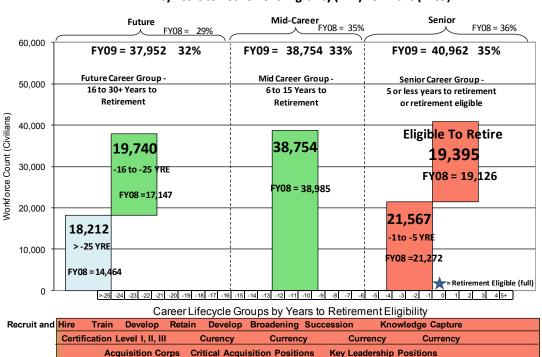


Figure 2-5. Defense Acquisition Workforce Lifecycle Model (WLM) (Civilian)<sup>16</sup>

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<sup>&</sup>lt;sup>16</sup> AT&L Workforce Data Mart (End of FY2009)

Forecasted Shape of Workforce in FY2017 with Projected Growth. As noted earlier, AT&L has partnered with RAND to further develop a workforce inventory projection tool, which facilitates analysis of various changes in potential workforce composition. This analytic tool allows the user to adjust planning factors to develop estimates of workforce size changes. Using projected near term growth and modeling of gains and loss patterns, the tool has been used to forecast the workforce shape into the future. Figure 2-6 contrasts the FY2009 acquisition workforce (civilians) with a forecasted distribution of the FY2017 acquisition workforce (civilians). Noted is that various factors can impact the forecast and actual factors used in modeling are subject to judgment.

#### Defense Acquisition Workforce Distribution Projection FY09 vs FY17

by Years to Retirement Eligibility (YRE) (Civilians)

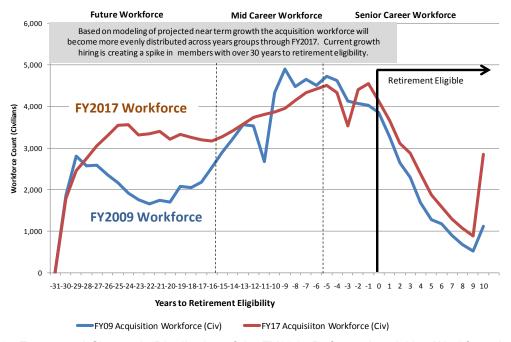


Figure 2-6. Forecasted Change in Distribution of the FY2017 Defense Acquisition Workforce by Years to Retirement Eligibility (Civilians)

**Defense Acquisition Workforce Gains and Losses.** Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring

and retention planning and assessment of progress. End-of-fiscal year defense acquisition workforce -membership" lists are compared to identify gains and losses. A —gin" is an individual who is recorded as an incumbent on a DOD acquisition position on the last day of a given fiscal year but not recorded as such on the last day of the prior fiscal year. A —lossis the reverse. Figure 2-7 depicts the gains and losses for the defense acquisition workforce by three categories as of the end of FY2009. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

## Defense Acquisition Workforce (DAW) (Civilian) (FY09) Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories

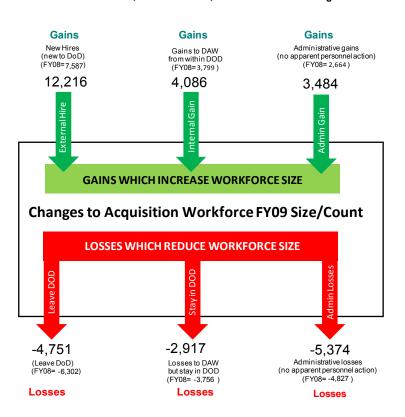


Figure 2-7. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories - External, Internal, and Administrative (Civilians)<sup>17</sup>

As Figure 2-7 depicts, gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains. External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. For the DOD-wide acquisition workforce analysis, substantive internal gains are individuals who

FERS.

<sup>&</sup>lt;sup>17</sup> AT&L HCl and RAND Analysis using DMDC data (end of FY2008 and FY2009). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, and bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

were part of the DOD civilian workforce in the prior year but not on an acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, no apparent change in job). Some administrative gains and losses appear to be "in-place" changes in which an encumbered position is designated acquisition (a -gain") or the acquisition designation is removed (a -less"). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure 2-8 depicts the defense acquisition workforce civilian gains and losses that took place during FY2009 by -years to retirement eligibility" groups. Current Component planning for the DOD workforce improvement strategy indicates overall organic growth will be composed of approximately 62 percent entry level personnel, 37 percent journeymen and 2 percent Highly Qualified Experts (HQEs).

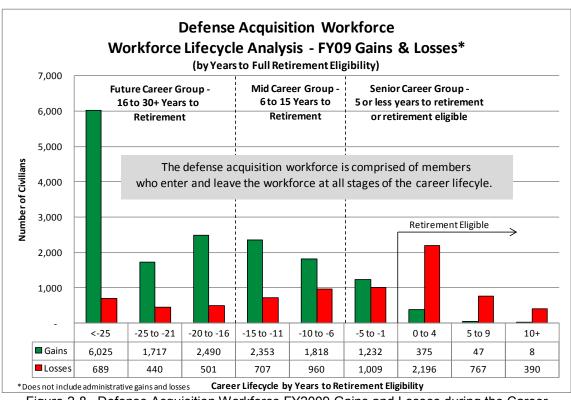


Figure 2-8. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Civilians)<sup>18</sup>

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<sup>&</sup>lt;sup>18</sup> AT&L HCI generated from RAND analysis using DMDC data (End of FY2009)

FY2009 data indicates that 10,232 of the 16,065 gains (64 percent) (less administrative gains) for the civilian acquisition workforce were in the future career group; 4,171 (26 percent) were in the mid-career group; and 1,662 gains (10 percent) were in the senior career group. This represents a 47 percent increase in FY2009 gains above FY2008 for the future career group; a 37 percent increase in the mid-career group, and a 20 percent increase for the senior career group. Gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., position coding updates). Figure 2-9 depicts the external hires and internal gains by lifecycle career group.

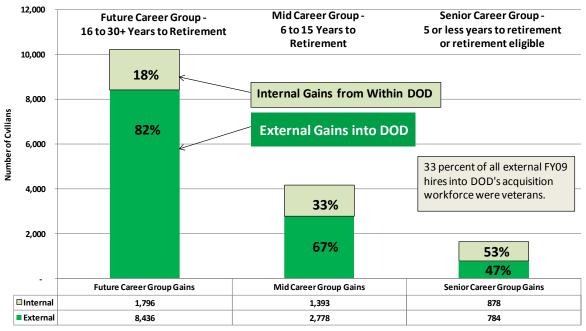


Figure 2-9. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source
- External and Internal (Civilians)<sup>19</sup>

 $<sup>^{19}</sup>$  AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY2009 data indicates that 1,630 of a total of 7,469 losses (22 percent) (less administrative losses) for the civilian acquisition workforce were in the future career group; 1,667 (22 percent) were in the mid-career group, and 4,172 gains (56 percent) were in the senior career group. This represents a 25 percent decrease in losses in FY2009 when compared to FY2008 for the future career group; a 25 percent decrease in the mid-career group; and a 26 percent decrease for the senior career group. The percent change is different within the twelve acquisition career fields – some increased while most decreased. Figure 2-10 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

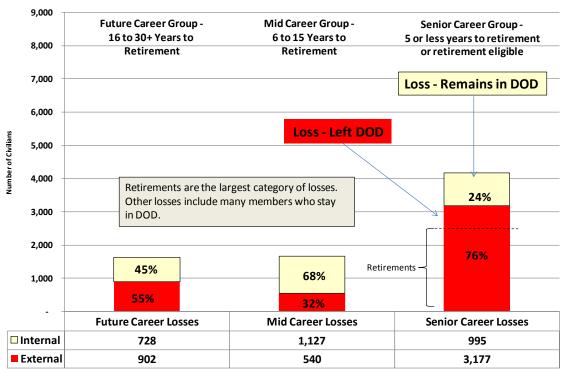


Figure 2-10. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (Civilians)<sup>20</sup>

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 $<sup>^{20}</sup>$  AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure.<sup>21</sup> Figure 2-11 provides a comparison of defense acquisition workforce civilian turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. The DOD overall civilian turnover rates<sup>22</sup> for FY2007, FY2008, and FY2009 were 13.09 percent, 12.95 percent, and 10.91 percent, respectively. The defense acquisition workforce turnover rates are lower by comparison for each of these fiscal years. For FY2009, the acquisition workforce turnover rate was 6.5 percent and the overall DOD turnover rate was 10.91 percent. FY2009 defense acquisition workforce (civilian) turnover rates decreased, likely, in part, due to economic conditions.

### **Defense Acquisition Workforce Turnover - DOD-Wide** (FY07, FY08, FY09)(by Career Lifecycle Group) (Civilian)

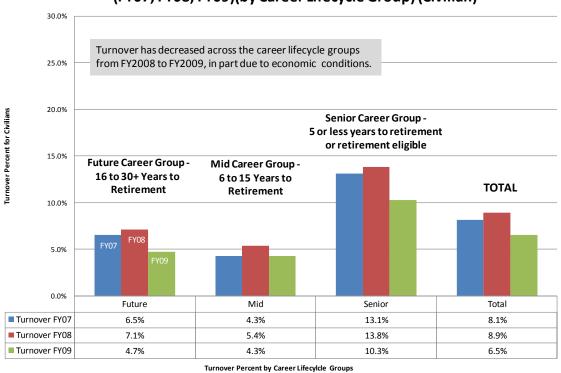


Figure 2-11. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Civilians)<sup>23</sup>

Gains with military experience. The average age of civilian gains in the acquisition workforce is 39.7 and the median age is 40. This indicates that successful hiring occurred with new college graduates and experienced second career personnel - journeymen employees. Recently separated military

<sup>&</sup>lt;sup>21</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the *average* of the end of fiscal year counts for 2008 and 2009, times 100.

Source: OUSD Personnel & Readiness/CPMS http://www.cpms.osd.mil/hrbits/DoD\_Demographics.aspx. FY2007, FY2008 and FY2009 statistics extracted from January 31, 2010 online report. Noted is that the P&R calculation is based on total separations divided by the *average* monthly employment for the year, times 100.

AT&L HCI generated from HCI/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

personnel are also being hired – many have acquisition experience. Thirty-three percent (33 percent) of FY2009 external hires had military experience and in FY2008 38 percent had military experience. These individuals help mitigate the loss of experience resulting from the departure of the Baby Boomers from the defense acquisition workforce.

Of the 4,028 hires with military experience, 22 percent (878) were previous members of the defense acquisition workforce. Six percent of the 878 were Level III certified; 5 percent Level II certified; and 3 percent Level I certified. For FY2008 the distribution of military members with certifications was 9 percent, 6 percent and 4 percent, respectively. Figure 2-12 depicts the variation in the mix of hires relative to military experience.

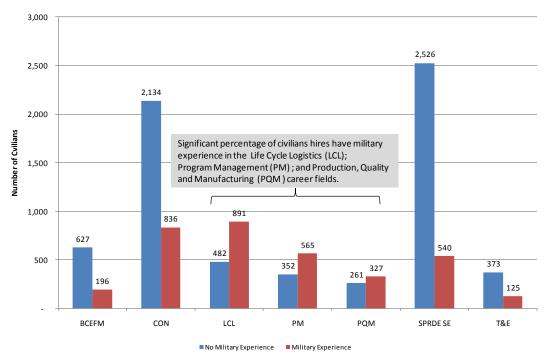


Figure 2-12. Defense Acquisition Workforce FY2009 Hires With and Without Military Experience (Civilians)<sup>24</sup>

For the Military Departments, 39 percent of the Air Force civilian hires were veterans; 36 percent in the Army; and 28 percent in the Navy. For FY2008 the percentages were 67, 43, and 29 percent, respectively. In both FY2008 and FY2009 military hires came from predominantly two groups - those who leave with 7-9 years (two tours -18 percent) and those with 20-24 years (41 percent).

Analysis of gains and loss patterns, turnover rates, and other workforce metrics will evolve with time to strategically shape our hiring and retention initiatives.

<sup>&</sup>lt;sup>24</sup> AT&L HCI generated from RAND analysis using DMDC data (FY2009)

Retirement Eligibility and Losses. Baby Boomers and the Traditional generations comprise 63 percent of the acquisition workforce as of the end of FY2009. For FY2008 this number was 68 percent. Approximately 19,400 civilian acquisition workforce members (16 percent) are eligible today to retire with full benefits. Over the next five years, another 21,600 will become eligible (18 percent). Prior analysis indicates that approximately 19 percent retire within the first year of full eligibility and a total of 50 percent retire within the first four years. Deploying a strategic workforce plan mandates a data driven understanding of retirements and other losses that impact the talent and experience base. Many members of the Baby Boomer and Traditional generations have extensive experience which includes acquiring most of the major systems that led to the end of the Cold War, extending the life of many aging systems, and supporting the needs of numerous contingency operations around the world. To mitigate the impact of their departure, the Department is deliberately capturing and transferring their expert knowledge for current and future uses. In addition, we are deploying targeted initiatives such as rehiring experienced annuitants and/or selective hiring of Highly Qualified Experts (HQEs).

Figure 2-13 documents the defense acquisition workforce retirement profile and shows current civilian acquisition workforce members who are approaching full retirement eligibility through 2019. There are two primary retirement systems in the Federal government: Civil Service Retirement System (CSRS) and Federal Employee Retirement System (FERS). Approximately 25 percent of the defense acquisition civilian workforce is under CSRS and 74 percent are under FERS. Retirement eligible levels are expected to remain above 4,000 per year through 2019. In addition to the current growth strategy and the current improvement in retention, the anticipated extent of departures is a compelling case for robust recruiting, hiring and retention strategies.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of experienced workforce members.

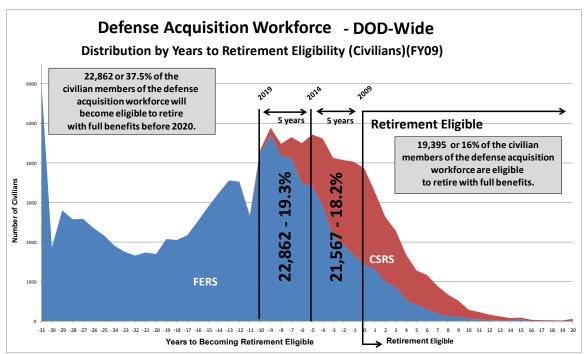


Figure 2-13. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Civilians)<sup>25</sup>

These tools support effective assessment of workforce trends relative to gains and losses and other workforce dynamics. This analytic capability will continue to improve through partnership with OUSD (P&R) and the components. The desired outcome is real time workforce data to improve recruiting and hiring, retention, workforce incentives, training, and other appropriate workforce strategies.

### **Competency Model Updates and Assessment**

The acquisition competency initiative facilitates defining critical skills and competencies that are available in the workforce and will be needed in the future. The initiative is a critical element of a comprehensive workforce data and analysis capability. It builds upon a long standing, policy-based approach that has identified acquisition workforce needs through a joint team of OSD and Component functional subject matter experts and workforce career managers. OSD Functional Leaders, using advice from the joint team, establish, oversee and maintain: 1) the education, training, and experience requirements including competencies and certification standards; 2) position category description(s); and 3) content of the DAU courses as current, technically accurate, and consistent with DOD acquisition policies. A key objective of the competency initiative is to ensure updated, validated competency models are available for various

 $<sup>^{25}</sup>$  AT&L HCl generated from HCl/RAND analysis using DMDC data (End of FY2009)

workforce applications: competency assessments, human capital planning, training improvements, etc. Information from competency assessments provides an improved data-driven capability to assess workforce strengths and gaps. Assessments are being conducted for all defense acquisition functional categories: Program Management, Contracting, Systems Engineering, etc. Core and functional competencies promote efficiency, effectiveness and consistency in workforce planning and development. Competency assessments will enable more informed decisions on human capital strategies to include closing skill gaps and shortfalls. To date, over 18,000 contracting; 1,500 program management; and 1,200 life cycle logisticians have been assessed using the updated competency models. The DOD acquisition workforce competency process is a five-phased approach:

- Phase I Framework Development. In this phase senior experts evaluate the existing competencies, establish a baseline, and identify subject matter experts for Phase II;
- Phase II Model Development. In this phase subject matter experts identify key work situations and competencies contributing to successful performance. These inputs are used to update the baseline model in preparation for additional validation using workforce assessments;
- Phase III Testing and Refinement. In Phase III model testing & refinement are conducted to include a beta —ssessment" test using the competency model in preparation for expanded assessments;
- Phase IV Model Validation and Assessment. As part of validation, frequency, criticality, and proficiency of a competency are assessed. The final competency model is deployed for Phase V comprehensive assessments in the specific career field community. Initial results are analyzed and reported to functional leadership and other users. Information is then available for use in gap analysis, workforce development, and other human capital applications;
- Phase V Community-Wide Assessment and Results Applications -Phase V includes expanding assessments community-wide; cross-walking updated competencies and gap results to improve resources such as training within the AT&L Performance Learning Model; leveraging competencies and gap results vertically for support to the workforce as they perform, and to human capital planning and initiatives; ensuring currency, and providing special interest and new insights to Component and functional leaders; reporting as part of partnering and accountability on progress to identify and close gaps; and sharing best practices and lessoned learned to other partners and to external stakeholders such as other agencies, Congress, OMB and OPM.

The Contracting community has completed its model update and assessments involving approximately 20,000 members of the DOD contracting workforce. The competencies and assessment results led to establishment of a new contracting course, CON 090 which is a new fundamentals course for the contracting career

field. Progress has been made for other acquisition functional communities to include completion of Phase IV assessments for program management and life cycle logistics. Additional model updates are underway community assessments will soon start for the Business (Cost Estimating and Financial Management) and the Systems Planning, Research, Development and Engineering career fields. These two efforts currently mid-way through the competency model update process and will community-wide assessments will be completed during FY2010. Competency model updates and assessments for additional career fields will also be conducted during FY2010 and FY2011.

### Certification Requirements and Levels Achieved

Military Components and defense agencies establish certification level requirements for each acquisition position based on type (career field) and level of position responsibilities. Certification requirements reflect the competencies and skill sets needed to perform the acquisition mission. An organization's distribution of position requirements reflects their overall assessment of the complexity and scope of acquisition responsibilities. This certification construct allows the Department to match individual skill levels with position requirements and to assess succession needs and workforce supply. Incumbents are required to meet position certification requirements within 24 months of assignment. Career certification and development guidance is available for workforce members. The Core Certification Standards and Core Plus Development Guide. available in the DAU Catalog (http://icatalog.dau.mil), provide certification standards by acquisition career field. The guide assists individuals in identifying appropriate certification, career path, and job-specific training. To promote career development and currency workforce members are also required to complete 80 continuous learning points every two years.

Table 2-4 shows the major Component certification level requirements by certification level and Table 2-5 shows requirements by acquisition career field.

Defense Acquisition Workforce Position Certification Requirements by DAWIA Level by Component (FY09)										
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)			
Army	3,200	17,486	19,584	40,270	7.9%	43.4%	48.6%			
Navy	4,708	16,171	25,993	46,872	10.0%	34.5%	55.5%			
Air Force	2,970	18,722	5,132	26,824	11.1%	69.8%	19.1%			
DCMA	492	5,657	1,750	7,899	6.2%	71.6%	22.2%			
DLA	389	2,929	622	3,940	9.9%	74.3%	15.8%			
Other Defense	589	3,130	2,985	6,704	8.8%	46.7%	44.5%			
Total (see note)	12,348	64,095	56,066	132,509	9.3%	48.4%	42.3%			

Note: There are 594 records with Unknown in the Career Level Required Code field

Table 2-4. Defense Acquisition Positions - Certification Level Requirements by Component FY2009) (All positions – Military and Civilian)<sup>26</sup>

Defense Acquisition Workforce (Military and Civilian) Position Requirements by DAWIA Certification Level by Acquisition Career Field/Path (FY09)									
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)		
Audit	410	2,354	1,011	3,775	11%	62%	27%		
Business (Cost Est & Fin Mgt)	775	3,395	3,086	7,256	11%	47%	43%		
Contracting	3,956	16,347	7,092	27,395	14%	60%	26%		
Facilities Engineering	221	4,463	713	5,397	4%	83%	13%		
Information Technology (Acquisition)	321	2,313	1,716	4,350	7%	53%	39%		
Life Cycle Logistics	1,103	8,520	5,225	14,848	7%	57%	35%		
Program Management	866	4,807	7,551	13,224	7%	36%	57%		
Production, Quality & Manufacturing	514	6,750	1,748	9,012	6%	75%	19%		
Industrial and/or Contract Property	30	382	62	474	6%	81%	13%		
Purchasing	432	737	29	1,198	36%	62%	2%		
SPRDE (PSE)	5	55	174	234	2%	24%	74%		
SPRDE (SE)	2,761	10,424	23,260	36,445	8%	29%	64%		
SPRDE (ST)	15	184	424	623	2%	30%	68%		
Test and Evaluation (Acquisition)	804	3,256	3,829	7,889	10%	41%	49%		
Unknown	135	108	146	389	35%	28%	38%		
Total	12,348	64,095	56,066	132,509	9%	48%	42%		

Note: There are 594 Unknown records with null in the Career Level Required Code field

Table 2-5. Defense Acquisition Positions - Certification Level Requirements by Acquisition Career Field (FY2009) (All positions – Military and Civilian)<sup>27</sup>

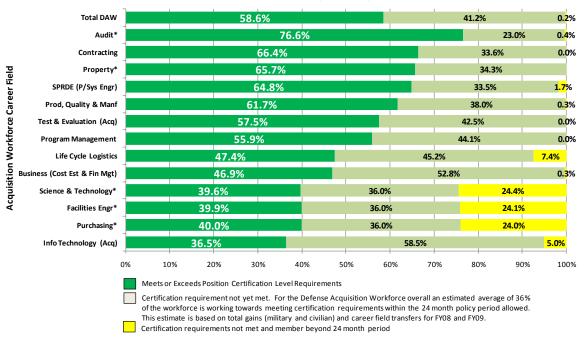
Based on component-reported data, the percentage of the defense acquisition workforce members (DOD-wide) who have met or exceeded certification requirements for acquisition positions has improved from 56 percent in FY2007 to 59 percent as of the end of FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the defense acquisition workforce as a whole, approximately 41 percent may be within the 24 month period allowed to achieve certification. Analysis is ongoing. Also noted is that while the number of members meeting or exceeding requirements has increased, the percentage has actually decreased due to the increase in workforce size. Figure 2-14 summarizes certification rates by Career Field; and Figure 2-15 summarizes certification rates for the Military Departments, DCMA, Defense Logistics Agency, and other Defense agencies.

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<sup>&</sup>lt;sup>26</sup> AT&L Workforce Data Mart (end of FY2009)

<sup>&</sup>lt;sup>27</sup> AT&L Workforce Data Mart (end of FY2009)

### Certification Level "Meet/Exceed" Rates by Career Field - DOD-Wide (FY2009)



<sup>\*</sup>DOD-wide FY08 & FY09 gains (military+civilian) and career field transfers as a percentage of total positions used as estimate of in-progress certifications (not to exceed total of 100%)

Figure 2-14. Defense Acquisition Workforce FY2009 Certification -Meet/Exceed" Rates by Career Field (Military and Civilians)<sup>28</sup>

AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

<sup>&</sup>lt;sup>28</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by

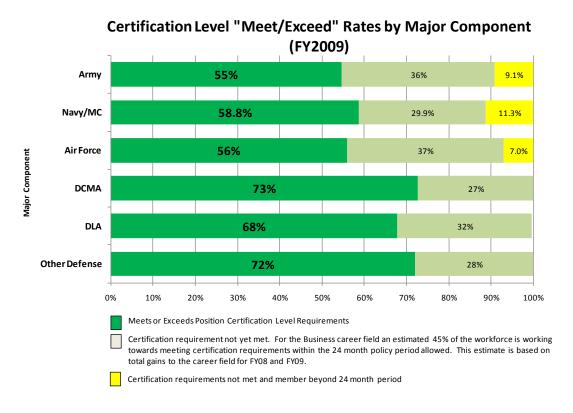


Figure 2-15. Defense Acquisition Workforce FY2009 Certification -Meet/Exceed" Rates by Component (Military and Civilians)<sup>29</sup>

### Conclusion.

Major progress has been achieved relative to workforce analysis and datadriven workforce initiatives. This Section represents a baseline and foundation for defense acquisition workforce planning and human capital analysis. This analytic construct will continue to evolve through collaboration with the Components, OSD (P&R), and other partners. It supports leadership decision-making for restoring and reshaping the current and future acquisition workforce.

This report provides for improved transparency and is a living document which will capture ongoing updates at https://acc.dau.mil/acquisitionworkforce. The following Section 3 describes specific defense acquisition workforce initiatives.

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<sup>&</sup>lt;sup>29</sup> See footnote 28.

# Section 3 Defense Acquisition Workforce Initiatives

In opening the October 26, 2009 Defense Acquisition Workforce Senior Steering Board, Under Secretary Carter stated:



"The Department is in an enviable position because President Obama and Secretary Gates intend to improve the acquisition process and rebuild and reshape the acquisition workforce. In addition, there is Congressional support on both sides of the aisle. We must grow and reshape the workforce to meet current needs with special emphasis and focus on improving workforce quality."

The importance of having a high quality, high performing acquisition workforce cannot be overstated. The President, the Congress, and the Secretary initiated aggressive actions to increase size and to improve the quality of the acquisition workforce. Since April 2009, significant progress has been achieved. In addition to other improvement initiatives, growth targets for FY2009 were exceeded and DOD is on track to meet or exceed FY2010 growth and rebalancing targets. However, the Department will continue to face complex challenges and must exploit opportunities to further strengthen the workforce as it moves through FY2015.

The Department must attract, develop, and retain the best and brightest to contribute to the acquisition mission. The strategy for success requires attracting and employing high quality applicants and a streamlined hiring process. Field organizations have implemented the right strategies to successfully recruit interns, journeymen and highly qualified experts (HQEs) who possess critical acquisition skills. Success will continue to accelerate during fiscal year 2010. The workforce planning infrastructure and resources are in place. Collaboration and integrated planning between acquisition, financial management, manpower, and human resources is ongoing and essential. The growth and workforce improvement strategy facilitates succession planning and is critical to mitigate the impact of departing Baby Boomers and other workforce turnover.

The following are key defense acquisition workforce initiatives:

### 1. Achieve the SECDEF Growth Strategy – 20,000

Why Initiative is Important. Increasing the size of the acquisition workforce is the cornerstone of the Secretary's initiative to right-size, rebalance and improve the overall quality of the acquisition workforce. To improve quality, the Department must increase organic acquisition workforce capability, such as

program management, systems engineering, contracting and other critical acquisition functions.

Section 820 of the FY2007 National Defense Authorization Act (NDAA) as later amended by the FY2010 NDAA, addresses government performance of certain acquisition functions on Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) programs. It establishes the goal that within five years after enactment (by October 17, 2011), the following positions are performed by properly qualified members of the Armed Forces or full-time DOD employees:

- (1) Program manager
- (2) Deputy program manager
- (3) Chief engineer
- (4) Systems engineer
- (5) Cost estimator
- (6) Product Support Manager
- (7) Lead program contracting officer (added by DOD)

Increasing the size of the organic acquisition workforce enables the Department to meet the requirements of Section 820. See Appendix 13 for an expanded discussion of Section 820. Recently, acquisition leaders agreed to expand this list to add additional key acquisition positions.

The Department will also grow and increase its contracting and oversight workforce, to include the Defense Contract Management Agency and the Defense Contract Audit Agency. This will improve our oversight capability to ensure we get what we pay for, ferret out waste, and more aggressively combat contract fraud. To get the best value for taxpayers, DOD will also grow its pricing and program-estimating capability to improve program cost estimates and ensure contracts are priced and structured appropriately.

Action. All components must ensure appropriate force planning strategies are in place and programmed in the FY2012 President's Budget to execute and sustain component workforce growth. Specifically, planning should reflect the appropriate workforce functional mix and funding to meet or exceed the Secretary's initiative.

## 2. Deploy Tools to Assess, Track, and Account for "Total Force" Defense Acquisition Workforce Capability and Capacity.

Why Initiative is Important. The Department must define, track and accurately understand the acquisition "Total Force," to include contractor support. This includes strategically planning the right workforce mix between organic and contractor support personnel. There are Congressional requirements to

accurately count the total defense acquisition workforce, e.g., section 324 of FY2008 NDAA and section 807 of the FY2008 NDAA. In addition, there are numerous GAO reports that have criticized the Department for its inability to accurately count contractor support. Most MDAP and MAIS programs use support contractors, but currently there is a lack of traceability for count and skill sets acquired.

Action. Ensure consistent definition for inventorying acquisition functional contractor support.

Action. By September 30, 2010 improve and integrate use of enterprise analytical tools (e.g., budget, acquisition (Data Mart), human resources (DCPDS), and manpower reporting tools) to inform and track workforce strategies and decisions.

3. Right size and right shape Major Defense Acquisition Program (MDAP) and Major Automated Information System Program (MAIS) office staffing with the right skilled people to enable successful program outcomes.

**Why Initiative is Important.** Proper staffing of MDAP and MAIS programs with high quality acquisition personnel is a top priority. Section 820 of the FY2007 National Defense Authorization Act (NDAA) addresses government performance of certain acquisition functions on MDAP/MAIS programs (See Appendix 13).

The recently revised DOD Instruction 5000.02 "Operation of the Defense Acquisition System" requires program managers (ACAT I-IV) to include a program office staffing plan as an element of their acquisition strategy. Proper staffing is a recurring issue for defense acquisition programs as documented by numerous GAO reviews and DOD-initiated studies.

The DOD acquisition mission represents the largest buying enterprise in the world with annual purchases of approximately \$400 billion. Since 2001, the number of MDAP and MAIS programs has increased from 70 to 102 representing \$1.6 trillion in budgeted cost. Effective staffing of these programs is critical. Analysis indicates 65 percent of the total dollars obligated are on 5 percent of the contract actions and 85 percent of total dollars are obligated on 20 percent of the actions. The majority of these actions support MDAP and MAIS programs. Understaffed programs increase the risk to successful program execution. Proper staffing requires the right size, right skill mix, and appropriate certification and experience levels.

Action. By September 30, 2010 Program Managers will establish and maintain program office staffing plans in accordance with the DOD Instruction 5000.2. The plan should include the program manager's assessment of personnel required to successfully execute objectives and deliverables at each program phase.

Action. By September 30, 2010 Components and Functional Leaders will establish a viable data strategy to improve traceability and transparency of program office workforce, leveraging existing information sources to the greatest extent possible.

## 4. Establish enterprise certification goals as a management tool for improving workforce quality.

Why Initiative is Important. A highly qualified workforce is a critical element for achieving acquisition success. Certification standards drive workforce quality. This objective is focused on improving the percentage of workforce members that meet or exceed certification requirements. Establishing enterprise certification goals as a key metric will provide objective measures of acquisition workforce quality and will drive increased certification levels resulting in a more qualified workforce. Making certification standards more robust will also contribute to a more qualified workforce. The AT&L Core Plus framework enables implementation of a more rigorous certification program. Examples include specialized qualifications that will recognize expertise within a career field such as earned value management. The Department's evolving workforce quality strategy, to include the proposed Acquisition Qualification Standards (AQS), will enhance the current certification program. AQS will increase the supervisor and employee mentoring process to validate and improve job performance qualifications.

Action. Functional Leaders, Component Representatives, and DAU evolve the current certification construct with increased emphasis relative to onthe-job experience (high priority experiences) to produce a more fully qualified workforce.

Action. Establish enterprise goals by June 30, 2010 for workforce members meeting or exceeding position certification requirements for defense acquisition positions: 1) key leadership positions; 2) critical acquisition positions; and 3) other acquisition positions.

## <u>5. Establish a comprehensive, workforce analysis and decision-making capability.</u>

Why Initiative is Important. Accurate, complete, and transparent workforce information is the foundation for effective workforce planning. It provides leadership with strategic insight for decision-making and enables appropriate workforce metrics. This initiative addresses longstanding enterprise problems relative to data accuracy and will provide improved transparency. It will enable the Department to track, understand, and adjust current workforce strategies required to attain the right numbers, skills, knowledge and capabilities.

Action. Significantly improve enterprise analytics, transparency, and workforce metrics by June 30, 2010.

Action. Complete an in-depth analysis of acquisition workforce military members with special emphasis on acquisition general and flag officers to support Section 834 of the FY2009 NDAA. Complete by September 30, 2010.

## 6. Establish robust recruiting strategies focused on interns, journeymen, and Highly Qualified Expert (HQE) initiatives.

Why Initiative is Important. The Secretary's growth strategy will increase the size of the organic acquisition workforce by approximately 20,000 over five years. This growth, coupled with normal workforce replenishment (8,000 – 10,000 annually) will require robust hiring strategies and tools. In 2009, the Department achieved significant hiring success as well as improved workforce retention. However, the Department must continue to compete for talent, especially in evolving demand areas such as bio-metric, nano-technologies, and other evolving critical technology areas. The Department must also continue to mitigate the loss of a very experienced workforce. Approximately 63 percent of the acquisition workforce is in the Baby Boomer and Traditional generations. Currently, 16 percent of the defense acquisition workforce is eligible to retire today, and another 18 percent will become eligible within the next five years. Based on retirement patterns, approximately 20 percent will retire within the first year, 32 percent retire in the next two years, and 48 percent stay in the workforce four or more years before retiring. Success in preparing for their departure requires action now, and the current growth strategy represents decisive action and enables the Department's succession planning. DOD's hiring strategy is already having a positive impact as reflected by the fact that Baby Boomer/Traditional generation composition in the workforce changed from 70 percent in 2008 to 63 percent in 2009.

Action. All components assess and validate career field demographics to identify projected workforce and gaps required to achieve mission success; continue to evolve the 2010 acquisition workforce plan for recruitment of intern, mid-level and HQEs to fill these gaps; establish appropriate progress metrics and tracking tools to ensure alignment with mission needs. Continue monthly and quarterly tracking of key workforce data throughout 2010 - 2015.

Action. Continue to evolve targeted strategies to focus recruiting on military members separating to start a second career. Track and report veteran hiring as of September 30 each fiscal year.

## 7. Attract and retain a high quality, high performing military and civilian acquisition workforce.

Why Initiative is Important. Achieving program success requires a highly qualified acquisition workforce in sufficient numbers for current and future mission needs. Today, analysis indicates 58 percent of the FY2009 losses were members who did not meet full retirement eligibility. This group is being examined to improve data-driven, appropriate targeted retention strategies. Retention initiatives will be targeted to address the most serious staffing challenges reshaping priorities such as program management, systems engineering, contracting, cost estimating, etc. Deployed incentives will be balanced and adjusted as required to support vital mission requirements, succession planning, and to reflect current market conditions. Appropriate incentives will be adjusted to help maintain a high quality workforce and ensure required tenure to promote continuity and accountability. This will motivate selected workforce members with critical skills to stay longer and take on more challenging and responsible assignments.

Action. Define, identify and implement appropriate enterprise incentives and pay policies by September 30, 2010. Incentives will target mission critical functions with emphasis on increasing the pool of highly qualified candidates for key leadership and other critical positions.

8. Provide an integrated, interactive learning environment that helps acquisition workforce members, teams, and organizations improve acquisition outcomes.

### Why Initiative is Important.

Training and development is a critical element of improving and sustaining a high quality workforce. The Department is creating a global learning environment to support a high quality, mission-ready Defense Acquisition Workforce throughout their careers. In addition to supporting each member of the workforce, the Department is improving its capability to provide training to acquisition teams and provide mission assistance to enhance organizational performance.

Action. Expand training capacity to meet forecasted increases in demand caused by departure of the Baby Boomers, replenishment hiring, planned growth of the workforce, and quality improvement initiatives. Specifically:

- Increase DAU training delivery capacity by 10,000 classroom and 25,000 web-based graduates over FY2008 initial baseline by September 2010.
- Deploy expanded contracting fundamentals training by April 2010.
- Provide expanded training and support resources starting in June 2010 in the areas of systems engineering, test and evaluation, and cost estimating.
- Provide expanded training and support resources starting in March 2010 in the areas of services, contracting officer representative, and contingency training.

 Successfully deploy Component-unique acquisition training by September 2010.

Action. Starting January 2010, provide enhanced mission assistance for Major Defense Acquisition Programs and Major Automated Information System Programs. This will include program start-up and critical milestone workshops; intact team training; immersive learning simulations; and executive coaching for DOD acquisition leaders. In addition, expand executive level PM training capacity, e.g., for PMT401 and PMT402.

Action. Deploy Defense Acquisition Workforce Certification Improvement Initiatives by September 30, 2010. The Department is placing emphasis on experience and being highly qualified, in addition to achieving certification. Functional Leaders are reviewing experience and training requirements to ensure improved and rigorous standards. As a result, engineering certification experience requirements have been expanded from 4 to 8 years. Cost estimating, now a separate career path within the Business career field, requires 7 instead of 4 years of experience to achieve Level III certification. DOD will establish an acquisition qualification standards program for the program management career field by September 30, 2010. This program places greater emphasis on demonstrated experience and being fully qualified. DOD will establish a new integrated acquisition leadership development program to include a Level IV certification, by September 2011.

#### Conclusion

The President and Secretary of Defense have established acquisition reform and improving acquisition outcomes as a top priority. President Obama's March 4, 2009 memorandum, "Government Contracting," communicated his intent for the acquisition workforce to have the capability and capacity to manage and oversee acquisitions appropriately. Secretary Gates' strategy to increase the size of the organic workforce by 20,000 through fiscal year 2015 is already having a positive impact. The initiatives described in this report represent decisive actions that will restore, build, and optimize the capability and capacity of the defense acquisition workforce.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>. Appendices are available on acquisition career fields, major Components, critical acquisition positions, military in acquisition, and workforce awards.

## Appendix 1 DOD Acquisition Mission Critical Career Field Contracting

Human Capital Fact Sheet 2009								
Defense Acquisition Workforce (DAW) Contracting	Civilian (Civ) Contracting	Military (Mil) Contracting	Total Contracting (Civ + Mil)	Defense Acquisition Workforce				
Size & Composition								
FY09 Workforce Size	23,752	3,903	27,655	133,103				
Change in size 2008-2009	9%	0%	8%	6%				
Civilian/Military Composition	86%	14%	-	89% / 11%				
DAW Growth Target 2015			23%	15%				
Educational Attainment								
Bachelor's Degree or Higher	83%	61%	80%	79%				
Graduate Degree	29%	29%	29%	29%				
Certification (Cert)								
Level I or Higher Achieved	78%	62%	76%	72%				
Level II or Higher Achieved	69%	44%	66%	60%				
Level III Achieved	36%	19%	33%	36%				
Position Cert Requirement Met or Exceeded	69%	49%	66%	59%				
Planning Considerations								
% Baby Boomer/Traditional Generations	62%	9%	54%	58%				
Average Age	46.1	34.4	44.5	45				
Workforce Life-Cycle Model (YRE)	35/29/36			32/33/35				
% Future/Mid-Career/Senior	(%)(Civ)		-	(%)(Civ)				
Average Years of Service	16.7	12.0	16.0	16.3				
Retirement Eligible	4,301 (17%)	-	-	19,395 (16%)				
Retirement Eligible w/i 5 Years	4,500 (19%)	-	-	21,567 (18%)				
Total Career Field Gains/Losses	4,441/2,455	-	-	19,786/13,042				
Training Statistics		Contracting 2008	Contracting 2009	AT&L 2009				
DAU Course Graduates (Classroom)		10,513	11,458	39,568				
DAU Course Graduates (Web)		31,361	46,522	154,399				
DAU Continuous Learning Completions		100,266	169,665	494,568				

### Defense Acquisition Contracting Functional Leader



Mr. Shay D. Assad
Director, Defense Procurement
And Acquisition Policy
OUSD (AT&L)

Mr. Shay Assad is the senior leader and

proponent for the Contracting functional community<sup>1</sup> within the defense acquisition workforce. In this role he provides advice to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the Contracting community. Mr. Assad establishes and maintains the education, training, and experience requirements as well as competencies, certification standards, and position category descriptions. The DOD Contracting Functional Integrated Product Team (FIPT) supports Mr. Assad in this role. The FIPT includes Component Contracting functional experts, acquisition career managers, and advisors from the Defense Acquisition University (DAU).

The Human Capital Fact Sheet<sup>2</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the Contracting workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

<sup>&</sup>lt;sup>1</sup> The government contracting workforce includes civilians and military on positions designated acquisition-contracting career field. For civilians this includes those in the 1102 occupational series and some from other non-1102 series.
<sup>2</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

### The Contracting Community Within the Defense Acquisition Workforce

The Contracting workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. Members execute critical functions across a range of mission domains to include: a) Major Systems Acquisition; b) Logistics and Sustainment; c) Base Operations; d) Architect and Engineering/Construction; e) Research and Development; and f) Contracting in an Expeditionary and/or Combat Environment. Contracting professionals, as part of the acquisition team, perform and support acquisition planning, procurement of supplies and services (including construction, research and development); conduct cost and price analysis; issue solicitations and select sources; negotiate, award and modify contracts; and conduct all phases of contract management to include ensuring successful delivery of supplies and services. In FY2009 the contracting community obligated approximately \$384 billion on total contract actions, which includes \$208 billion in services.<sup>3</sup> The contracting community has also been extensively involved in supporting the contingency operations and Security, Stabilization, and Reconstruction Operations (SSTRO) activities such as those currently underway in Iraq and Afghanistan.

Members of the acquisition workforce are generally identified based on the responsibilities of their position. For contracting, as a result of statutory requirements, all members of the 1102 occupation series are required to be included. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721, establishes requirements for designating defense acquisition positions<sup>4</sup>. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) to ensure consistent identification of acquisition positions throughout the DOD Components. The Contracting PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

Special statutory requirements apply to contracting. Section 1724 of the DAWIA requires that to serve as a contracting officer with authority to award or administer contracts for amounts above the simplified acquisition threshold, an employee must meet minimum training, education and experience requirements. Section 1724 also requires that for positions in the GS-1102 occupational series, an employee or potential employee must meet minimum education requirements.

<sup>4</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

<sup>&</sup>lt;sup>3</sup> Source: OUSD(A&T)/DPAP (based on FPDS data provided by DMDC as of January 6, 2010, adjusted to correct known reporting anomaly). The amount includes \$45B in RDT&E.

As shown in Table A1-1, the Defense acquisition contracting workforce has 27,655 members and is comprised of 86 percent civilian (21,639 civilian 1102s + 2,113 civilian non-1102s = 23,752) and 14 percent military (3,903). The contracting career field workforce constituted 21 percent of the organic<sup>5</sup> defense acquisition workforce at the end of FY2009. Contracting is the second largest functional community within the Defense acquisition workforce.

Defense Acquisition Workforce Civilian/Military Composition Contracting Career Field (FY09)								
Acquisition Career Field	FY09 Count	Count %	Civ	Mil	Civ %	Mil %		
Army	8,391	30%	7,741	650	92%	8%		
Navy/Marine Corps	5,516	20%	4,336	1,180	79%	21%		
Air Force	7,443	27%	5,370	2,073	72%	28%		
DCMA	2,262	8%	2,262	0	100%	0%		
DLA	3,050	11%	3,050	0	100%	0%		
Other	993	4%	993	0	100%	0%		
Total	27,655	100%	23,752	3,903	86%	14%		

Table A1-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (Contracting Career Field) (by Component)<sup>6</sup>

The Contracting functional career field civilian workforce, although primarily represented by the 1102 occupation series, includes other series. Table A1-2 provides a breakout of the top five series by Service. The highest percentages of civilians are in the Contracting 1102 series (78 percent).

Top 5 Occupation Series (end of FY2009)  Contracting (Civilian)									
Occ Series - Description	Total	Total (%)	Cum (%)	Army	Navy/MC	AF	Other		
1102 - Contract Specialist	21,639	78.2%	78.2%	6,307	4,266	5,261	5,805		
0810 - Engineer, Civil	825	3.0%	81.2%	821	4	0	0		
1101 - Business and Industry Specialist	726	2.6%	83.9%	288	28	10	400		
0301 - Administration & Program Staff	125	0.5%	84.3%	97	1	14	13		
1199 - Business and Industry Student Trainee	94	0.3%	84.6%	28	0	31	35		
Note: There are 9 records with null values for OCC series		•	•		•		•		

Note: There are 8 records with null values for OCC series

#Occ Series in Career Field = 74

Table A1-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the Contracting Career Field (FY2009)<sup>7</sup>

### **Contracting Career Field Challenges**

The Department must strengthen and sustain its mission critical Contracting workforce capability. The Contracting workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges.

<sup>&</sup>lt;sup>5</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>6</sup> Source: AT&L Workforce Data Mart (end of FY09)

<sup>&</sup>lt;sup>7</sup> Source: AT&L Workforce Data Mart (end of FY09)

Challenges in contracting continue to receive strong attention from the Administration, Congress, and senior DOD leaders.

The demand for contracting support will remain strong as the acquisition community supports the following mission imperatives: 1) support of 102 major acquisition programs; 2) recapitalization of equipment and systems used to support global contingency operations; 3) an expanded and evolving expeditionary requirement, including surge requirements for contingency operations and SSTRO; support for humanitarian efforts at home and overseas; 4) expanded use of services across all support domains, and 5) modernization and other new system requirements. The contracting workforce count (civilians + military) was relatively stable from FY2001 through FY2008, and like other career fields, experienced a significant increase in acquisition workload. The number of major defense acquisition programs has increased by 36 percent. Another major indicator of increased workload is that dollars obligated on DOD contracts (actions over \$100,000) increased by 166 percent from FY2001 to FY2009. This heavy workload is expected to continue.

As with the DOD as a whole, the Defense acquisition workforce, including the Contracting workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of experienced Contracting workforce members represents increased performance risk associated with the Contracting functions needed to support DOD acquisition programs. As of the end of FY2009, 62 percent of the Contracting civilian workforce is in the Baby Boomer or Traditional generations. Analysis indicates 17 percent of the Contracting civilian workforce is eligible for full retirement and 19 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

### **Major Ongoing Panels/Initiatives**

DOD has several major efforts underway to thoroughly address contracting mission, workforce and environmental challenges.

Panel on Contracting Integrity. The Department established the Panel on Contracting Integrity (the Panel), in response to the requirements of section 813 of the National Defense Authorization Act for Fiscal Year 2007 (NDAA FY2007). As a result of the Weapon Systems Acquisition Reform Act of 2009, the Panel has been extended through at least FY2011. The Panel, representing a cross section of DOD contracting senior leaders, continues a Department-wide review of progress made by DOD to eliminate areas of vulnerability for fraud, waste, and abuse in the acquisition system. The Panel's twelve subcommittees include two that are workforce-related: Sustained Senior Leadership and Capable Contracting Workforce. The Department submitted its first annual report, December 31, 2007, to the Congressional committees. Its third annual report,

which contains a summary of FY 2009 initiatives and actions selected for implementation in FY 2010, was submitted on January 25, 2010. In FY2009 the Panel pursued 28 actions to eliminate areas of vulnerability. Of the 28 actions undertaken in FY2009, several focused on the contracting work areas such as: designating an ombudsman for procurement integrity in each organization; developing and implementing gap closure strategies to address competency gaps; establishing a component cross-functional working group to report on source selection deficiencies, best practices, lessons learned, and recommendations; and developing a Contracting Officer Representative (COR) certification process.

A significant Department initiative which supports eliminating areas of vulnerability for fraud, waste, and abuse in the acquisition system, was announced by the Secretary of Defense in April 2009. The Secretary announced his intent to revitalize the acquisition workforce which includes targeted increases of the organic workforce to strengthen DOD's capability and capacity to perform inherently governmental functions and provide appropriate oversight of all acquisition activities. The Department is growing its contracting and oversight workforce, to include the Defense Contract Management Agency and the Defense Contract Audit Agency.

Task Force for Contracting and Contract Management in Expeditionary **Operations.** As required by Section 849 of the FY2008 NDAA, the USD (AT&L) established the Task Force for Contracting and Contract Management in Expeditionary Operations. The Task Force addressed recommendations in the Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations, including those on workforce. A primary Commission recommendation was to increase the stature, quantity, and career development of military and civilian contracting personnel (especially for expeditionary operations). The Department is integrating the efforts of this task force with the many related activities underway within the DOD. The Task Force is comprised of senior OSD leaders, representatives for the Military Services, the Defense Contract Management Agency and the Joint Contracting Command for Irag/Afghanistan. In June 2008, DOD submitted a Task Force plan to Congress which provides a Department-wide response on all of the commission recommendations. The Army submitted a separate appendix and addressed increasing the size of its workforce. The Army also has initiatives supported by the Defense Acquisition Workforce Development Fund that address recommendations contained in the Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations.

In October 2008, on the one-year anniversary of the Commission's report, DoD presented a progress review to the Commission. Together, the office of the Director, Defense Procurement and Acquisition Policy (DPAP), the office of the Assistant Deputy Under Secretary of Defense (Program Support), the Army, the other Military Services, and the Components made important inroads, in working

to ensure the recommendations of the Commission on Army Acquisition and Program Management in Expeditionary Operations are implemented. DPAP is committed to sustained progress, beyond the Commission report recommendations, to ensure that future military operations achieve greater effectiveness, efficiency, and transparency. Although the Commission and the associated Task Force have sunset, DPAP continues to lead efforts across the Department to ensure initiatives to benefit the warfighter in current and future contingencies are developed, staffed, and implemented.

Task Force on Wartime Contracting. The Department has, and continues to provide support to the Commission on Wartime Contracting in Iraq/Afghanistan, which Congress established by section 841 of the Fiscal Year 2008 National Defense Authorization Act. Appointed by the Secretary of Defense to assist in the Commission's mission, DPAP led and escorted members of the Commission, as well as Department of State representatives, on an inaugural December 2008 trip into theater of operations. This trip provided the Commission with its first sense of the climate and working conditions in a deployed environment. In addition, the Department has supported fully the Commission's independent study by providing it with personnel data, interviews, and insights.

In June 2009, COWC published an interim report. The USD(AT&L) established the DoD Task Force on Wartime Contracting (TFWC), in a memorandum dated July 26, 2009, to evaluate COWC interim report, with particular focus on the interim report's issues of concern:

- 1. Risk associated with drawdown of troops in Iraq
- 2. Shortage of contract management personnel in theater and training
- 3. Acceleration of transition to the new LOGCAP IV contract
- 4. Adequacy of contractor business systems
- 5. Greater accountability in the use of subcontractors
- 6. Proper transition of lessons learned in Iraq to Afghanistan
- 7. Establishment of a contracting command in Afghanistan
- 8. Proper training and equipping of security contractors.

The Director, DPAP is responsible for the Task Force's daily activities. The Army Senior Procurement Executive serves as the Task Force vice-chair. The TFWC is comprised of cross-cutting teams with representatives from the Departments of the Army, Navy, and Air Force; Joint Staff; Joint Contracting Command—Iraq/Afghanistan; and the Office of the Secretary of Defense. These same organizations supported the section 849 NDAA-08 Task Force. The Task Force analysis, which was provided to USD(AT&L) in late 2009, includes a scorecard indicating the Department has been proactive in its pursuit of initiatives (94 percent of related DoD initiatives were begun prior to the COWC interim report) and the Department is making significant forward progress on these initiatives (83 percent of the Department's initiatives are free from major challenges). Each initiative has a plan of action and milestones. To ensure timely and effective progress on the Department's initiatives, the TFWC is targeting those few

initiatives facing major challenges—all of which relate to resourcing. A senior leader in the Department has been assigned responsibility for each such effort. Going forward, the assigned leader for each initiative with a major challenge will provide the TFWC and the USD(AT&L) with quarterly status updates, until the major challenges are removed.

This Task Force exemplifies the Department's dedication to improving contingency contracting in Iraq and Afghanistan. The group continues to advocate the great work being accomplished by the Department's committed professionals and will continue to enhance contingency contracting regardless of the locale, to best support our troops in any deployed mission.

**DOD Contracting Competency Assessment Initiative.** Under the leadership of Mr. Assad, the Contracting Functional Leader and Director, Defense Procurement and Acquisition Policy, a comprehensive DOD-wide contracting competency assessment has been completed. The results are being linked with component organization workforce planning efforts and have served as important input for major community-wide workforce improvement decisions. Significant gap closure planning has been completed and closure actions are underway. Further details are provided at the end of this appendix.

The above efforts reflect significant effort and a comprehensive approach to improving the Contracting workforce. The following is a review of recently completed (yet ongoing) FY2009 workforce demographic and trend analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

Contracting Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. Figure A1-1 depicts the count of the DOD Contracting civilian and military workforce from FY2005 to the end of FY2009. This count includes civilians and military service members in the 1102 occupation series and other occupation series and military service codes that are

on acquisition-designated positions categorized as Contracting. Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes.

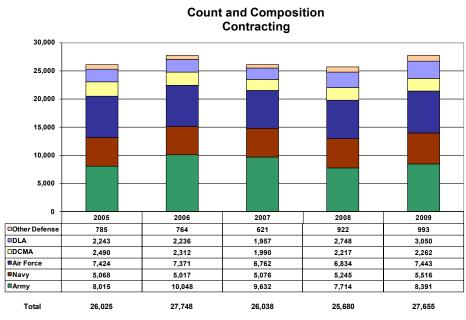


Figure A1-1. Historical Size of Defense Acquisition Workforce Contracting Career Field (FY2005 – FY2009) (Military & Civilian)<sup>8</sup>

Position adjustments by the Army for individuals in the 0810 occupational series reduced the number of positions coded contracting in FY2008. As a result of the competency assessment, human capital strategic planning efforts, and the Report of the Commission on Army Acquisition and Program Management in Expeditionary Operations<sup>9</sup>, Components have increased the contracting workforce in FY 2009 with additional increases planned through FY 2015.

### **Assessment of Projected Workforce Growth**

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the Contracting career field is projected to grow approximately 6,400 (24%) by FY2015. Part of this growth, approximately 427, is associated with the DOD initiative to rebalance

DOD Task Force on Contracting and Contract Management in Expeditionary Operations - 2008 Report to Congress (June 2008)

A1-8

 $<sup>^{8}</sup>$  The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts.

the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 3,461 for FY2010 and 2,905 in FY2011. Corresponding retention needs require losses at levels below 1,911 for FY2010 and 2,035 in FY2011. In FY2009, the Contracting career field within the defense acquisition workforce experienced approximately 3,800 gains and 1,750 losses. Noted is that this analysis, with projections through FY2017 (Figure A1-2), provides a very top level view of projected gains and losses.

Gains and Losses to Achieve & Maintain Target Strength

#### Defense Acquisition Workforce - DOD-Wide (Contracting) (Civilians) PB23 FY08 Baseline = 22.644 Growth by FY15\* 6.418 4,000 Target Strength 29,062 3,000 2,000 Number of Civilians 1,000 (1,000) (2,000)(3,000)FY2010 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016 FY2017 **Target Gains** 3,461 2,905 3,751 3,112 2,786 2,488 2,343 2,342 (Recruiting, Hiring) Target Max Losses (1,911) (2,035) (2,116)(2,228)(2,296)(2,330)(2,343) (2,342)(Retention)

\* Growth estimates are as of Oct 2009 Senior Steering Board Component Inputs and include DOD and other Component initiatives

Figure 2-2. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (Contracting Career Field) (Civilians)<sup>10</sup>

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<sup>&</sup>lt;sup>10</sup> AT&L HCl and RAND analysis using DMDC data (end of FY2009) and RAND/HCl inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

Civilian Contracting Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A1-3) provides a visual display of a workforce in three cohort groups – Future (early career) workforce, Mid-career and Seniorcareer cohort groups. The Years to Retirement Eligibility (YRE) distribution for the Defense acquisition workforce is 32/33/35 percent. The distribution of the Contracting workforce members between the three cohorts is 35/29/36 percent, reflecting an increase in FY2009 from FY2008 in the Future career group. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce lifecycle, retirement eligibility, and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives.

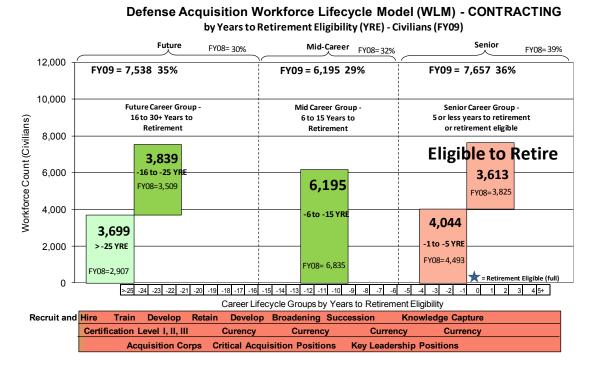


Figure A1-3. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (Contracting Career Field) (Civilians)<sup>11</sup>

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<sup>&</sup>lt;sup>11</sup> AT&L Workforce Data Mart (End-of-FY09)

Civilian Contracting Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A1-4 depicts the gains/losses for Contracting, to include substantive and administrative switches in and out of the Contracting career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

Defense Acquisition Workforce (Civilian) (FY09) - Contracting

### Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories Gains Gains New Hires Gains to Career Field from Administrative gains to Career Field (no apparent personnel action) (FY08= 1,036) (new to DoD) (FY08= 1,948) within DAW and/or DOD (FY08= 1,209) +2.970+898 +573 e.g., assimilation, career field migration, other coding updates **GAINS WHICH INCREASE WORKFORCE SIZE** Changes to Acquisition Workforce FY09 Size/Count LOSSES WHICH REDUCE WORKFORCE SIZE e.g., career field migration, other coding updates -1.272-669 -514 (Leave DoD) (FY08=-1,455) Losses to Career Field but stay Admin istrative losses (no apparent personnel action) (FY08= -1,964) in DAW and/or DOD (FY08=-1,381) Losses

Figure A1-4. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (Contracting Career Field) (Civilians) 12

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains.

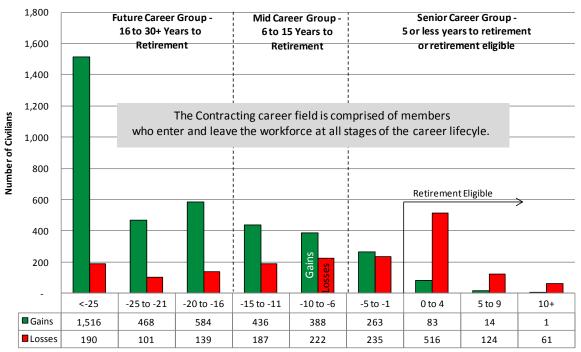
FERS.

<sup>&</sup>lt;sup>12</sup> AT&L HCl and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on a Contracting acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure A1-5 depicts the Contracting civilian gains and losses that took place during FY2009 by -years to retirement eligibility" groups.

### **Defense Acquisition Workforce** Workforce Lifecycle FY09 Gains & Losses\* - Contracting (by Years to Full Retirement Eligibility)



Career Lifecycle by Years to Retirement Eligibility \*Does not include administrative gains and losses

Figure A1-5. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Contracting Career Field) (Civilians)

<sup>&</sup>lt;sup>13</sup> RAND analysis using DMDC data (end of FY07 and end of FY08 data).

FY09 data indicates that 2,568 of 3,753 gains <sup>14</sup> (68 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 824 (22 percent) were in the mid-career group, and 361gains (10 percent) were in the senior career group. This represents a 50 percent increase in FY2009 gains above FY2008 for the future career group, a 3 percent decrease in the mid-career group, and a 31 percent decrease in gains for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A1-6 depicts the external hires and internal gains by lifecycle career group.

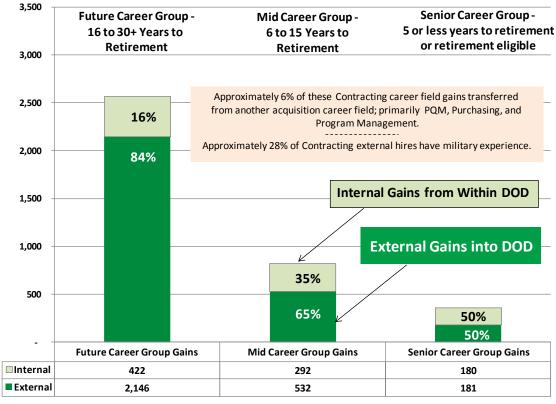


Figure A1-6. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (Contracting Career Field) (Civilians)<sup>15</sup>

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<sup>&</sup>lt;sup>14</sup> Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

<sup>&</sup>lt;sup>15</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 430 of a total of 1,745 losses<sup>16</sup> (25 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 409 (23 percent) were to the mid-career group, and 906 (52 percent) were to the senior career group. This represents a 39 percent decrease in losses in FY2009 when compared to FY2008 for the future career group, a 42 percent decrease in the mid-career group, and a 35 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A1-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

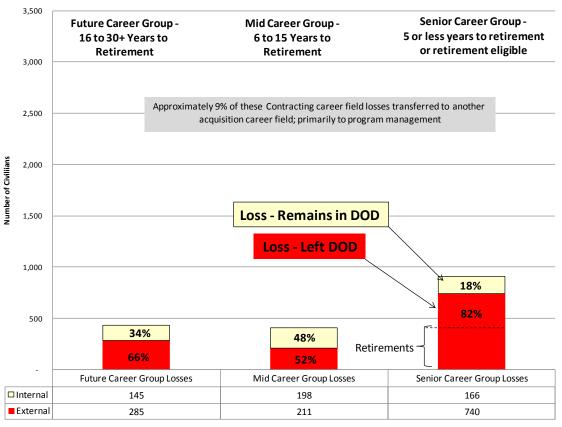


Figure A1-7. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (Contracting Career Field) (Civilians)<sup>17</sup>

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 $<sup>^{16}</sup>$  Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

 $<sup>^{17}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A1-8 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

### **Defense Acquisition Workforce Turnover - Contracting**



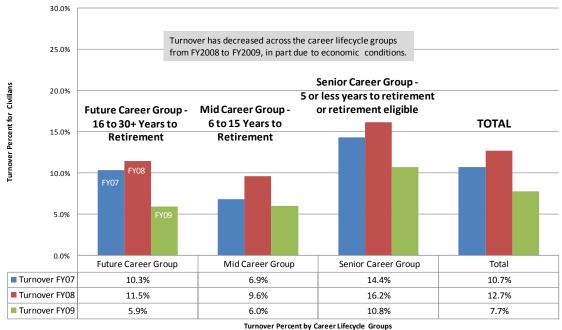


Figure A1-8. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Contracting Career Field) (Civilians)<sup>19</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

Retirement Eligibility. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce. The retirement eligibility profile in Figure A1-9 indicates that 17 percent (4,301) of the civilian Contracting workforce are eligible for full retirement benefits and an additional 19 percent (4,500) will become eligible within the next five years. An average of 850 members (approximately 4 percent) of the civilian Contracting workforce per year will become fully retirement eligible each year through FY2019. Approximately 22.7 percent of the civilian Contracting workforce is under the Civil Service Retirement System (CSRS) and 76 percent are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal

<sup>&</sup>lt;sup>18</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>19</sup> AT&L HCl generated from HCl/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

government.<sup>20</sup> The rate of separation for Contracting spikes from 4 percent at one year before retirement eligibility to 21 percent during the first year of eligibility. Based on past retirement patterns, approximately 54 percent of the Contracting workforce members that become fully retirement eligible will likely separate within the first four years of eligibility. Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

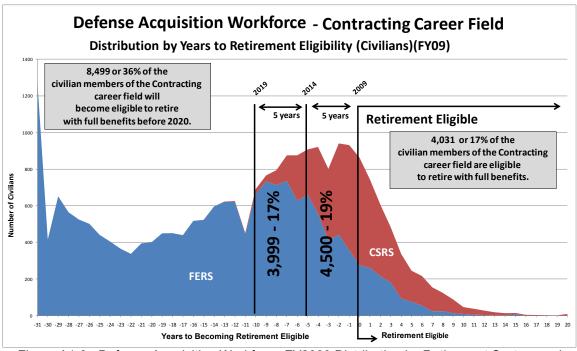


Figure A1-9. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Contracting Career Field) (Civilians)<sup>21</sup>

### **Contracting Competency Model and Assessment**

The AT&L community-wide competency management initiative supports DOD human capital strategies. Ensuring leaders have a comprehensive workforce analysis capability for data-driven decisions is a key objective. The AT&L competency initiative is a key enabler. The outcome of this initiative is updated, validated competency models for various workforce applications (competency assessments, training improvements, human capital planning, etc.) for all Defense acquisition functional categories (Program Management, Contracting, etc.). A common set of core and acquisition functional competencies promotes efficiency, effectiveness and consistency in workforce planning and development. Resulting competency assessments results inform decisions on human capital

<sup>&</sup>lt;sup>20</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense. p. 25. <sup>21</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

strategies to include gap closure solutions. A comprehensive competency model update process is used as appropriate and consists of a five-phased approach:

- Phase I Framework Development. In this phase senior experts evaluate the existing competencies, establish a baseline, and identify subject matter experts for Phase II.
- Phase II Model Development. In this phase subject matter experts identify key work situations and competencies contributing to successful performance. The resulting model is prepared for test and evaluation in Phase III.
- Phase III Testing and Refinement. In Phase III model testing & refinement is conducted to include a beta test of tools and the competency model in preparation for an expanded pilot assessment.
- Phase IV Model Validation and Assessment. As part of validation, frequency, criticality, and proficiency of a competency are assessed. The final competency model is deployed for Phase V comprehensive assessments in the specific career field community. Initial results are analyzed and reported to functional leadership and other users. Information is then available for use in gap analysis, workforce development, and other human capital applications.
- Phase V Community-Wide Assessment and Results Applications -Phase V includes expanding assessments community-wide; cross-walking updated competencies and gap results to improve resources such as training within the AT&L Performance Learning Model; leveraging competencies and gap results vertically for support to the workforce as they perform, and to human capital planning and initiatives; ensuring currency, and providing special interest and new insights to Component and functional leaders; reporting as part of partnering and accountability on progress to identify and close gaps; and sharing best practices and lessoned learned to other partners and to external stakeholders such as other agencies, Congress, OMB and OPM.

The Contracting functional leader (Director, DPAP) is proactively leading the Contracting community in this initiative. The Director, DPAP has worked closely with DOD's Senior Procurement Executives and Defense Acquisition University to put in place a continuous competency-based management process to define the competencies required for the Contracting community to deliver mission critical capabilities; assess competencies resident in the Contracting community and identify gaps for current and future requirements; and align/adjust workforce strategies to address competency gaps and provide opportunities for training and development.

In March of 2007, the Department completed development of a comprehensive, validated Contracting Competency Model that defines behaviors and underlying knowledge, skills and abilities (KSAs) that define superior job performance for the contracting workforce; provides insight into the full spectrum of contracting job

requirements and career opportunities; and serves as the cornerstone of a human capital strategy to identify and fill capability gaps. Senior Contracting leaders throughout DOD and over 350 practitioner subject matter experts participated in the competency model update. The resulting Contracting Competency Model consists of 11 units of competence supported by 28 technical competencies with 52 technical elements and 10 professional competencies.

DOD used the Contracting Competency Model to conduct a Contracting Competency Assessment of all military and civilian members of the DoD-wide contracting workforce across six mission areas: Major Systems Commands; Logistics and Sustainment; Base Operations; Contracting in a Contingency and/or Combat Environment; Defense Agencies and Research Labs; and Construction/Architecture and Engineering. The purpose of the assessment was to complete an inventory of competencies which exist in the DoD Contracting Workforce and to identify and address competency gaps.

The Contracting Competency Assessment was completed in September 2008 with over 20,000 participants and an 87% participation rate DoD-wide. Community engagement for this assessment was exemplary and this effort has provided a solid baseline for understanding the current inventory of skills. Organizational level results from the Contracting Competency Assessment were provided to the senior procurement executives and contracting leaders for each of the organizations participating in the assessment. These results provided leadership with valuable insights into proficiency levels of the technical and professional competencies of their workforce by career level and how important the competencies are to the performance of their contracting professionals.

Senior leaders used their first hand knowledge of the challenges experienced by their organizations and the supporting data provided from the assessment process to assess capability gaps at the entry, journey and senior career levels. Capability gaps identified across all DOD Components included fundamental contracting skills across entry and journey career levels; currency, breadth and depth of knowledge across journey and senior career levels; the source selection process; cost and price analysis; contract performance management; and integrated acquisition skills needed for the development of key functional leaders.

Senior leaders are leading the charge to close capability gaps through a set of practical strategies focused on ensuring that the Department has the high quality workforce needed to deliver mission critical capabilities. The Defense Acquisition Workforce Development Fund (DAWDF) and the FY2011 Defense Budget together provide the means to close workforce gaps and adjust human capital strategies.

Specifically, Contracting senior leaders are implementing workforce quality initiatives in the areas of training - to include training topics, content, methods, and delivery; improvements in policy, guidelines, and business processes that govern and regulate contracting actions; ways to broaden and deepen

experience and increase career development opportunities; and resources—both manpower and dollars - to meet the mission. For example, a new four-day course —ON 334 Advanced Joint Contingency Contracting" was deployed in FY 2009 to prepare individuals for contingency contracting leadership positions. Also a four week classroom course —ON 090 Federal Acquisition Regulation (FAR) Fundamentals" will be deployed in June 2010 that provides an in-depth immersion into the Federal Acquisition Regulation and its supplement to ensure individuals new to the contracting career field are well grounded in contracting fundamentals.

In addition, the Department is growing the Contracting workforce and increasing the DOD's internal acquisition management and oversight capability to address workforce capability shortfalls. A complete report of the Contracting community's competency effort – to include a discussion of capability gaps and gap closure strategies – will be published later this year.

DOD will integrate results of competency-based management efforts for the DOD-wide Contracting community into the AT&L human capital strategic plan and establish a continuous process to define and maintain the competencies required to deliver mission critical capabilities. A key best practice of the Contracting initiative is the active and collaborative teamwork amongst senior contracting leaders across DOD.

#### Certifications/Standards

The DOD Functional Leader for Contracting establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The Contracting career field is organized around a —Corelus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. In addition to core certification requirements, additional training is required for Contracting workforce members who support major defense acquisition programs or major acquisition information systems. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A Contracting development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx. The Core Plus guide is has been updated identify Core Plus training opportunities by career levels.

Table A1-3 shows the Contracting certification level requirements established by the Components for acquisition positions categorized as contracting.

Certification Level Requirements by Service Contracting (FY09)											
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)				
Army	1,113	4,766	2,489	8,368	13.3%	57.0%	29.7%				
Navy	1,282	2,271	1,943	5,496	23.3%	41.3%	35.4%				
Air Force	955	5,371	927	7,253	13.2%	74.1%	12.8%				
DCMA	207	1,370	682	2,259	9.2%	60.6%	30.2%				
DLA	332	2,157	547	3,036	10.9%	71.0%	18.0%				
Other Defense	67	412	504	983	6.8%	41.9%	51.3%				

Note: There are 220 records with null in the Career Level Required Code field and 20 records with Unknown in the Career Level Required Code field

Table A1-3. Defense Acquisition Positions - Certification Level Requirements by Component (Contracting Career Field)(FY2009)(All positions – Military and Civilians)<sup>22</sup>

Based on component-reported data, the percentage of Contracting workforce members who have met or exceeded contracting certification requirements was 56 percent in FY2006 and is now 67 percent in FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the Contracting career field as a whole, assessment indicates 34 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A1-10 summarizes certification rates for the Services and 4th Estate.

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<sup>&</sup>lt;sup>22</sup> AT&L Workforce Data Mart (End of FY09)

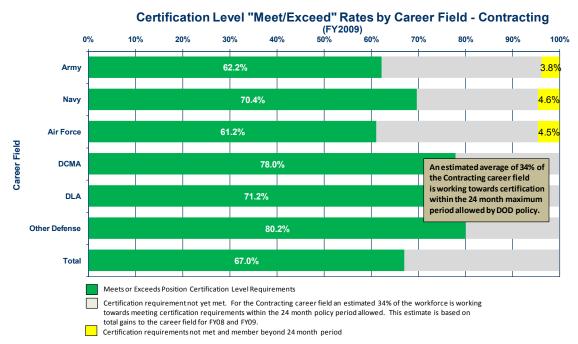


Figure A1-10. Defense Acquisition Workforce FY2009 Certification —Met/Exceed" Rates for the Contracting Career Field by Component (Military and Civilians)<sup>23</sup>

### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the Contracting workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD Contracting career field builds the foundation for data-driven decision making to improve the Contracting workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

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<sup>&</sup>lt;sup>23</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCl-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCl estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCl. DoN and Air Force percentages directly provided by DoN and Air Force.

# Appendix 2 DOD Acquisition Mission Critical Career Field Business (Cost Estimating and Financial Management)

Human Capital Fact Sheet 2009									
Defense Acquisition Workforce (DAW) Business - (Cost Estimating & Financial Management Career Paths)	Civilian (Civ) Military (Mil) Business Business		Total Business (Civ + Mil)	Defense Acquisition Workforce					
Size & Composition									
FY09 Workforce Size	7,059	203	7,262	133,103					
Change in size 2008-2009	3.2%	-17%	2.5%	6.0%					
Civilian/Military Composition	97%	3%	-	89% / 11%					
DOD DAW 2015 Growth Target			23%	15%					
Educational Attainment									
Bachelor's Degree or Higher	66%	95%	67%	79%					
Graduate Degree	24%	50%	24%	29%					
Certification (Cert)									
Level I or Higher Achieved	62%	56%	62%	72%					
Level II or Higher Achieved	49%	33%	48%	60%					
Level III Achieved	32%	12%	31%	36%					
Position Cert Requirement Met or Exceeded	47%	35%	47%	59%					
Planning Considerations									
% Baby Boomer/Traditional Generations	62%	14%	61%	58%					
Average Age	46.2	37.4	45.9	45					
Workforce Life-Cycle Model (YRE)	33/31/36			32/33/35					
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)					
Average Years of Service	17.1	14.1	17.1	16.3					
Retirement Eligible	1,129 (16%)	-	-	19,395 (16%)					
Retirement Eligible w/i 5 Years	1,383 (20%)	-	-	21,567 (18%)					
Total Career Field Gains/Losses	1,884/1,687	-	-	19,786/13,042					
Training Statistics		Business 2008	Business 2009	DAW 2009					
DAU Course Graduates (Classroom)		2,746	2,762	39,568					
DAU Course Graduates (Web)		4,296	6,195	154,399					
DAU Continuous Learning Completions		18,508	29.850	494,568					

Defense
Acquisition
Business
Functional Leader



Dr. Nancy Spruill Director, Acquisition Resources and Analysis OUSD (AT&L)

Dr. Nancy Spruill is the senior leader and proponent for the

Business (Cost Estimating and Financial Management) functional community within the defense acquisition workforce. In this role she provides advice to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the Business community. Dr. Spruill establishes and maintains the education, training, and experience requirements, as well as competencies, certification standards, and position category descriptions. The Department of Defense (DOD) Business Functional Integrated Product Team (FIPT) supports Dr. Spruill in this role. The FIPT includes DOD component Business functional experts, component acquisition career managers, and advisors from the Defense Acquisition University (DAU).

The Human Capital Fact Sheet<sup>1</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the Business workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

## The Business Community Within the Defense Acquisition Workforce

The Business workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. This workforce executes critical functions of business to include cost analysis and estimating, financial planning, formulating financial programs and budgets, budget analysis and execution, and earned value management. They advise commanders, Program Executive Officers (PEOs), program managers, and other acquisition decision makers.

Members of the Business career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721, establishes requirements for designating Defense acquisition positions<sup>2</sup>. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, and others) and by career path (e.g., cost estimating or financial management) within a functional career field category (e.g., business, program management, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. Business PCDs for the Cost Estimating and Financial Management career paths are available at http://www.dau.mil/workforce/pages/pcds.aspx.

It is important to understand that some acquisition workforce functional communities (e.g., program management, contracting, and quality) are entirely within the acquisition workforce while other communities, such as Business, are part of a larger DOD functional community. Initiatives to strengthen the capability of the broader comptroller community and initiatives to improve those in the Defense acquisition workforce are mutually beneficial. The broader community represents a large, comptroller-domain experienced source for future Business career field acquisition workforce members.

As shown in Table A2-1, the defense acquisition Business workforce had 7,262 members as of the end of FY2009 and is comprised of 97 percent civilian (7,059) with 3 percent military (203). The Business workforce constitutes 5.5 percent of the organic<sup>3</sup> Defense acquisition workforce.

<sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

Defense Acquisition Workforce Civilian/Military Composition Business Career Field (FY09)										
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil %										
Army	2,771	38%	2,771	0	100%	0%				
Navy/Marine Corps	2,286	31%	2,211	75	97%	3%				
Air Force	1,845	25%	1,717	128	93%	7%				
DCMA	112	2%	112	0	100%	0%				
DLA	6	0%	6	0	100%	0%				
Other	242	3%	242	0	100%	0%				
Total	7,262	100%	7,059	203	97%	3%				

Table A2-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (Business Career Field) (by Component)<sup>4</sup>

The Business civilian workforce represents various occupation series, of which the primary series are identified in the Business PCDs. Table A2-2 provides a breakout of the top five occupational series by Service in the Business career field. The highest percentage of Business members is in the Financial Administrator occupation series (0501) series (34 percent).

Top 5 Occupation Series (end of FY2009) Business - Cost Estimating and Financial Management (Civilian)										
Occ Series - Description	Total	Total (%)	Cum	Army	Navy/MC	AF	Other			
0501 - Financial Administrator	2,480	34.2%	34.2%	250	1,063	1,154	13			
0343 - Management and Program Analyst	1,761	24.2%	58.4%	1,187	427	66	81			
0560 - Budget Analyst	914	12.6%	71.0%	547	27	284	56			
1515 - Operations Research Analyst	703	9.7%	80.7%	286	279	83	55			
0301 - Administration & Program Staff	255	3.5%	84.2%	230	15	7	3			

Note: There are 16 records with null values for OCC series

#Occ Series in Career Field = 54

Table A2-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the Business Career Field (FY2009)<sup>5</sup>

### **Business Career Field Challenges**

The Department is strengthening Business workforce capacity and capability to address challenges and improve acquisition outcomes. Continued challenges in cost estimating and controlling acquisition program costs continue to receive Congressional and senior leader attention. This includes the need for effective cost estimating and earned value management. The demand for Business expertise will remain strong as the acquisition community supports 102 major acquisition programs valued at \$1.6 trillion and recapitalization of equipment and systems. In addition, support is also provided to over 200 other programs identified for special oversight. The Business workforce count (civilians + military) decreased by 13 percent from FY2005 to FY2008, and as with other career fields, has experienced a significant increase in acquisition workload. The number of major defense acquisition and automated information system programs has increased by 36 percent since FY2001. Another indicator of this

<sup>&</sup>lt;sup>4</sup> AT&L Workforce Data Mart (end of FY2009)

<sup>&</sup>lt;sup>5</sup> AT&L Workforce Data Mart (end of FY2009)

increased workload is that dollars obligated on DOD contracts (actions over \$100,000) increased by 166 percent from FY2001 through FY2009.

The U.S. Department of Labor Statistics forecasts above average and increasing demand for cost analysts at a rate of 18-26 percent through 2014 (private demand is the driver). This demand will likely result in increased hiring and retention challenges. Furthermore, the knowledge, skills and abilities to perform cost estimates are not readily taught at universities throughout the U.S. To produce a qualified cost analyst, the DOD must make significant investments in on-the-job and classroom training. This is supported by a Society of Cost Estimating and Analysis survey<sup>6</sup> which concluded that the knowledge required for this career field is based on a strong technical foundation and nurtured over an average period of 5 to 7 years of on-the-job and targeted classroom training. Retaining those who attain this uniquely specialized, hard-to-replace skill set is critical to the acquisition mission.

As with the DOD as a whole, the Defense acquisition workforce, including the Business workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of experienced Business workforce members represents increased performance risk associated with the Business functions needed to support DOD acquisition programs. As of the end of FY2009, 70 percent of the Business civilian workforce is in the Baby Boomer or Traditional generations. Analysis indicates 16 percent of the Business civilian workforce is eligible for full retirement and 20 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

Section 820 of the FY2007 National Defense Authorization Act requires that DOD establish a goal of filling key positions in major defense acquisition programs and major automated information system programs with a properly qualified military or civilian member of the DOD. These key positions include lead cost estimators for these programs. Anticipated workforce growth, in-sourcing, and other workforce quality initiatives support this goal.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to

<sup>&</sup>lt;sup>6</sup> Society of Cost Estimating and Analysis Survey, December 2006.

improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OUSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

Business Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The Business workforce count decreased by 11 percent; from 8,119 members in FY2005 to 7,262 in FY2009 (Figure A2-1). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses associated with personnel actions such as hiring, separations and transfers, and administrative coding changes to acquisition positions. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes and partnering with OUSD (P&R) and the Components to potentially create improved acquisition occupation identifiers.

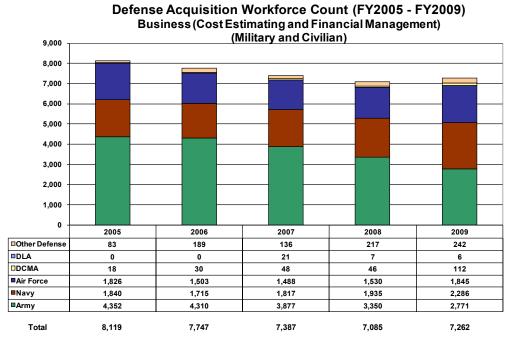


Figure A2-1. Historical Size of Defense Acquisition Workforce Business Career Field (FY2005 – FY2009) (Military & Civilian)<sup>7</sup>

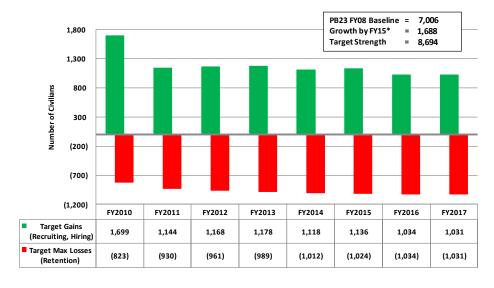
**Assessment of Projected Workforce Growth**. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth

<sup>&</sup>lt;sup>7</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts. Source of data is AT&L Workforce Data Mart.

strategy and other initiatives, the Business career field, which includes the cost estimating and financial management career paths, is projected to grow approximately 1,700 (23%) by FY2015. Part of this growth, approximately 650, is associated with the DOD initiative to rebalance the workforce through insourcing. Component's plans are aligned with the Department's acquisition workforce improvement strategy as well as component-unique objectives. The projected plans support DOD strategies to strengthen the program management, systems engineering, contracting, cost estimating, logistics, and other acquisition functions. In addition, these initiatives will directly address and improve contract oversight in the Department.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 1,700 for FY2010 and 1,150 in FY2011. Corresponding retention needs require losses at levels below 850 for FY2010 and 950 in FY2011. In FY2009, the Business career field within the defense acquisition workforce experienced approximately 800 gains and 1,400 losses. This analysis, with projections through FY2017 (Figure A2-2), provides an enterprise-level view for the Business community of projected gains and losses. Other Component specific factors will impact projected gains and losses.

### Gains and Losses to Achieve & Maintain Target Strength Defense Acquisition Workforce - DOD-Wide (Business) (Civilians)



\*Growth estimates are as of Oct 2009 Senior Steering Board Component Inputs

Figure A2-2. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (Business Career Field) (Civilians)<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

Business Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The WLM provides a visual representation of the distribution of the workforce and assists in assessing trends, needs, and targeted strategies for improved workforce planning and management. The WLM depicts the distribution of workforce members in Future (early-career), Mid-career, and Senior career life-cycle groups. The visual display serves as a framework for additional discreet analysis of factors such as the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the type and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility, and retirement patterns. This information helps to assess risk and serves as part of a data driven foundation for decisions on hiring, development and retention initiatives. Figure A2-3 provides a view of the WLM for civilians in the Business acquisition career field as of the end of FY2009. The Years to Retirement Eligibility distribution for the Defense acquisition workforce is 32/33/35 percent. The distribution of the Business workforce members between the three cohorts is 33/31/36 percent respectively which indicates a potential workforce imbalance and need for action to increase hiring and retention. The analysis following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce lifecycle, retirement eligibility, and retirement patterns. This information helps to assess risks and serves as part of the foundation for datadriven decisions on hiring, development and retention initiatives.

## Defense Acquisition Workforce Lifecycle Model (WLM) - BUSINESS by Years to Retirement Eligibility (YRE) - Civilians (FY09)

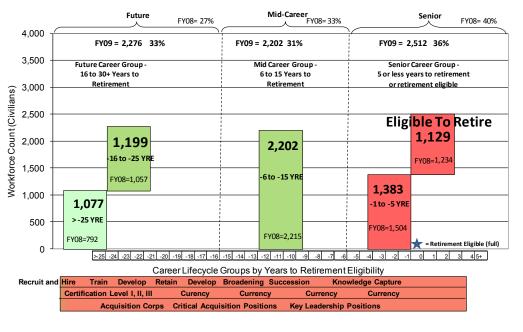


Figure A2-3. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (Business Career Field) (Civilians)<sup>9</sup>

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<sup>9</sup> AT&L Workforce Data Mart (End-of-FY2009)

Business Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A2-4 depicts the gains/losses for Business, to include substantive and administrative switches in and out of the Business career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses. Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

## Defense Acquisition Workforce (Civilian) (FY09) - Business Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories

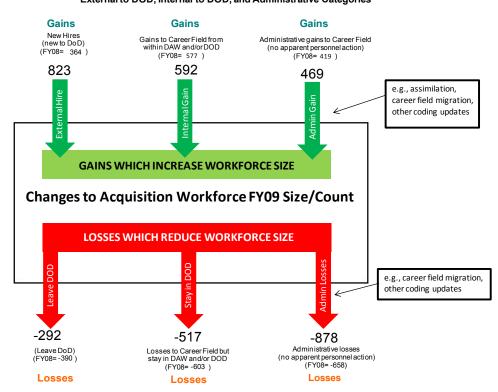


Figure A2-4. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (Business Career Field) (Civilians)<sup>10</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains.

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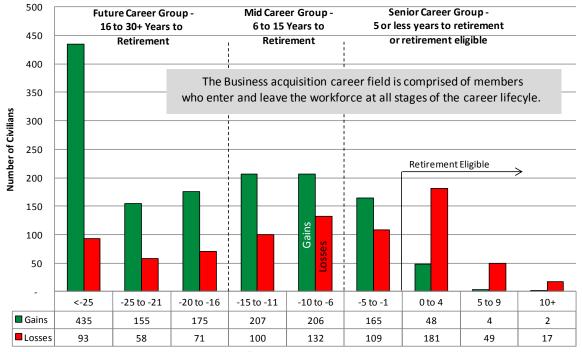
<sup>&</sup>lt;sup>10</sup>AT&L HCI and RAND Analysis using DMDC data (end of FY2009). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and FERS.

External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on a Business acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job).

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help highlight hiring, retention and career management needs. Figure A2-5 depicts the defense acquisition Business workforce civilian gains and losses that took place during FY2009 by "years to retirement eligibility" groups.

## Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\*- Business

(by Years to Full Retirement Eligibility)



\*Does not include administrative gains and losses

Career Lifecycle by Years to Retirement Eligibility

Figure A2-5. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Business Career Field) (Civilians)<sup>11</sup>

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<sup>&</sup>lt;sup>11</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY2009 data indicates that 765 of 1,397 gains <sup>12</sup> (55 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 413 (30 percent) were in the mid-career group, and 219 gains (16 percent) were in the senior career group. This represents a 56 percent increase in FY2009 gains above FY2008 for the future career group, a 49 percent increase in the mid-career group, and a 32 percent increase for the senior career group. Gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A2-6 depicts the external hires and internal gains by lifecycle career group.

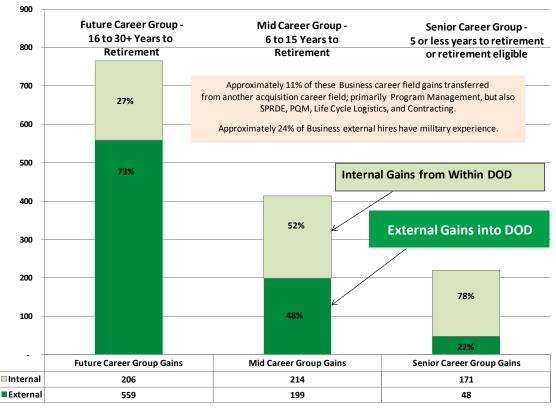


Figure A2-6. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (Business Career Field) (Civilians)<sup>13</sup>

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Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

<sup>&</sup>lt;sup>13</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY2009 data indicates that 222 of 802 losses<sup>14</sup> (28 percent) (less administrative losses) for the civilian acquisition workforce were in the future career group, 232 (29 percent) were in the mid-career group, and 348 (43 percent) were in the senior career group. This represents a 10 percent increase in losses in FY2009 when compared to FY2008 for the future career group, a 20 percent decrease in the mid-career group, and a 30 percent decrease for the senior career group. Losses include external losses (left DOD), internal losses in which acquisition workforce members staved in DOD, and other administrative gains (e.g., through position coding updates). Figure A2-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

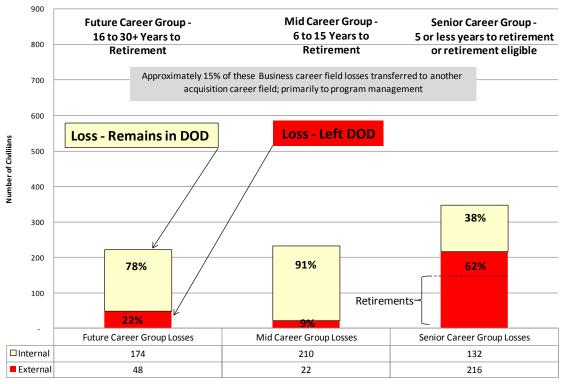


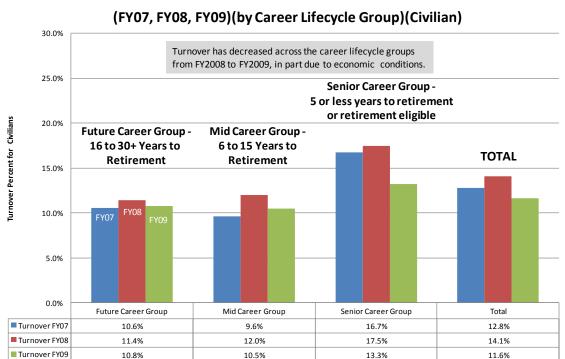
Figure A2-7. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (Business Career Field) (Civilians) 15

<sup>&</sup>lt;sup>14</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

<sup>&</sup>lt;sup>15</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A2-8 provides a comparison of defense acquisition workforce turnover rates for the Business workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, likely due to economic conditions.

### **Defense Acquisition Workforce Turnover - Business**



Turnover Percent by Career Lifecycle Groups

Figure A2-8. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Business Career Field) (Civilians)<sup>17</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

**Retirement Eligibility.** Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A2-9 indicates that 16 percent (1,129) of the civilian Business workforce are eligible for full retirement benefits and an additional 20 percent (1,383) will become eligible within the next five years. An average of 268 members (approximately 4 percent) of the civilian Business workforce per year will become fully retirement eligible each year through FY2019. Approximately 23 percent of the Business workforce is currently under the Civil Service Retirement System (CSRS) and 76 percent are under the

<sup>&</sup>lt;sup>16</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>17</sup> AT&L HCl generated from HCl/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government.<sup>18</sup> The rate of separation for Business spikes from 5 percent at one year before retirement eligibility to 21 percent during the first year of eligibility. Based on past retirement patterns, approximately 59 percent of the Business workforce members that become fully retirement eligible will likely separate within the first three years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

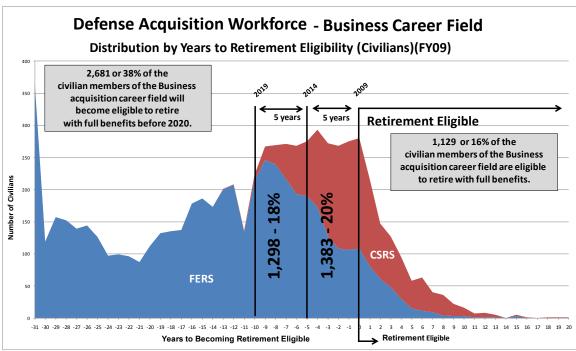


Figure A2-9. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Business Career Field) (Civilians)<sup>19</sup>

### **Business Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including Business. Updated acquisition functional competency models are enabling workforce assessments and improved, data-driven human capital planning. Results of the assessments provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications. Within the AT&L phased approach, the Business competency

Retirements: Evidence from the Department of Defense. p. 25.

9 AT&L HCI graph derived from RAND analysis of data from DMDC EOFY2009 Civ Personnel Master File (Appropriated Funds)

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<sup>&</sup>lt;sup>18</sup> Asch B., Haider S. and Zizzimopoulos, J. (2003) *The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense.* p. 25.

model update effort has resulted in updates to the competency model and will next enter final validation and the assessment process.

### **Certification/Standards**

The DOD Business Functional Leader establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The Business career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A Business development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A2-3 shows the Business certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (FY2009) Business - Cost Estimating and Financial Management											
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)				
Army	302	1,252	1,217	2,771	10.9%	45.2%	43.9%				
Navy	254	693	1,336	2,283	11.1%	30.4%	58.5%				
Air Force	197	1,335	311	1,843	10.7%	72.4%	16.9%				
DCMA	2	42	68	112	1.8%	37.5%	60.7%				
DLA	0	1	5	6	0.0%	16.7%	83.3%				
Other Defense	20	72	149	241	8.3%	29.9%	61.8%				

Table A2-3. Defense Acquisition Positions - Certification Level Requirements by Component (Business Career Field)(FY2009)(All positions – Military and Civilians)<sup>20</sup>

Based on component-reported data, the percentage of Business acquisition workforce members who have met or exceeded certification requirements was 39 percent in FY2007 and is now 47 percent in FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the Business career field as a whole, approximately 45 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the

<sup>&</sup>lt;sup>20</sup> AT&L Workforce Data Mart (End of FY2009 data)

number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A2-10 summarizes certification rates for the Services and 4th Estate.

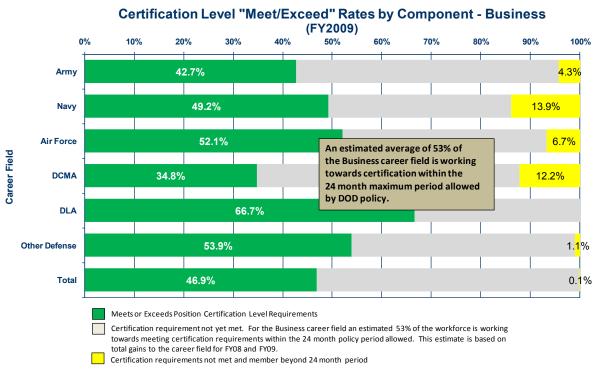


Figure A2-10. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the Business Career Field by Component (Military and Civilians)<sup>25</sup>

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<sup>&</sup>lt;sup>25</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (including administrative/recoding) for FY2008 and FY2009. Gains and loss data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the Business workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD Business career field builds the foundation for data-driven decision making to improve the Business workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

## Appendix 3 DOD Acquisition Mission Critical Career Field Information Technology (Acquisition)

Human Capital Fact Sheet									
Defense Acquisition Workforce (DAW) Information Technology (IT)	Civilian (Civ) IT	Military (Mil) IT	Total IT (Civ + Mil)	Defense Acquisition Workforce					
Size & Composition									
FY09 Workforce Size	4,034	324	4,358	133,103					
Change in size 2008-2009	13%	-9%	11%	6%					
Civilian/Military Composition	93%	7%	-	89% / 11%					
DOD DAW 2015 Growth Target			14%	15%					
Educational Attainment									
Bachelor's Degree or Higher	56%	91%	58%	79%					
Graduate Degree	19%	53%	22%	29%					
Certification (Cert)									
Level I or Higher Achieved	57%	26%	54%	72%					
Level II or Higher Achieved	40%	10%	38%	60%					
Level III Achieved	21%	4%	20%	36%					
Position Cert Requirement Met or Exceeded	38%	12%	37%	59%					
Planning Considerations									
% Baby Boomer/Traditional Generations	69%	10%	64%	58%					
Average Age	48.1	36.9	47.3	45					
Workforce Life-Cycle Model (YRE)	27/36/37			32/33/35					
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)					
Average Years of Service	16.7	14.1	16.5	16.3					
Retirement Eligible	712 (18%)	-	-	19,395 (16%)					
Retirement Eligible w/i 5 Years	785 (20%)	_	-	21,567 (18%)					
Total Career Field Gains/Losses	1,139/702	-	-	19,786/13,042					
Training Statistics		IT 2008	IT 2009	AT&L 2009					
DAU Course Graduates (Classroom)		1,602	1,613	39,568					
DAU Course Graduates (Web)		4,888	6,611	154,399					
DAU Continuous Learning Completions		-		494,568					

### Defense Acquisition Information Technology Functional Leader



Mr.Ed Wingfield
Office of the Deputy CIO
OASD (NII)

Mr. Ed Wingfield is the senior leader and proponent for the Information Technology (IT) functional community

within the defense acquisition workforce. In this role he provides advice to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the IT (acquisition) community. Mr. Wingfield establishes and maintains the education, training, and experience requirements, as well as competencies, certification standards, and position category descriptions. The DOD IT Functional Integrated Product Team (FIPT) supports Mr. Wingfield in this role. The FIPT includes Component IT functional experts, acquisition career managers, and advisors from the Defense Acquisition University (DAU). The Human Capital Fact Sheet above and horizontal enterprise analysis presented in this appendix, builds the foundation for datadriven decision making to improve the IT workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

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<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

## The IT Community Within the Defense Acquisition Workforce

The IT (acquisition) workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. This workforce executes critical functions for acquisitions that use information technology, including National Security Systems (NSS). Consistent with the Clinger-Cohen Act of 1996, Division E, IT includes: any equipment, or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data and information. IT professionals conduct or support requirements analysis, design, development, performance measurement, procurement, lease, outsourcing, verification and validation, certification and accreditation, installation, transition, operations, support, and, where applicable, disposal by applying technical as well as program/project management skills. They apply information technology to support business processes such as those that enable e-government.

Members of the IT (acquisition) career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721, establishes requirements for designating Defense acquisition positions<sup>2</sup>. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. The IT PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

It is important to understand that some acquisition workforce communities (e.g., program management, contracting, and quality) are entirely part of the acquisition workforce. Other acquisition career fields, such as IT and Life Cycle Logistics, are part of broader DOD communities (see Figure A3-1). The broad DoD IT workforce, which includes the IT acquisition workforce, consists of 80,932 personnel as of September FY2009. Initiatives to develop and strengthen the capability of the broader community benefit those in the defense acquisition workforce. The broader community represents a large, domain-experienced recruiting source for future LCL acquisition workforce members.

established in DOD D

<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

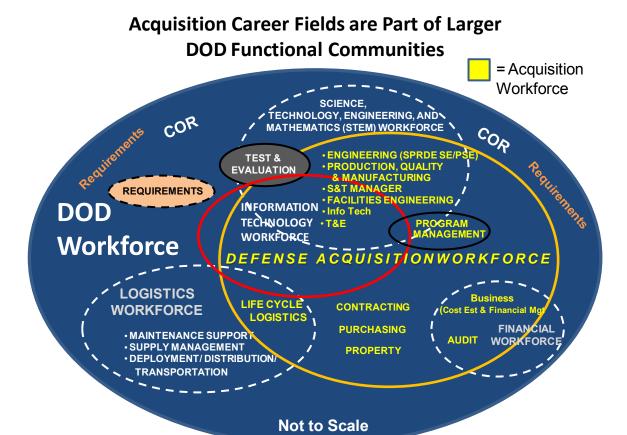


Figure A3-1. Some Defense Acquisition Career Fields are Part of Larger DOD Workforce Functional Communities (e.g., the IT Acquisition Career Field is part of the DOD IT community)<sup>3</sup>

As shown in Table A3-1, the defense acquisition IT workforce (acquisition) has 4,358 members and is comprised of 93 percent civilian (4,034) with 7 percent military (324). The IT workforce (acquisition) constituted 3 percent of the organic<sup>4</sup> defense acquisition workforce at the end of FY2009.

Defense Acquisition Workforce Civilian/Military Composition Information Technology Career Field (FY09)										
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil %										
Army	1,843	42%	1,794	49	97%	3%				
Navy/Marine Corps	1,240	28%	1,197	43	97%	3%				
Air Force	966	22%	734	232	76%	24%				
DCMA	124	3%	124	0	100%	0%				
DLA	7	0%	7	0	100%	0%				
Other	178	4%	178	0	100%	0%				
Total	4,358	100%	4,034	324	93%	7%				

Table A3-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (IT Acquisition Career Field) (by Component)<sup>5</sup>

3 OUSD(AT&L)/HCI

<sup>&</sup>lt;sup>4</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

Source: AT&L Workforce Data Mart (end of FY09)

The IT civilian workforce represents various occupational series, of which the primary series were identified in the PCD. Table A3-2 provides a breakout of the top five series by Service. The highest percentage of civilians is in the Information Technology Management Specialist (2210) series (70 percent).

Top 5 Occupation Series (end of FY2009) Information Technology (Civilian)										
Occ Series - Description	Total	Total (%)	Cum (%)	Army	Navy	AF	Other			
2210 - Information Technology Mgt Specialist	3,051	70.0%	70.0%	1,339	1,021	486	205			
0301 - Administration & Program Staff	257	5.9%	75.9%	191	16	45	5			
1550 - Computer Scientist	253	5.8%	81.7%	99	90	59	5			
0391 - Telecommunications Specialist	123	2.8%	84.5%	58	24	23	18			
0343 - Management and Program Analyst	84	1.9%	86.5%	12	6	59	7			

Note: There are 25 records with null values for OCC series

#Occ Series in Career Field = 41

Table A3-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the IT Acquisition Career Field (FY2009)<sup>6</sup>

### IT (Acquisition) Career Field Challenges

The demand for IT expertise will remain strong as the acquisition community supports the following: 1) support of 102 major defense acquisition and automated information system programs and over 200 other programs identified for special oversight; 2) recapitalization of equip and systems; 3) an expanded and evolving Expeditionary requirement, including surge requirements for Security, Stabilization, and Reconstruction Operations; contingency operations; and/or humanitarian assistance; 4) supply chain management; and 5) expanded use of logistics services to support deployed systems. The IT workforce count (civilians + military) has decreased by 20 percent since 2005. At the same time, the career field has experienced a significant increase in acquisition workload. The number of major defense acquisition and automated information system programs has increased by 36 percent. Another major indicator of this increased workload is that dollars obligated on DOD contracts (actions over \$100,000) have increased by 166 percent from FY2001 through FY2009. The loss of experienced IT workforce members represents increased performance risk associated with IT functions needed to lead and manage DOD acquisition programs.

Impact of Increased Systems Dependence on Software. The increasing software complexity of DOD systems coupled with the bulk of a system's critical functionality being provided by software has resulted in a variety of challenges. Root cause analysis of many failed programs has consistently identified fundamental issues related to lack of effective IT and software acquisition management on both the industry and government side as well as systemic

<sup>&</sup>lt;sup>6</sup> Source: AT&L Workforce Data Mart (end of FY09)

failures to properly accommodate Systems Engineering process rigor into software development activities. The growth of sophisticated software-dominated systems, which frequently push state-of the-art, is expected to continue as the DOD responds to demands driven by global conflicts.

DOD Software Engineering Revitalization Efforts. A variety of joint DOD-NDIA workshops and summit meetings have identified a number of systemic persistent software and IT technical issues related to requirements analysis, life cycle planning and cost estimation, inadequate verification and validation, poor risk management and insufficiency of software engineering expertise. Workshop results from a follow-on human capital working group identified security clearance issues; shortages of highly-qualified personnel in areas of program management, system/software architect and domain technical expert positions and the impacts of competition from the commercial sector for such highly-qualified personnel; and the longer term results of the observed decreases in US computer science and software engineering university enrollments.

Results of these workshops led to a comprehensive AT&L plan of action addressing identified issues in areas of software cost/risk estimation, better integration with Systems Engineering, software requirements management and quality attributes as well as a human capital strategy. Key components of the human capital strategy include competency and content assessments of certification courses; use of knowledge portals and best practice dissemination; in-house AT&L training; development of a Software Engineering reference curriculum; and industrial base emphasis.

Software Acquisition Training and Education Working Group. Nearly all acquisition career fields are impacted in some way by software—whether actually developing/coding software-intensive systems, estimating their costs, contracting for them, testing them or sustaining them. While a comprehensive look across the spectrum of the DAWIA career fields had been performed in the mid-1990s, no re-validation of these cross-disciplinary software competencies had occurred since then. Accordingly, the Software Acquisition Training and Education Working Group (SATEWG), was formally chartered by the USD (AT&L) to analyze persistent issues and derive relevant competencies for DAWIA career fields. Final recommendations are expected in 2010.

**Software Engineers vs. IT Careerists.** While the IT career field is a relatively small one, other personnel performing duties related to software development also exist in other career fields, most notably as part of the Systems Planning, Research, Development and Engineering (SPRDE). Many degreed Software Engineering professionals are coded into this career field and their contribution must be considered to get a total picture of the acquisition workforce impact.

**Retirement Losses.** As with DOD as a whole, the defense acquisition workforce, including the IT workforce, is experiencing the departure of the Baby

Boomers from the workforce. As of the end of fiscal year 2009, 69 percent of the IT civilian workforce is part of the Baby Boomer and Traditional generations. In addition, 18 percent of the IT civilian workforce was eligible for full retirement benefits and approximately 20 percent will become eligible for full retirement benefits over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

IT Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The DOD IT workforce decreased by 20 percent from FY2005 to FY2009, from 5,472 to 4,358 (Figure A3-2). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes and partnering with OUSD (P&R) and the Components to potentially create improved acquisition occupation identifiers.



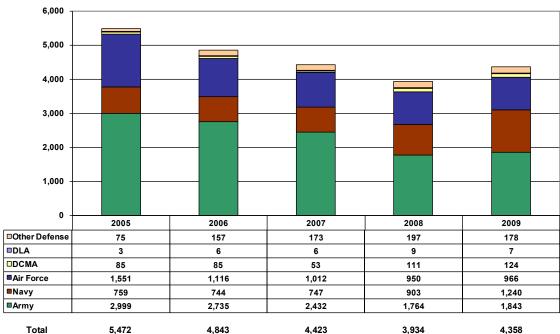


Figure A3-2. Historical Size of Defense Acquisition Workforce IT Acquisition Career Field (FY2005 – FY2009) (Military & Civilian)<sup>7</sup>

### **Assessment of Projected Workforce Growth**

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the IT (acquisition) career field is projected to grow approximately 580 (14%) by FY2015. Part of this growth, approximately 300, is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

A3-7

<sup>&</sup>lt;sup>7</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 674 for FY2010 and 616 for FY2011. Corresponding retention needs require losses of no more than 513 for FY2010 and 536 for FY2011. In FY2009, the IT career field within the defense acquisition workforce experienced approximately 700 gains and 450 losses. Noted is that this analysis, with projections through FY2017 (Figure A3-3), provides a very top level view of projected gains and losses.

Gains and Losses to Achieve & Maintain Target Strength

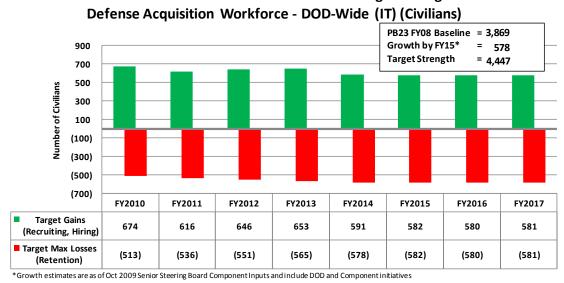


Figure A3-3. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (IT Acquisition Career Field) (Civilians)<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

IT Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A3-4) provides a visual display of a workforce in three cohort groups – Future (early career) workforce, Mid-career and Senior- career cohort groups. The Years Retirement Eligible (YRE) distribution for the defense acquisition workforce is 32/33/35 percent. The distribution of the IT workforce between the three cohorts is 27/36/37 percent respectively. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility and the "bow wave," and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives

### Defense Acquisition Workforce Lifecycle Model (WLM) - IT (acquisition) by Years to Retirement Eligibility (YRE) - Civilians (FY09)

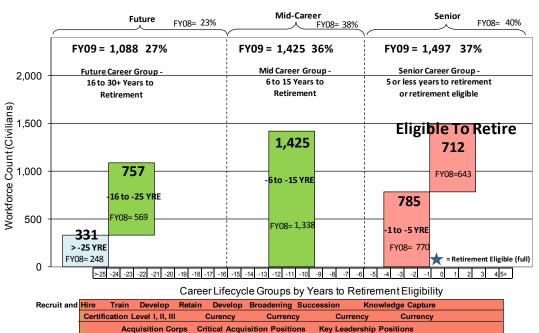


Figure A3-4. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009)
(IT Acquisition Career Field) (Civilians)<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> AT&L Workforce Data Mart (End-of-FY09)

IT Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A3-5 depicts the gains/losses for IT (acquisition), to include substantive and administrative switches in and out of the IT (acquisition) career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

## Defense Acquisition Workforce (Civilian) (FY09) - IT (Acquisition) Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories

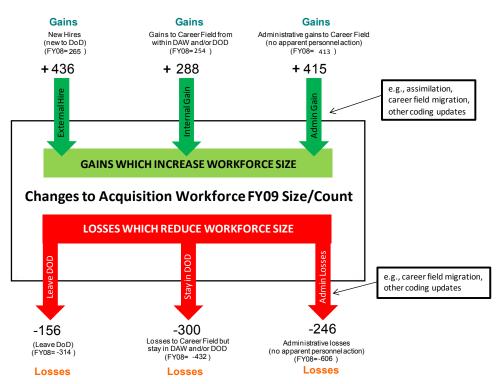


Figure A3-5. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (IT Acquisition Career Field) (Civilians)<sup>10</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains. External or new hires to DOD are those who were not part of the DOD civilian

FERS.

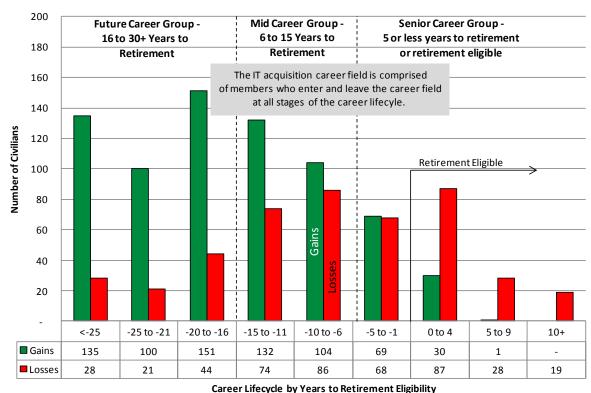
<sup>&</sup>lt;sup>10</sup> AT&L HCl and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on an IT acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses helps improve targeting of hiring, retention and career management strategies. Figure A3-6 depicts the IT civilian gains and losses that took place during FY2009 by -years to retirement eligibility" (YRE) groups.

## Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\*-IT

(by Years to Full Retirement Eligibility)



<sup>\*</sup>Does not include administrative gains and losses

Figure A3-6. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (IT Acquisition Career Field) (Civilians)<sup>11</sup>

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<sup>&</sup>lt;sup>11</sup> HCI generated from HCI/RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 386 of 622 gains<sup>12</sup> (53 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 236 (33 percent) were in the mid-career group, and 100 gains (14 percent) were in the senior career group. This represents a 53 percent increase in FY2009 gains above FY2008 for the future career group, a 30 percent increase in the mid-career group, and a 10 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A3-7 depicts the external hires and internal gains by lifecycle career group.

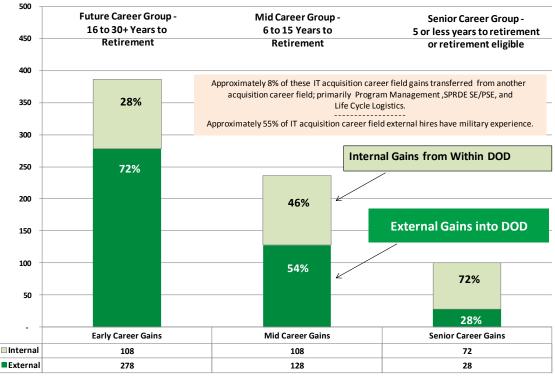


Figure A3-7. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (IT Acquisition Career Field) (Civilians)<sup>13</sup>

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<sup>&</sup>lt;sup>12</sup> Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

<sup>&</sup>lt;sup>13</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data)

FY09 data indicates that 93 of 253 losses<sup>14</sup> (21 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 160 (36 percent) were to the mid-career group, and 194 (43 percent) were to the senior career group. This represents a 38 percent decrease in losses in FY2009 when compared to FY2008 for the future career group, a 19 percent decrease in the mid-career group, and a 51 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A3-8 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

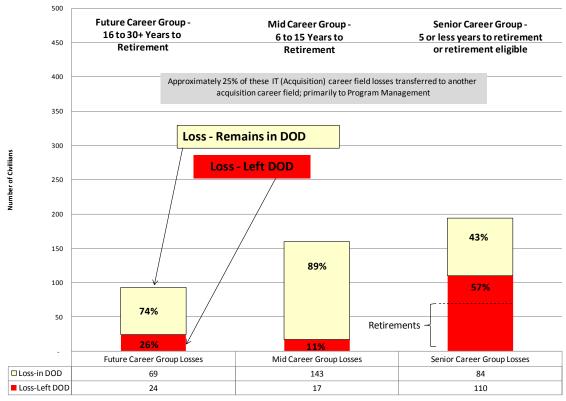


Figure A3-8. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (IT Acquisition Career Field) (Civilians)<sup>15</sup>

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<sup>&</sup>lt;sup>14</sup> Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

<sup>&</sup>lt;sup>15</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A3-9 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

### **Defense Acquisition Workforce Turnover - IT (Acquisition)**

(FY07, FY08, FY09) (by Career Lifecycle Group) (Civilian)

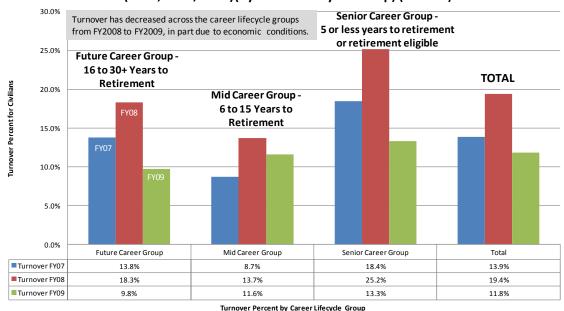


Figure A3-9. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (IT Acquisition Career Field) (Civilians)<sup>17</sup>

Retirement Eligibility. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A3-10 indicates that 18 percent (712) of the civilian IT workforce are eligible for full retirement benefits and an additional 20 percent (785) will become eligible within the next five years. An average of 158 members (approximately 4 percent) of the civilian IT workforce per year will become fully retirement eligible each year through FY2019. Approximately 20 percent of the IT workforce is currently under the Civil Service Retirement System (CSRS) and 79 percent are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government. The rate of separation for IT spikes from 6 percent at one year before retirement eligibility to 28 percent during the first year of eligibility. Based

 $<sup>^{16}</sup>$  For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>17</sup> AT&L HCl generated from HCl/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Asch B., Haider S. and Zizzimopoulos, J. (2003) The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense. p. 25.

on past retirement patterns, approximately 63 percent of the IT workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

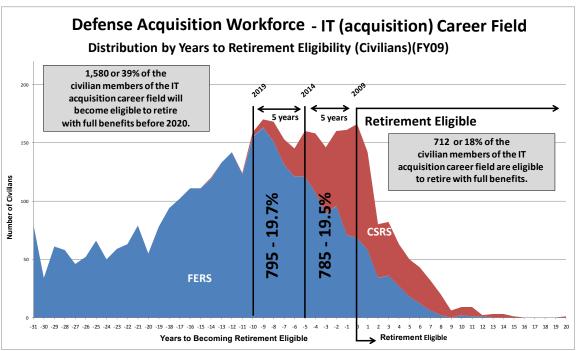


Figure A3-10. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (IT Acquisition Career Field) (Civilians)<sup>19</sup>

### **IT Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including IT. Updated acquisition functional competency models are enabling workforce assessments and improved, data-driven human capital planning. Results of the assessments provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications.

An extensive IT career field competency analysis was performed by the IT FIPT assisted by service senior review teams in 2002 and 2005 and included both

<sup>&</sup>lt;sup>19</sup> AT&L HCI graph derived from RAND analysis of data from DMDC EOFY09 Civ Personnel Master File (Appropriated Funds)

Information Technology and Software Acquisition Management (SAM) competencies. These competencies were also aligned with federally-mandated Clinger-Cohen Act IT core competencies as well. DAU IT certification courses were updated accordingly. This baselined IT competency set will be used as the starting point for development of a competency model for the IT acquisition career field. This IT follow-on competency effort is projected to begin during FY2010.

### Certifications/Standards

The DOD Functional Leader for IT establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The IT career field is organized around a —Corelus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. This model, by supplementing core functional certification training, provides key learning assets at time and point of need. To promote career long development and currency, defense acquisition workforce members are required to complete 80 continuous learning points every two years. An IT development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

In 2006 Software Acquisition Management (SAM) courses, previously optional, were mandated by the IT FIPT for the IT career field. This had the effect of nearly doubling training certification requirements and exposing IT careerists to a variety of relevant software issues. Since 2006, functional certification training standards have remained stable. Table A3-3 shows the IT certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (FY2009) Information Technology (Acquisition)											
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)				
Army	111	908	820	1,839	6.0%	49.4%	44.6%				
Navy	123	452	662	1,237	9.9%	36.5%	53.5%				
Air Force	72	813	81	966	7.5%	84.2%	8.4%				
DCMA	11	80	32	123	8.9%	65.0%	26.0%				
DLA	3	1	3	7	42.9%	14.3%	42.9%				
Other Defense	1	59	118	178	0.6%	33.1%	66.3%				

Table A3-3. Defense Acquisition Positions - Certification Level Requirements by Component (IT Acquisition Career Field)(FY2009)(All positions –Military and Civilians)<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> AT&L Workforce Data Mart (End of FY09)

Based on component-reported data, the percentage of IT acquisition workforce members who have met or exceeded certification requirements was 37 percent in FY2008 and is the same in FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the IT (acquisition) career field as a whole, assessment indicates 59 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A3-11 summarizes certification rates for the Services and 4th Estate.

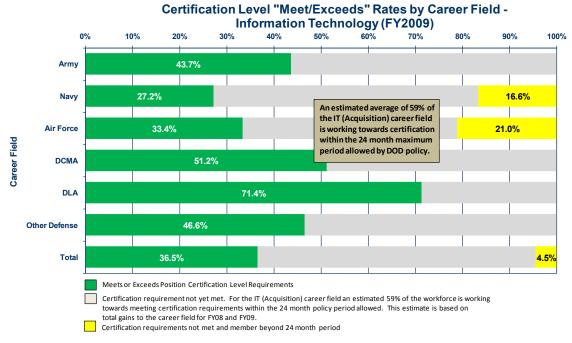


Figure A3-11. Defense Acquisition Workforce FY2009 Certification - Meet/Exceed" Rates for the IT Acquisition Career Field by Component (Military and Civilians)<sup>21</sup>

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<sup>&</sup>lt;sup>21</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

#### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the IT workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD Business career field builds the foundation for data-driven decision making to improve the IT workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

# Appendix 4 DOD Acquisition Mission Critical Career Field Life Cycle Logistics

Human Capital Fact Sheet 2009							
Defense Acquisition Workforce (DAW) Life Cycle Logistics (LC Log)	Civilian (Civ) LC Log	Military (Mil) LC Log	Total LC Log (Civ + Mil)	Defense Acquisition Workforce			
Size & Composition							
FY09 Workforce Size	13,927	925	14,852	133,103			
Change in size 2008-2009	12%	-2%	11%	6%			
Civilian/Military Composition	94%	6%	-	89% / 11%			
DOD DAW 2015 Growth Target			16%	15%			
Educational Attainment							
Bachelor's Degree or Higher	53%	58%	53%	79%			
Graduate Degree	16%	25%	17%	29%			
Certification (Cert)							
Level I or Higher Achieved	72%	41%	70%	72%			
Level II or Higher Achieved	51%	18%	49%	60%			
Level III Achieved	28%	7%	27%	36%			
Position Cert Requirement Met or Exceeded	49%	22%	47%	59%			
Planning Considerations							
% Baby Boomer/Traditional Generations	72%	21%	69%	58%			
Average Age	48.4	39.7	47.9	45			
Workforce Life-Cycle Model (YRE)	25/35/40			32/33/35			
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)			
Average Years of Service	16.7	17.6	16.8	16.3			
Retirement Eligible	2,740 (20%)	-	-	19,395 (16%)			
Retirement Eligible w/i 5 Years	2,766 (20%)	-	-	21,567 (18%)			
Total Career Field Gains/Losses	2,935/1,445	-	-	19,786/13,042			
Training Statistics		LC Logistics 2008	LC Logistics 2009	DAW 2009			
DAU Course Graduates (Classroom)		3,419	4,675	39,568			
DAU Course Graduates (Web)		16,708	20,564	154,399			
DAU Continuous Learning Completions		20.009	27,209	494,568			

#### Defense Acquisition Life Cycle Logistics Functional Leader



Mr. Randy Fowler Asst Deputy USD Material Readiness OUSD (AT&L)

Mr. Randy Fowler is the senior leader and

proponent for the DOD Life Cycle Logistics (LCL) functional community within the defense acquisition workforce. In this role, he provides advice to the Under Secretary of Defense for Acquisition Technology and Logistics (USD (AT&L)) in fulfillment of his 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the LCL community. In addition, he establishes and maintains the education, training, and experience requirements which include competencies, certification standards, and position category descriptions. The DOD Life Cycle Logistics Functional Integrated Product Team (FIPT) supports Mr. Fowler in this role. The FIPT includes Component Life Cycle Logistics functional experts, acquisition career managers, and advisors from the Defense Acquisition University (DAU). The LCL community, in addition to being part of the defense acquisition workforce, is also part of the broader DOD logistics community, led by the Deputy Under Secretary of Defense for Logistics and Materiel Readiness as its DOD Functional Community Manager (FCM).

The Human Capital Fact Sheet<sup>1</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the Life Cycle Logistics workforce. It is understood that Components

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

## The Life Cycle Logistics Community Within the Defense Acquisition Workforce

The Life Cycle Logistics workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. This workforce executes critical functions such as logistics planning, management and support of defense acquisition programs. Life Cycle Logistics is a core acquisition management function that ensures the integration of all support elements to maximize deployability, supportability, and mobility of the system throughout the program life cycle. Life Cycle Logisticians can work in a Program Management Office (PMO) directly in support of the Program Manager (PM), or in other supporting logistics activity offices (e.g., Logistics/ Materiel Commands, logistics centers, life cycle management centers, inventory control points, logistics readiness centers, warfare centers, other defense agencies, etc).

Members of the LCL career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 U.S.C Chapter 87, Section 1721, establishes requirements for designating Defense acquisition positions<sup>2</sup>. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. The LCL PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

It is important to understand that some acquisition workforce functional communities (e.g., program management, contracting, and quality) are entirely within the acquisition workforce while other communities, such as Life Cycle Logistics, are part of a larger DOD functional community (see Figure A4-1). While the LCL career field is 11 percent of the defense acquisition workforce, it is 2 percent of the broader Big "L" DOD logistics community, comprised of approximately 615,000 military and civilian members. Initiatives to strengthen the capability of the broader Logistics community and initiatives to improve those in the Defense acquisition workforce are mutually beneficial. The broader

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<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

community represents a large, logistics-domain experienced source for future LCL acquisition workforce members.

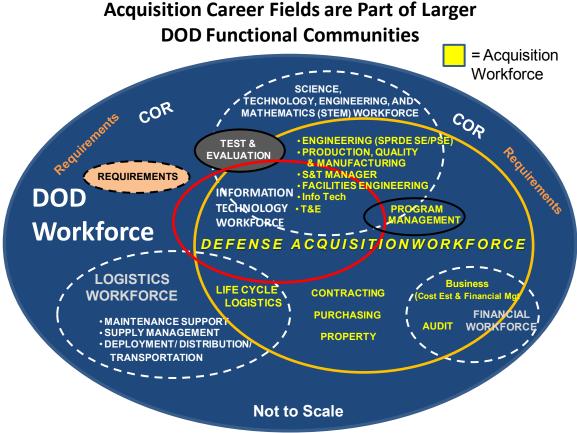


Figure A4-1. Some Defense Acquisition Career Fields are Part of Larger DOD Workforce Functional Communities (e.g., the Life Cycle Logistics Acquisition Career Field is part of the DOD Logistics community)

The Life Cycle Logistics career field includes professionals responsible for planning, development, implementation, and management of a comprehensive, affordable, and effective systems support strategy. Life cycle logisticians have principal roles during the acquisition and operational sustainment phases of the weapon or material systems life cycle to:

- Ensure product support strategies meet the program goals for operational effectiveness, system readiness, and facilitate iterative technology enhancements during the system life cycle;
- 2) Ensure supportability requirements are addressed consistently with cost, schedule, and performance;
- 3) Perform an integral role in systems engineering to ensure supportability considerations are implemented during systems design; and

4) Plan and develop performance-based logistics (PBL) initiatives as the preferred approach to product support.

As shown in Table A4-1, the defense acquisition Life Cycle Logistics workforce has 14,852 members and is comprised of 94 percent civilian (13,927) and 6 percent military (925). Again, the LCL workforce constituted 11 percent of the organic<sup>3</sup> defense acquisition workforce at the end of FY2009. As part of the Secretary's growth strategy and other initiatives, the Life Cycle Logistics career field, is projected to grow approximately 2,000 (16%) by 2015. Contractor support is also used to support the life cycle logistics part of the acquisition mission. Part of the organic growth, approximately 1,200, is associated with the DOD initiative to rebalance the workforce through in-sourcing. DOD acquisition functional community leaders will continue to assess the extent and use of contractor support.

Other leadership initiatives are re-shaping the Life Cycle Logistics workforce. Starting in 2004, DOD logistics senior leaders re-focused acquisition logistics to a broader life cycle logistics role. Creation of Life Cycle Management Commands in the Army in 2004-2005 led to assimilation. The LCL workforce count (civilians + military) has increased by 19 percent since 2005. The Air Force has also been assimilating personnel and positions into the acquisition workforce at Air Logistics Centers, and this effort is expected to accelerate between FY2010-FY2015 to assimilate an additional 200 positions as a result of the Air Force Life Cycle Logistics Reconstitution Working Group. Additionally, the Defense Logistics Agency is expected to assimilate approximately 2,975 positions between FY2010 and FY2015. These assimilation efforts for personnel focused on life cycle management and acquisition activities during both system acquisition and sustainment increase the workforce count may drive the LCL count above 20,500 by FY2015. Ongoing growth planning by senior leaders is continuing. This growth by assimilation is in addition to the Secretary's current DOD acquisition workforce growth strategy.

Defense Acquisition Workforce Civilian/Military Composition Life Cycle Logistics Career Field (FY09)									
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil									
Army	7,952	54%	7,952	0	100%	0%			
Navy/Marine Corps	4,784	32%	4,329	455	90%	10%			
Air Force	1,989	13%	1,519	470	76%	24%			
DCMA	35	0%	35	0	100%	0%			
DLA	22	0%	22	0	100%	0%			
Other	70	0%	70	0	100%	0%			
Total	14,852	100%	13,927	925	94%	6%			

Table A4-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (Life Cycle Logistics Career Field) (by Component)<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>4</sup> Source: AT&L Workforce Data Mart (end of FY09)

The Life Cycle Logistics civilian workforce represents various occupational series. The primary series are identified in the PCD. Table A4-2 provides a breakout of the top five series by Service. The highest percentage of civilians is in the Logistics Management Specialist (0346) series (64 percent).

Top 5 Occupation Series (end of FY2009)  Life Cycle Logistics (Civilian)										
Occ Series - Description   Total   Total (%)   Cum (%)   Army   Navy   AF   Other										
0346 - Logistics Management Specialist	9,450	63.6%	63.6%	4,391	3,527	1,465	67			
1670 - Equipment Specialist	1,161	7.8%	71.4%	973	184	4	0			
2010 - Inventory Management Specialist	791	5.3%	76.8%	687	99	1	4			
0301 - Administration & Program Staff	637	4.3%	81.1%	510	91	24	12			
2003 - Supply Management Specialist	434	2.9%	84.0%	404	28	0	2			

Note: There are 12 records with null values for OCC series

#Occ Series in Career Field = 63

Table A4-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the Life Cycle Logistics Career Field (FY2009)<sup>5</sup>

#### **Life Cycle Logistics Career Field Challenges**

The Department is strengthening the Life Cycle Logistics workforce capacity and capability to address challenges and improve acquisition outcomes. The demand for life cycle logistics expertise will remain strong as the acquisition community supports: 1) approximately 102 major acquisition programs and over 200 other programs identified for special oversight; 2) the need for long term system success throughout logistics acquisition activities to include system sustainment; 3) recapitalization of military equipment and systems; 4) expanded and evolving expeditionary requirements, including requirements for Security. Stabilization, and Reconstruction Operations; 5) contingency operations and humanitarian assistance; 6) supply chain management; and 7) management of logistics services used to support deployed systems. The career field has experienced a significant increase in acquisition workload. The number of major defense acquisition programs has increased by 36 percent. Dollars obligated on DOD contracts (actions over \$100,000) have increased by 166 percent from FY2001 through FY2009. While executing this heavy workload, the ongoing and expected continued loss of experienced LCL workforce members represents increased performance risk.

As with DOD as a whole, the Defense acquisition workforce, including the Life Cycle Logistics workforce, is experiencing the departure of the Baby Boomers from the workforce. As of the end of fiscal year 2009, 72 percent of the LCL civilian workforce is part of the Baby Boomer and Traditional generations. In addition, 20 percent of the LCL civilian workforce was eligible for full retirement benefits and approximately 20 percent will become eligible for full retirement

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<sup>&</sup>lt;sup>5</sup> Source: AT&L Workforce Data Mart (end of FY09)

benefits over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

#### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

Life Cycle Logistics Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical for effective workforce planning and decisions. The DOD Life Cycle Logistics workforce count increased by 19 percent; from 12,493 in FY2005 to 14,852 as of the end of FY2009 (Figure A4-2). The Army accounted for the majority of this increase. Various factors can impact the count, from major senior leader strategic decisions such as the downsizing in the 1990's and current Secretary's acquisition workforce growth initiative. Factors that impact count also include statutory requirements, count methodology, Total Obligation Authority, force change decisions and initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes and partnering with OUSD (P&R) and the Components to potentially create improved acquisition occupation identifiers.

#### Count and Composition Life Cycle Logistics

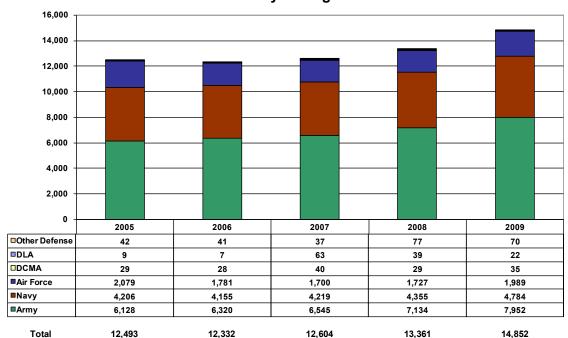


Figure A4-2. Historical Size of Defense Acquisition Workforce Life Cycle Logistics Career Field (FY2005 – FY2009) (Military & Civilian)<sup>6</sup>

#### **Assessment of Projected Workforce Growth**

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the Life Cycle Logistics career field is projected to grow approximately 2,100 (16%) by FY2015. Part of this growth, approximately 1,240 is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 1,546 for FY2010 and 1,325 in

A4-7

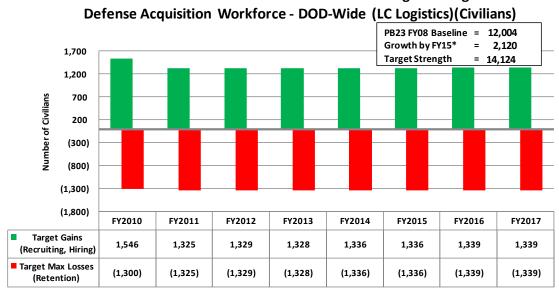
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<sup>&</sup>lt;sup>6</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts. Source of data is AT&L Workforce Data Mart.

FY2011. Corresponding retention needs require losses at levels below 1,300 for FY2010 and 1,325 in FY2011.

In FY2009, the LCL career field within the defense acquisition workforce experienced approximately 2,300 gains and 1,200 losses. Noted is that this analysis, with projections through FY2017 (Figure A4-3), for the LCL community is across DOD Components. Other Component specific factors will impact projected gains and losses.

Gains and Losses to Achieve & Maintain Target Strength



 ${\bf *Growth\ estimates\ are\ as\ of\ Oct\ 2009\ Senior\ Steering\ Board\ Component\ Inputs\ and\ include\ DOD\ and\ Component\ initiatives\ and\ include\ DOD\ and\ initiatives\ and\ include\ DOD\ and\ initiatives\ and\ in$ 

Figure A4-3. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (Life Cycle Logistics Career Field) (Civilians)<sup>7</sup>

<sup>7</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition

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Workforce Senior Steering Board.

Life Cycle Logistics Workforce Lifecycle Model Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A4-4) provides a visual display of a workforce in three cohort groups – Future (early career) workforce, Mid-career and Senior- career cohort groups. The Years to/of Retirement Eligible (YRE) distribution for the total organic Defense acquisition workforce is 32/33/35 percent. The distribution of the LCL workforce between the three cohorts is 25/35/40 percent respectively. The LCL distribution highlights the large mid-career and senior cohorts and represents a shift from the FY2008 distribution of 23%/35%/42%.

The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility and the "bow wave," and retirement patterns. This information helps to assess risks and supports decisions on hiring, development and retention initiatives.

### Defense Acquisition Workforce Lifecycle Model - LC LOGISTICS Years to Retirement Eligibility (YRE) - DAW Civilians (FY09)

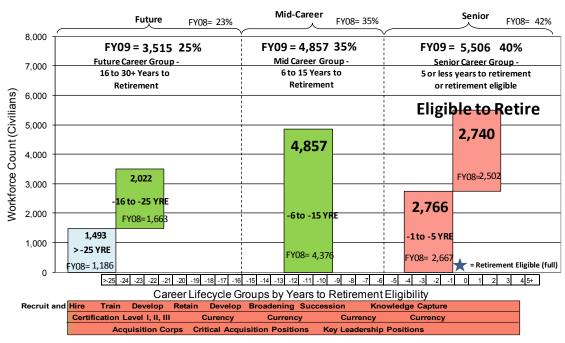


Figure A4-4. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (Life Cycle Logistics Career Field) (Civilians)<sup>8</sup>

<sup>8</sup> AT&L Workforce Data Mart (End-of-FY09)

Life Cycle Logistics Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is currently ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A4-5 depicts the gains/losses for Life Cycle Logistics, to include substantive and administrative switches in and out of the Life Cycle Logistics acquisition career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

### Defense Acquisition Workforce (Civilian) (FY09) - Life Cycle Logistics Gains and Losses by

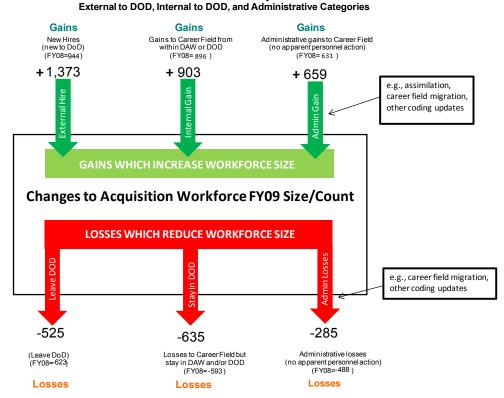


Figure A4-5. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (Life Cycle Logistics Career Field) (Civilians)<sup>9</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains. External or new hires to DOD are those who were not part of the DOD civilian

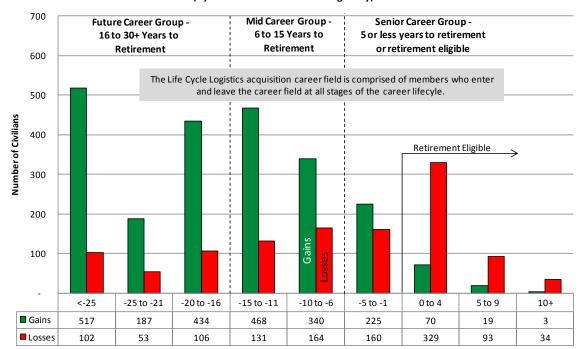
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<sup>&</sup>lt;sup>9</sup> AT&L HCI and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on an LCL acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure A4-6 depicts the Defense acquisition workforce civilian gains and losses that took place during FY2009 by "years to retirement eligibility" groups.

## Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\* - LC Logistics (by Years to Full Retirement Eligibility)



\*Does not include administrative gains and losses

Career Lifecycle by Years to Retirement Eligibility

Figure A4-6. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Life Cycle Logistics Career Field) (Civilians)<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 1,138 of 2,263 gains <sup>11</sup> (50 percent) (less administrative gains) to the civilian acquisition workforce were to the future career group, 808 (36 percent) were to the mid-career group, and 317 gains (14 percent) were to the senior career group. This represents a 24 percent increase in FY2009 gains above FY2008 for the future career group, a 28 percent increase in the mid-career group, and an 11 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A4-7 depicts the external hires and internal gains by lifecycle career group.

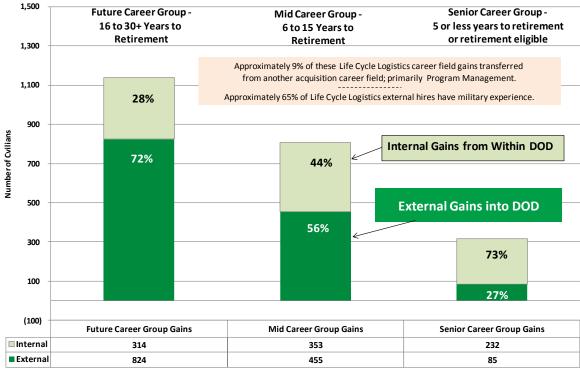


Figure A4-7. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (Life Cycle Logistics Career Field) (Civilians)<sup>12</sup>

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<sup>&</sup>lt;sup>11</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{12}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY2009 data indicates that 261of 1,155 losses<sup>13</sup> (23 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 295 (26 percent) were to the mid-career group, and 599 (52 percent) were to the senior career group. This represents a 22 percent increase in losses in FY2009 when compared to FY2008 for the future career group, a 4 percent decrease in the mid-career group, and a 14 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A4-8 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

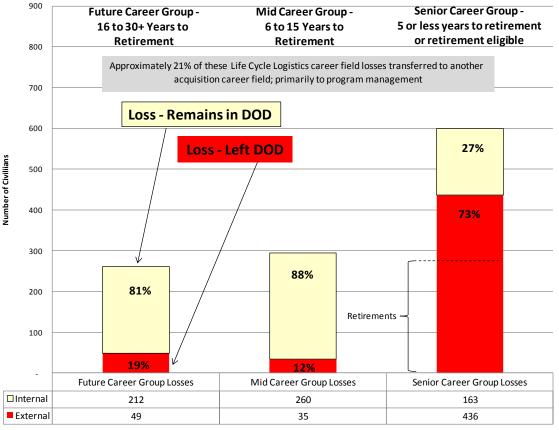


Figure A4-8. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (Life Cycle Logistics Career Field) (Civilians)<sup>14</sup>

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<sup>&</sup>lt;sup>13</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{14}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A4-9 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

#### **Defense Acquisition Workforce Turnover - LC Logistics**

(FY07, FY08, FY09) (by Career Lifecycle Group) (Civilian)

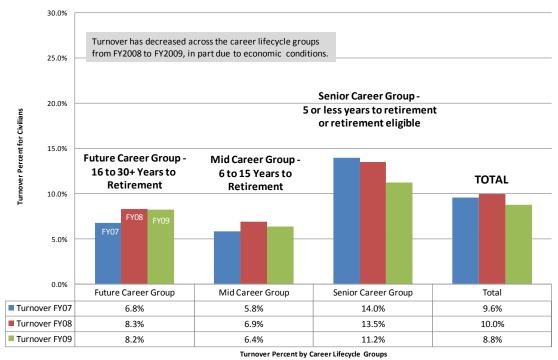


Figure A4-9. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Life Cycle Logistics Career Field) (Civilians)<sup>16</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

Retirement Eligibility and Departure. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A4-10 indicates that 20 percent (2,740) of the civilian Life Cycle Logistics workforce are eligible for full retirement benefits and an additional 20 percent (2,766) will become eligible within the next five years. An average of 524 members (approximately 4 percent) of the civilian Life Cycle Logistics workforce per year will become fully retirement eligible each year through FY2019. Approximately

<sup>&</sup>lt;sup>15</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

AT&L HCI generated from HCI/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

24 percent of the Life Cycle Logistics workforce is under the Civil Service Retirement System (CSRS) and 76 percent are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government. The rate of separation for Life Cycle Logistics increases from 5 percent at one year before retirement eligibility to 20 percent during the first year of eligibility. Based on past retirement patterns, approximately 55 percent of the Life Cycle Logistics workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

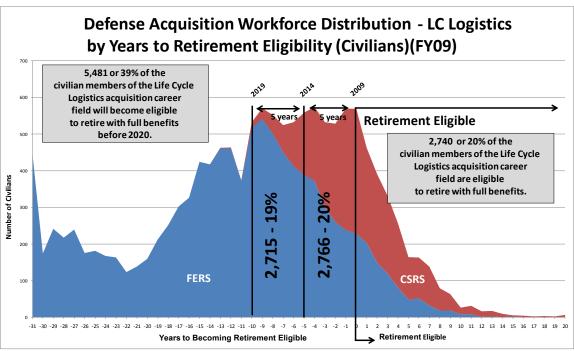


Figure A4-10. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Life Cycle Logistics Career Field) (Civilians)<sup>18</sup>

#### **Life Cycle Logistics Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including Life Cycle Logistics. Updated acquisition functional competency models are enabling workforce assessments and improved, datadriven human capital planning. Results of the assessments provide important

<sup>18</sup> AT&L HCl graph derived from RAND analysis of data from DMDC EOFY09 Civ Personnel Master File (Appropriated Funds)

A4-15

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<sup>&</sup>lt;sup>17</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) *The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense.* p. 25.

organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications.

The Logistics community has developed a DOD Logistics Human Capital Strategy to support its workforce development efforts. More than 50 Subject Matter Experts (SMEs) and senior leaders from across the Services and defense agencies came together to identify and define the competencies that will be necessary in the future. Additionally, the OUSD (AT&L) competency initiative resulted in an updated competency model for acquisition life cycle logisticians which also included 1,300 individual competency assessments.

The DOD Logistics Human Capital Strategy identifies competencies and proficiencies required to achieve high quality performance outcomes that support DOD mission requirements across four major logistics mission domains, of which one is life cycle logistics. The seven top-level Life Cycle Logistics technical competencies identified in the DOD Logistics Human Capital Strategy document are logistics design influence, integrated logistics support planning, product support and sustainment, configuration management, reliability and maintainability analysis, technical/product data management, and supportability analysis. The competency model for LCL is comprised of a total of 7 competencies and 450 proficiencies. A cross walk is currently underway to map the current LCL competency model to existing DAWIA LCL certification training. This crosswalk will result not only in continued improvement and refinement of the learning assets and Defense Acquisition Workforce Improvement Act (DAWIA) certification training provided by DAU, but will ultimately enhance the quality of the support provided by, and the expertise of, the Life Cycle Logistics workforce.

#### **Certifications/Standards**

The DOD Functional Leader for Life Cycle Logistics establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. In addition to certification requirements, assignment specific training is required for Life Cycle Logistics workforce members.

The LCL Functional Integrated Product Team (FIPT), with cross-component membership, advises the Functional Leader. The LCL FIPT is currently assessing the need to extend the experience time requirement for certification, better balancing requirements across LCL certification levels and promoting improved integration of key LCL competencies as core competencies across the

acquisition workforce competency domain. The LCL career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. Currently there are 27 LCL-related continuous learning modules available to the workforce. A Life Cycle Logistics development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A4-3 shows the Life Cycle Logistics certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (FY2009) Life Cylce Logistics (LCL)										
DAWIA DAWIA DAWIA Level III Total DAWIA Level II (%) Level II (%) C%										
Army	471	4,521	2,960	7,952	5.9%	56.9%	37.2%			
Navy	449	2,332	2,000	4,781	9.4%	48.8%	41.8%			
Air Force	180	1,612	196	1,988	9.1%	81.1%	9.9%			
DCMA	1	27	7	35	2.9%	77.1%	20.0%			
DLA	2	10	10	22	9.1%	45.5%	45.5%			
Other Defense	0	18	52	70	0.0%	25.7%	74.3%			

Note: There are 1 records with null in the Career Level Required Code field and 1 records with Unknown in the Career Level Required Code field

Table A4-3. Defense Acquisition Positions - Certification Level Requirements by Component (Life Cycle Logistics Career Field) (FY2009)(All positions –Military and Civilians)<sup>19</sup>

Based on component-reported data, the percentage of Life Cycle Logistics acquisition workforce members who have met or exceeded certification requirements was 46 percent in FY2007 and 47 percent for FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the Life Cycle Logistics career field as a whole, assessment indicates 45 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on

Air Force.

A4-17

<sup>&</sup>lt;sup>19</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCl-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCl estimate of in-progress certifications within 24 month policy period based on number of all gains (including administrative/recoding) for FY2008 and FY2009. Gains and loss data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCl. DoN and Air Force percentages directly provided by DoN and

achieving required certifications as well as improving data quality and reporting. Figure A4-11 summarizes certification rates for the Services and 4th Estate.

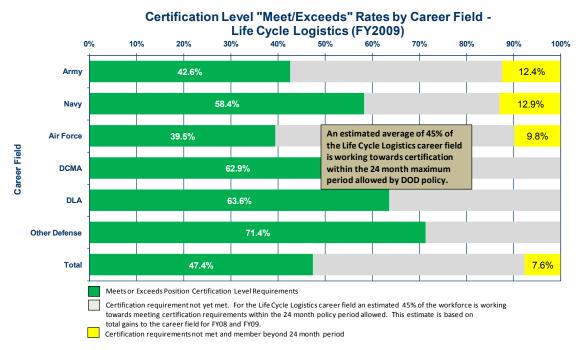


Figure A4-11. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the Life Cycle Logistics Career Field by Component (Military and Civilians)<sup>20</sup>

#### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the Life Cycle Logistics workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD LCL career field builds, along with the larger DOD logistics human capital planning, the foundation for data-driven decision making to improve the LCL workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

<sup>&</sup>lt;sup>20</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by

# Appendix 5 DOD Acquisition Mission Critical Career Field Program Management

Human Capital Fact Sheet 2009							
Defense Acquisition Workforce (DAW) Program Management (PM)	Civilian (Civ) PM	Military (Mil) PM	Total PM (Civ + Mil)	Defense Acquisition Workforce			
Size & Composition							
FY09 Workforce Size	8,789	4,633	13,422	133,103			
Change in size 2008-2009	9%	-2%	5%	6%			
Civilian/Military Composition	65%	35%	_	89% / 11%			
DOD Acquisition Workforce Growth Target			19%	15%			
Educational Attainment							
Bachelor's Degree or Higher	76%	95%	83%	79%			
Graduate Degree	39%	61%	47%	29%			
Certification (Cert)							
Level I or Higher Achieved	70%	78%	72%	72%			
Level II or Higher Achieved	60%	63%	61%	60%			
Level III Achieved	44%	33%	40%	36%			
Position Cert Requirement Met or Exceeded	54%	59%	56%	59%			
Planning Considerations							
% Baby Boomer/Traditional Generations	76%	19%	57%	58%			
Average Age	49.3	38.8	45.7	45			
Workforce Life-Cycle Model (YRE)	19/42/39			32/33/35			
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)			
Average Years of Service	17.4	15.7	16.8	16.3			
Retirement Eligible	1,412 (17%)	-	-	19,395 (16%)			
Retirement Eligible w/i 5 Years	1,928 (22%)	-	-	21,567 (18%)			
Total Career Field Gains/Losses	2,388/1,722	-	-	19,786/13,042			
Training Statistics		PM 2008	PM 2009	DAW 2009			
DAU Course Graduates (Classroom)		10,399	11,628	39,568			
DAU Course Graduates (Web)		41,084	47,991	154,399			
DAU Continuous Learning Completions		62,431	116,485	494,568			

Defense Acquisition Program Management Functional Leader



Mr. David Ahern Director, Portfolio Systems Acquisition, OASD(A)

Mr. David Ahern is the senior leader and proponent for the Acquisition Management functional community.

In this role he provides advice to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the Program Manager (PM) community. Mr. Ahern establishes and maintains the education, training, and experience requirements, as well as competencies, certification standards, and position category descriptions. The DOD Acquisition Management Functional Integrated Product Team (FIPT) supports Mr. Ahern in this role. The FIPT includes Component PM functional experts, acquisition career managers, and advisors from the Defense Acquisition University (DAU).

The Human Capital Fact Sheet<sup>1</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the Program Management workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

## The Program Management Community Within the Defense Acquisition Workforce

The Program Management workforce leads the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. The Department's extensive use of high-value, complex systems guide the need for a world-class, highly competent program management workforce. PM professionals serve in a wide range of Program Management Office and Program Executive Office positions, including program integrators, analysts, program managers, program executive officers, and their deputies. They may also serve in a number of support and management positions throughout the workforce. The fundamental responsibilities of the program manager are to balance the many factors that influence cost, schedule, and performance; to interpret and execute the requirements of the DOD 5000 series regulations; and to ensure that high quality, affordable, supportable, and effective defense systems are delivered as quickly as possible.

Members of the PM career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721, establishes requirements for designating Defense acquisition positions. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. The PCD identifies responsibilities, typical positions, locations, and occupations series for the career field. The Program Management PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

To enhance focus on a targeted acquisition mission and workforce need, the International Acquisition Career Path was created within the Program Management career field in June 2007. Establishing this career path structure enhances qualification and development for acquisition workforce members (e.g. Program Managers) responsible for international programs. Mr. Alfred Volkman, OUSD(AT&L) Director, International Cooperation, is the senior leader and proponent for the International Acquisition Career Path functional



Mr. Alfred Volkman Functional Leader International Acquisition Career Path

<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

community. Level III International career path positions are designated when the program management specific duties substantially involve implementing and providing support to international cooperative research, development, test and evaluation, acquisition and support international programs/projects. To date, the DoD Components have identified and coded over 400 acquisition positions as International. Throughput for International courses doubled from FY2008 to FY2009. A new 300-level Technology Transfer and Export Control course is projected for deployment in FY2011. The Program Management – International Acquisition PCD is also available at

http://www.dau.mil/workforce/pages/pcds.aspx.

As shown in Table A5-1, the Defense acquisition PM workforce has 13,422 members and is comprised of 65 percent civilian (8,789) with 35 percent military (4,633). The PM workforce constituted 10 percent of the organic<sup>3</sup> defense acquisition workforce at the end of FY2009.

Defense Acquisition Workforce Civilian/Military Composition Program Management Career Field (FY09)										
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil %										
Army	3,452	26%	2,529	923	73%	27%				
Navy/Marine Corps	4,598	34%	3,335	1,263	73%	27%				
Air Force	4,461	33%	2,014	2,447	45%	55%				
DCMA	334	2%	334	0	100%	0%				
DLA	7	0%	7	0	100%	0%				
Other	570	4%	570	0	100%	0%				
Total	13,422	100%	8,789	4,633	65%	35%				

Table A5-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (Program Management Career Field) (by Component)<sup>4</sup>

The Program Management civilian workforce represents various occupational series; the primary series are identified in the PCD (Figure A5-1). Table A5-2 provides a breakout of the top five series by Service. The majority of civilians (63.7percent) are captured within three series; 0340 (Navy), 1101 (Air Force), and 0301 (Army).

Top 5 Occupation Series (end of FY2009)									
Program Management (Civilian)									
Occ Series - Description	Total	Total (%)	Cum (%)	Army	Navy	AF	Other		
1101 - Business and Industry Specialist	2,314	17.2%	17.2%	16	5	1,892	401		
0340 - Program Manager	2,069	15.4%	32.7%	539	1,480	2	48		
0343 - Management and Program Analyst	1,482	11.0%	43.7%	253	982	36	211		
0301 - Administration & Program Staff	1,349	10.1%	53.7%	1,204	50	23	72		
0801 - Engineer, General 694 5.2% 58.9% 147 486 18						43			
Note: There are 37 records with null values for OCC series #Occ Series in Career Field = 89									

Table A5-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the Program Management Career Field (FY2009)<sup>5</sup>

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<sup>&</sup>lt;sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>4</sup> Source: AT&L Workforce Data Mart (end of FY2009)

#### **Program Management Workforce Challenges**

Management of all aspects of DOD acquisition receives the highest level of Congressional and DOD senior leader attention. Acquisition outcomes represent a major national investment and are critical to supporting national military strategy. DOD acquisition program managers carry a heavy burden of responsibility and a high degree of accountability for reaching successful acquisition outcomes. Improved acquisition program outcomes and critical support to the program management workforce is a USD (AT&L) high priority.

DOD and acquisition-specific mission imperatives have and will impact workforce size and skills needed for this critical function. The demand for PM expertise will remain strong as the acquisition community supports 102 major acquisition programs, over 200 other programs identified for special oversight, and recapitalization of equipment and systems. The PM workforce count (civilians + military) has increased by 4 percent since 2005 however, as with other career fields, the PM workforce has experienced a significant increase in acquisition workload. The number of major defense acquisition programs has increased by 36 percent. Another indicator of this increased workload is that dollars obligated on DOD contracts (actions over \$100,000) have increased by 166 percent from FY2001 through FY2009. This heavy workload is expected to continue. The loss of experienced PM workforce members represents increased performance risk associated with program management functions needed to lead and manage DOD acquisition programs.

As with the DOD as a whole, the Defense acquisition workforce, including the Program Management workforce, is experiencing the departure of the Baby Boomers from the workforce. As shown in Table A5-3, 82 percent of the PM civilian workforce is in the Baby Boomer or Traditional generations. Today, 17 percent of the PM civilian workforce is eligible for full retirement benefits and approximately 22 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The Department is strengthening the Program Management career field to improve acquisition outcomes. Current planning as part of the Defense acquisition workforce growth strategy would increase the PM career field by approximately 19 percent through FY2015. The Department is continuing to enhance the role, empowerment and support to DOD program managers. In response to Section 853 of the FY2007 NDAA, "Program Manager Empowerment and Accountability," the Department developed a strategy for enhancing the role of PMs in creating and carrying out defense acquisition programs. <sup>6</sup> This includes, among other things, opportunities for enhanced

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<sup>&</sup>lt;sup>5</sup> Source: AT&L Workforce Data Mart (end of FY2009)

<sup>&</sup>lt;sup>6</sup> This report was required by Section 853 of the FY2007 National Defense Authorization Act. It is available at https://acc.dau.mil/CommunityBrowser.aspx?id=192152

training and education, mentoring, improved career paths and career opportunities, incentives for recruitment and retention, and enhanced rewards for successful accomplishment of program objectives.

In addition, Section 820 of the FY2007 National Defense Authorization Act requires that DOD establish a goal of filling key positions in major defense acquisition programs and major automated information system programs with a properly qualified military or civilian member of the DOD. These key positions include program and deputy program managers for these programs. Anticipated workforce growth, in-sourcing, and workforce quality initiatives described below support this goal.

PMs and their deputies are receiving increased attention regarding qualifications and tenure. With strong regard for accountability, the Department issued guidance clarifying tenure agreement policy and established new policy to require program management agreements to be updated annually. The use of tenure agreements along with the establishment of program management agreements are intended to ensure that program managers are retained in their positions long enough to see and measure results of their actions. The AT&L Key Leadership Position initiative applies to this career field as well and should result in improved development, succession planning, and qualifications.

Extensive case-based, program management training and performance support is provided by Defense Acquisition University through the Defense Systems Management College (DSMC) - School of Program Managers. Also, to improve support to the workforce, the Department has significantly increased training at the point of need (also known as Just-In-Time training), deploying over 200 webbased modules on key acquisition-related performance topics. The Core Plus concept involves additional position-specific coursework for program managers in specialty areas such as systems or software engineering cost estimating, contracting, or financial management.

The components are establishing a Program Manager-Focused Mentoring Program. Currently, each Service has formal and informal mentoring programs designed to develop potential leaders in the lower ranks. Under the general area of "knowledge sharing," the Department is providing much more information to program managers and program management offices.

To recruit the highest caliber military and civilian members into the acquisition workforce for major defense acquisition programs, the Department is also considering monetary rewards including recruitment, relocation, and retention incentives and/or non-monetary rewards such as enhanced opportunities for advanced training and education.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

#### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

Program Management Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The DOD PM workforce count increased by 9 percent, from 12,284 in FY2005 to 13,422 in FY2009 (Figure A5-1). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses, and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes and partnering with OUSD (P&R) and the Components to potentially create improved acquisition occupation identifiers.

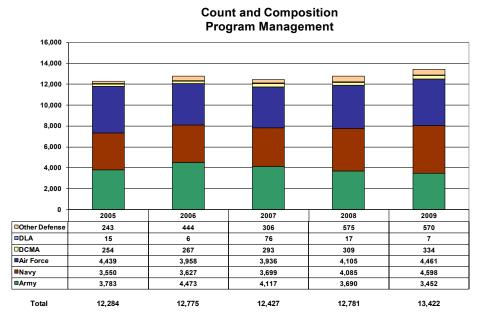


Figure A5-1. Historical Size of Defense Acquisition Workforce Program Management Career Field (FY2005 – FY2009) (Military & Civilian)<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts. Source of data is AT&L Workforce Data Mart.

#### **Assessment of Projected Workforce Growth**

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by 2015. As part of the Secretary's growth strategy and other initiatives, the program management career field is projected to grow approximately 2,600 (19%) by 2015. Part of this growth, approximately 2,000, is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components have been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 2,280 for FY2010 and 1,445 in FY2011. Corresponding retention needs require losses at levels below 1,041 for FY2010 and 1,168 in FY2011. In FY2009, the Program Management career field within the defense acquisition workforce experienced approximately 1,800 gains and 975 losses. Noted is that this analysis, with projections through FY2017 (Figure A5-2), for the PM community is across DOD Components. Other Component specific factors will impact projected gains and losses.

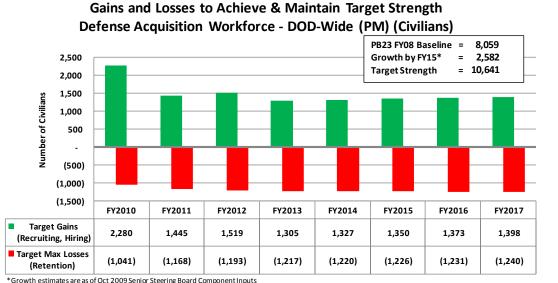


Figure A5-2. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (Program Management Career Field) (Civilians)<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

PM Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A5-3) provides a visual display of a workforce in three cohort groups – Future (early career) workforce, Mid-career and Senior-career cohort groups. The Years Retirement Eligible (YRE) distribution (as a percentage) for the Defense acquisition workforce is 32/33/35. The distribution of the PM workforce members between the three cohorts is at 19/42/39 percent respectively. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives.

# Defense Acquisition Workforce Lifecycle Model (WLM) - PM by Years to Retirement Eligibility (YRE) - Civilians (FY09) Future FY08= 16% Mid-Career FY08=43% Senior FY08

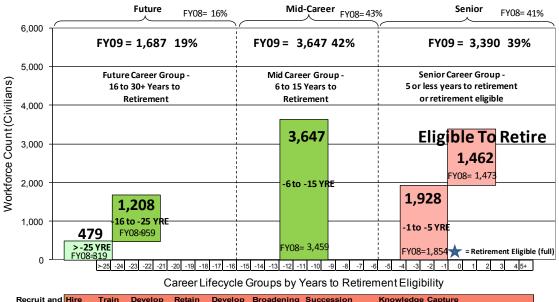


Figure A5-3. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (Program Management Career Field) (Civilians)<sup>9</sup>

Critical Acquisition Positions

Currency

Curency

Currency

Currency

Certification Level I, II, III

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<sup>9</sup> AT&L Workforce Data Mart (End-of-FY2009)

PM Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A5-4 depicts the gains/losses for Program Management, to include substantive and administrative switches in and out of the Program Management acquisition career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

Defense Acquisition Workforce (Civilian) (FY09) - PM

#### Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories Gains Gains New Hires (new to DoD) Gains to Career Field from Administrative gains to Career Field within DAW and/or DOD (FY08= 902 ) (no apparent personnel action) (FY08= 824 ) (FY08= 453 +917 + 553 + 918 ernal Gain e.g., assimilation, career field migration, other coding updates GAINS WHICH INCREASE WORKFORCE SIZE Changes to Acquisition Workforce FY09 Size/Count LOSSES WHICH REDUCE WORKFORCE SIZE e.g., career field migration, other coding updates -738-640 -344 Losses to Career Field but stay Administrative losses (Leave DoD) (FY08= -456 in DAW and/orDOD (no apparent personnel action) (FY08= -840 ) (FY08= -697 ) Losses

Figure A5-4. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (Program Management Career Field) (Civilians)<sup>10</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains.

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<sup>&</sup>lt;sup>10</sup> AT&L HCI and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on a PM acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure A5-5 depicts the PM workforce civilian gains and losses that took place during FY2009 by "years to retirement eligibility" groups.

## Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\* - PM (by Years to Full Retirement Eligibility)

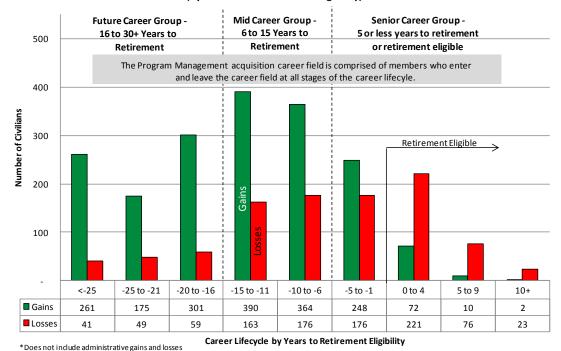


Figure A5-5. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Program Management Career Field) (Civilians)<sup>11</sup>

<sup>&</sup>lt;sup>11</sup> RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 737 of 1,823 gains 12 (40 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 754 (41 percent) were in the mid-career group, and 332 gains (18 percent) were in the senior career group. This represents a 75 percent increase in FY2009 gains above FY2008 for the future career group, a 34 percent increase in the mid-career group, and a 6 percent decrease for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A5-6 depicts the external hires and internal gains by lifecycle career group.

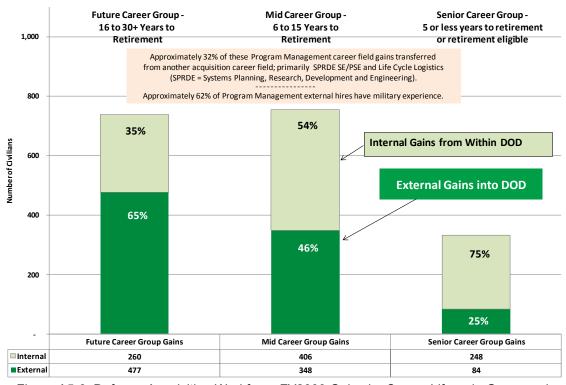


Figure A5-6. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (Program Management Career Field) (Civilians)<sup>13</sup>

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<sup>&</sup>lt;sup>12</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{13}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 149 of 975 losses<sup>14</sup> (15 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 339 (35 percent) were to the mid-career group, and 487 (50 percent) were to the senior career group. This represents a 12 percent decrease in losses in FY2009 when compared to FY2008 for the future career group, an 11 percent decrease in the mid-career group, and a 18 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A5-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

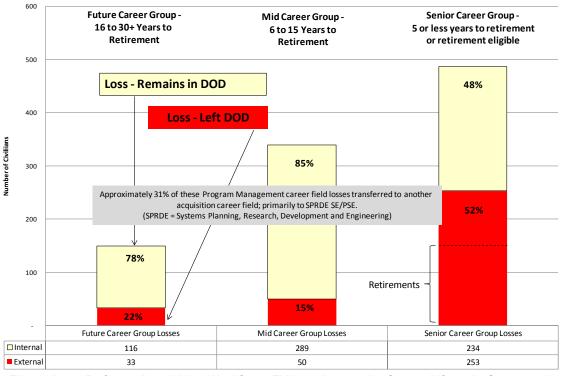


Figure A5-7. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (Program Management Career Field) (Civilians)<sup>15</sup>

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<sup>&</sup>lt;sup>14</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

<sup>&</sup>lt;sup>15</sup> AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A5-8 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

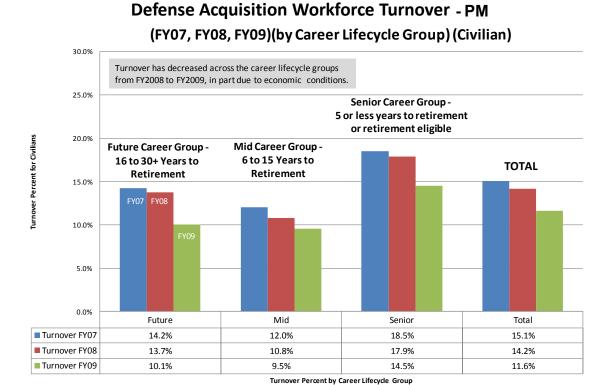


Table A5-8. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Program Management Career Field) (Civilians)<sup>17</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

**Retirement Eligibility.** Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce. The retirement profile in Figure A5-9 below indicates that 17 percent (1,462) of the civilian PM workforce are eligible for full retirement benefits as of the end of FY2009 and an additional 22 percent (1,928) will become eligible within the next five years. An average of 434 members (approximately 5 percent) of the civilian PM workforce per year will become fully retirement eligible each year through FY2019. Approximately 22 percent of the PM workforce is under the Civil Service Retirement System

<sup>&</sup>lt;sup>16</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

 $<sup>^{17}</sup>$  AT&L HCI generated from HCI/RAND analysis using  $\,$  DMDC data (end of FY2008 and end of FY2009 data).

(CSRS) and the 77 percent are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government. The rate of separation for PM spikes from 5 percent at one year before retirement eligibility to 22 percent during the first year of eligibility. Based on past retirement patterns, approximately 55 percent of the PM workforce members that become fully retirement eligible in a given year will likely separate within the first four years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

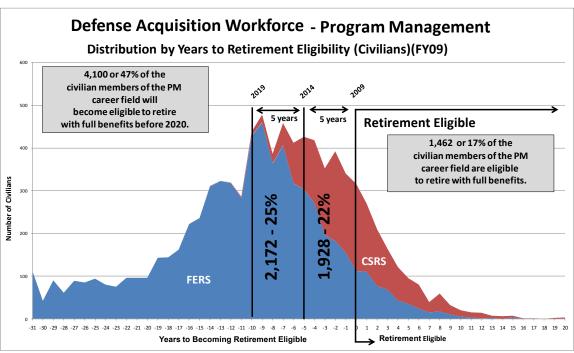


Figure A5-9. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Program Management Career Field) (Civilians)<sup>19</sup>

#### **PM Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including PM. As part of validation, frequency, criticality, and proficiency of a competency are assessed. Updated acquisition functional competency models are enabling workforce assessments and improved, data-driven human capital planning. Results of the assessments provide important organization and enterprise information for improving workforce analysis, hiring

<sup>19</sup> AT&L HCl graph derived from RAND analysis of data from DMDC EOFY09 Civ Personnel Master File (Appropriated Funds)

<sup>&</sup>lt;sup>18</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) *The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense*. p. 25.

and retention decisions relative to size, training improvements and other workforce applications. The Department has completed model updating and supporting assessment and has expanded assessments to include MDAP program and deputy program managers. Following the completion for the Phase IV assessment, the program management community conducted a study to determine necessary changes to better support competency development. The study recommended improvements to training and career development efforts. As a result, PM certification courses have been modified to add emphasis on topics such as earned value management and risk management. Several continuous learning modules are being modified to reflect the findings of the competency model and new acquisition policy. In addition to training improvements, the PM community in conjunction with other functional communities is exploring an integrated approach to executive leadership development that emphasizes the critical competencies.

#### Certifications/Standards

The DOD Functional Leader for Program Management establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The PM career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A PM development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A5-3 shows the PM certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (FY2009) Program Management									
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)		
Army	165	976	2,256	3,397	4.9%	28.7%	66.4%		
Navy	357	766	3,474	4,597	7.8%	16.7%	75.6%		
Air Force	335	2,805	1,180	4,320	7.8%	64.9%	27.3%		
DCMA	1	156	177	334	0.3%	46.7%	53.0%		
DLA	0	2	5	7	0.0%	28.6%	71.4%		
Other Defense	8	102	459	569	1.4%	17.9%	80.7%		

Table A5-3. Defense Acquisition Positions - Certification Level Requirements by Component (Program Management Career Field)(FY2009)(All positions –Military and Civilians)<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> AT&L Data Mart (End of FY09)

Based on component-reported data, the percentage of Program Management acquisition workforce members who have met or exceeded certification requirements was 54 percent in FY2007 and 57 percent for FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the Program Management career field as a whole, assessment indicates 44 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A5-10 summarizes certification rates for the Services and 4th Estate.

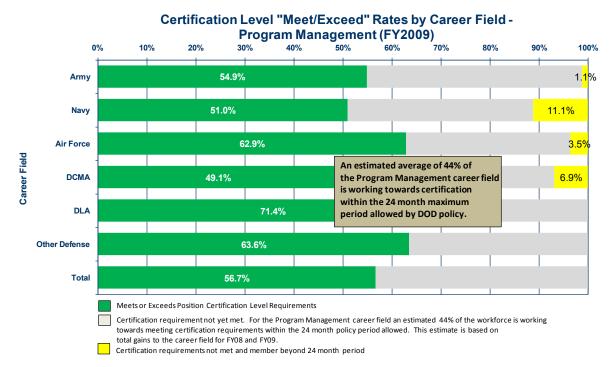


Figure A5-10. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the Program Management Career Field by Component (Military and Civilians)<sup>21</sup>

gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

<sup>&</sup>lt;sup>21</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all

#### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the Program Management workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD PM career field builds the foundation for data-driven decision making to improve the PM workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

# Appendix 6 DOD Acquisition Mission Critical Career Field Production, Quality and Manufacturing (PQM)

Human Capital Fact Sheet 2009								
Defense Acquisition Workforce (DAW) Production, Quality & Manufacturing (PQM)	Civilian (Civ) PQM	Military (Mil) PQM	Total PQM (Civ + Mil)	Defense Acquisition Workforce				
Size & Composition								
FY09 Workforce Size	8,356	667	9,023	133,103				
Change in size 2008-2009	-1%	-4%	-1%	6%				
Civilian/Military Composition	93%	7%	_	89% / 11%				
DOD DAW 2015 Growth Target			13%	15%				
Educational Attainment								
Bachelor's Degree or Higher	38%	84%	41%	79%				
Graduate Degree	9%	37%	11%	29%				
Certification (Cert)								
Level I or Higher Achieved	74%	62%	74%	72%				
Level II or Higher Achieved	66%	42%	64%	60%				
Level III Achieved	13%	24%	14%	36%				
Position Cert Requirement Met or Exceeded	63%	46%	62%	59%				
Planning Considerations								
% Baby Boomer/Traditional Generations	78%	20%	74%	58%				
Average Age	50.7	39.8	49.9	45				
Workforce Life-Cycle Model (YRE)	19/30/51			32/33/35				
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)				
Average Years of Service	20.3	17.0	20.0	16.3				
Retirement Eligible	2,426 (29%)	-	_	19,395 (16%				
Retirement Eligible w/i 5 Years	1,768 (21%)	-	_	21,567 (18%				
Total Career Field Gains/Losses	1,554/1,631	-	-	19,786/13,04				
Training Statistics		PQM 2008	PQM 2009	AT&L 2009				
DAU Course Graduates (Classroom)		1,167	1,209	39,568				
DAU Course Graduates (Web)		3,093	3,700	154,399				

Defense Acquisition Production, Quality & Manufacturing Functional Leader



Mr. Stephen Welby Director, Systems Engineering OUSD (AT&L)

Mr. Stephen Welby is the senior leader and proponent for the Production, Quality and Manufacturing (PQM) functional community. In

this role he provides advice to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the PQM community. Mr. Welby establishes and maintains the education, training, and experience requirements, as well as competencies, certification standards, and position category descriptions. The DOD PQM Functional Integrated Product Team (FIPT) supports Mr. Welby in this role. The FIPT includes Component functional experts, acquisition career managers, and is supported by advisors from the Defense Acquisition University (DAU).

The Human Capital Fact Sheet<sup>1</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the PQM workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

### THE PQM COMMUNITY

The PQM workforce contributes to the successful acquisition and management of major weapon systems, services, and other equipment and support systems required to respond to military challenges. This workforce executes critical functions to include all aspects of quality and production and manufacturing management supporting defense acquisition programs. The Department's extensive use of highvalue, complex systems, guides the need for a world-class, highly competent production, quality and manufacturing workforce. The PQM acquisition workforce member manages quality assurance activities to establish essential quality standards and controls. This person also develops and executes plans that focus on the quality of design and conformance and fitness for use; integrates quality plans into the system engineering process; and develops policies, procedures, test provisions, and quality requirements in specifications, standards and solicitations. Using design reviews, functional and configuration audits, production readiness reviews, and milestone reviews, the specialist evaluates quality assurance during acquisition. Acquisition-related manufacturing and production duties usually involve program management or the monitoring of the manufacturing and production efforts of contractors.

Members of the PQM career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721 establishes requirements for designating Defense acquisition positions<sup>2</sup> Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. The PQM PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

As shown in Table A6-1, the Defense acquisition PQM workforce has 9,023 members and is comprised of 93 percent civilian (8,356) with 7 percent military (667). The PQM workforce constituted 7 percent of the organic<sup>3</sup> Defense acquisition workforce at the end of FY2009.

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<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

<sup>&</sup>lt;sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

Defense Acquisition Workforce Civilian/Military Composition PQM Career Field (FY09)											
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil %											
Army	1,930	21%	1,930	0	100%	0%					
Navy/Marine Corps	2,064	23%	1,514	550	73%	27%					
Air Force	389	4%	272	117	70%	30%					
DCMA	3,975	44%	3,975	0	100%	0%					
DLA	652	7%	652	0	100%	0%					
Other	13	0%	13	0	100%	0%					
Total	9,023	100%	8,356	667	93%	7%					

Table A6-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (PQM Career Field) (by Component)<sup>4</sup>

The PQM civilian workforce represents various occupational series, of which the primary series were identified in the PCD. Table A6-2 provides a breakout of the top five series by Service. The highest percentage of civilians is in the Quality Assurance (1910) series (52 percent).

Top 5 Occupation Series (end of FY2009)  Production, Quality & Manufacturing (Civilian)											
Occ Series - Description   Total   Total (%)   Cumulati   Army   Navy   AF   Otal											
1910 - Quality Assurance Specialist	4,699	52.1%	52.1%	642	506	162	3,389				
1101 - Business and Industry Specialist	839	9.3%	61.4%	59	307	1	472				
1150 - Industrial Specialist	725	8.0%	69.4%	102	150	8	465				
0801 - Engineer, General	487	5.4%	74.8%	374	51	3	59				
1152 - Production Controller	359	4.0%	78.8%	185	174	0	0				
#Occ Series in Career Field = 62											

Table A6-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the PQM Career Field (FY2009)<sup>5</sup>

### **PQM Career Field Challenges**

The Department must strengthen and sustain the PQM mission critical workforce capability to meet continued challenges in managing development and production of systems. To mitigate a potential substantial loss in experienced, senior-level PQM talent and to address other mission imperative factors, the Department has started to implement hiring and retention strategies.

The demand for PQM expertise will remain strong as the acquisition community supports 102 major acquisition programs, over 200 other programs identified for special oversight, and recapitalizes equipment and systems. The PQM workforce count (civilians + military) has decreased by 3 percent since 2005 and, as with other career fields, has experienced a significant increase in acquisition workload. An indicator is that the number of major defense acquisition programs has increased by 36 percent. Another indicator of this increased workload is that dollars obligated on DOD contracts (actions over \$100,000) have increased by 166 percent from FY2001 through FY2009. The loss of experienced PQM workforce members represents

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<sup>&</sup>lt;sup>4</sup> Source: AT&L Workforce Data Mart (end of FY09)

<sup>&</sup>lt;sup>5</sup> AT&L Workforce Data Mart (end of FY09)

increased performance risk associated with PQM functions that ensure high quality, affordable, supportable, and effective defense systems are delivered.

A variety of GAO reports and other studies have indicated that DOD systems frequently attempt to enter into production with immature technologies, causing manufacturing and later performance problems. This has led to an emphasis on technology maturity in general and on Manufacturing Readiness Levels (MRLs) in particular. A working group of the Joint Defense Manufacturing Technology Panel (JDMTP) is defining MRL criteria and policies to be used across the acquisition lifecycle. When finalized, these are expected to impact the competencies and related training for the Program Management, Science & Technology, and especially the PQM career field.

As with the DOD as a whole, the Defense acquisition workforce, including the PQM workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of experienced PQM workforce members represents increased performance risk associated with the PQM functions needed to support DOD acquisition programs. As of the end of FY2009, 78 percent of the PQM civilian workforce is in the Baby Boomer or Traditional generations. Analysis indicates 29 percent of the PQM civilian workforce is eligible for full retirement and 21 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

**PQM Workforce Count – FY2005 to FY2009.** An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. As depicted in Figure A6-1, the PQM workforce count decreased by 4 percent since FY2005, from 9,397 in FY2005 to 9,023 in FY2009 (count includes both military and civilian workforce members). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts

continue which will improve the accuracy of the count, to include improving workforce data management and processes.

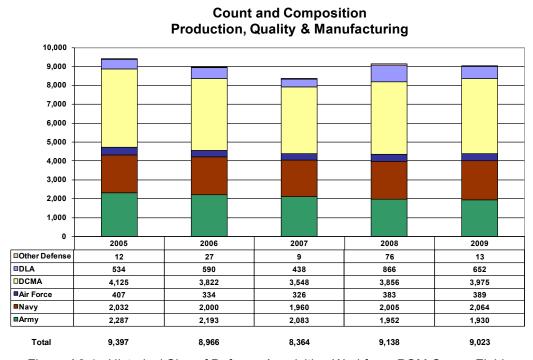


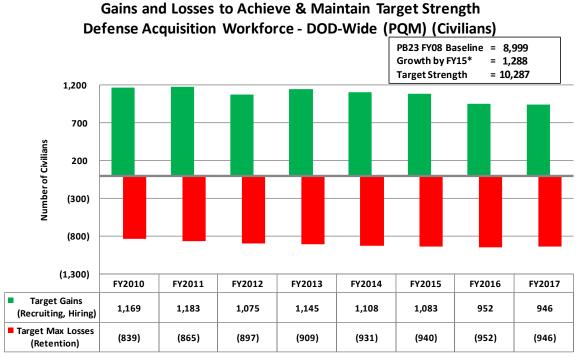
Figure A6-1. Historical Size of Defense Acquisition Workforce PQM Career Field (FY2005 – FY2009) (Military & Civilian)<sup>6</sup>

Assessment of Projected Workforce Growth. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the PQM career field is projected to grow approximately 1,300 (13%) by FY2015. Part of this growth, approximately 100, is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

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<sup>&</sup>lt;sup>6</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 1,169 for FY2010 and 1,183 in FY2011. Corresponding retention needs require losses at levels below 839 for FY2010 and 865 in FY2011. In FY2009, the PQM career field experienced approximately 1,100 gains and 825 losses. Noted is that this analysis, with projections through FY2017 (Figure A6-2), for the PQM community is across DOD Components. Other Component specific factors will impact projected gains and losses.



\*Growth estimates are as of Oct 2009 Senior Steering Board Component Inputs and include DOD and Component initiatives

Figure A6-2. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (PQM Career Field) (Civilians)<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

**PQM Workforce Lifecycle Assessment.** A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A6-3) provides a visual display of a workforce in three cohort groups - Future workforce, Mid-career and Senior cohort groups. The Years to Retirement Eligibility distribution for the Defense acquisition workforce is 32/33/35. The distribution of the PQM workforce members between the three cohorts is 19/30/51 percent respectively which indicates a workforce imbalance and need for immediate action to increase hiring and retention.

The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility, and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives.

### Defense Acquisition Workforce Lifecycle Model (WLM) - PQM (Quality) by Years to Retirement Eligibility (YRE) - Civilians (FY09)

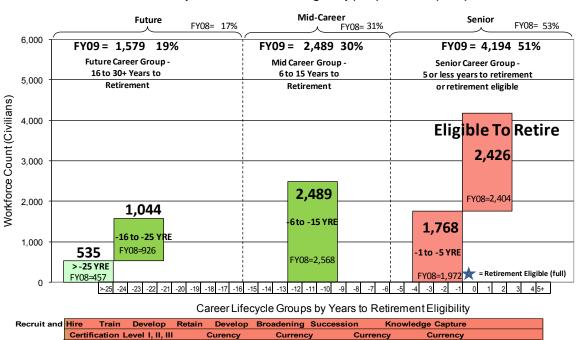


Figure A6-3. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (PQM Career Field) (Civilians)<sup>8</sup>

Key Leadership Positions

**Critical Acquisition Positions** 

Acquisition Corps

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<sup>&</sup>lt;sup>8</sup> AT&L Workforce Data Mart (End-of-FY09)

**PQM Workforce Gains and Losses.** Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2008 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A6-4 depicts the gains/losses for PQM (acquisition), to include substantive and administrative switches in and out of the PQM (acquisition) career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

Defense Acquisition Workforce (Civilian) (FY09) - PQM (Quality)

#### Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories Gains Gains Gains Gains to Career Field from New Hires Administrative gains to Career Field (new to DoD) (FY08=502) within DAW or DOD (FY08= 693) (no apparent personnel action) (FY08= 1,127) +588 + 545 +421 e.g., assimilation, ı Gain career field migration, other coding updates **GAINS WHICH INCREASE WORKFORCE SIZE** Changes to Acquisition Workforce FY09 Size/Count LOSSES WHICH REDUCE WORKFORCE SIZE e.g., career field migration, other coding updates 463 -771 -397 Losses to Career Field but stay (Leave DoD) Administrative losses in DAW and/or DOD (no apparent personnel action) (FY08= -539) (FY08= -515) Losses Losses

Figure A6-4. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (PQM Career Field) (Civilians)<sup>9</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains. External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part

A6-8

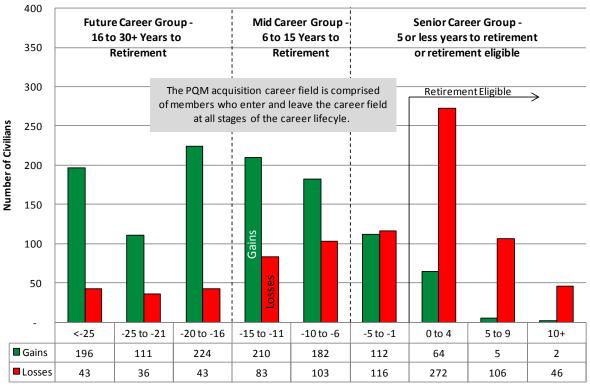
<sup>&</sup>lt;sup>9</sup> AT&L HCl and RAND Analysis using DMDC data (end of FY2008 and FY2009). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and FERS.

of the DOD civilian workforce in the prior year but not on a PQM acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure A6-5 depicts the PQM workforce civilian gains and losses that took place during FY2009 by "years to retirement eligibility" groups.

# Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\* - PQM

(by Years to Full Retirement Eligibility)



\*Does not include administrative gains and losses \*Career Lifecycle by Years of Retirement Eligibility

Figure A6-5. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (PQM Career Field) (Civilians)<sup>10</sup>

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<sup>&</sup>lt;sup>10</sup> RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 531of 1,106 gains<sup>11</sup> (48 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 392 (35 percent) were to the mid-career group, and 183 gains (17 percent) were in the senior career group. This represents a 21 percent increase in FY2009 gains above FY2008 for the future career group, a 6 percent decrease in the mid-career group, and a 39 percent decrease for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A6-6 depicts the external hires and internal gains by lifecycle career group.

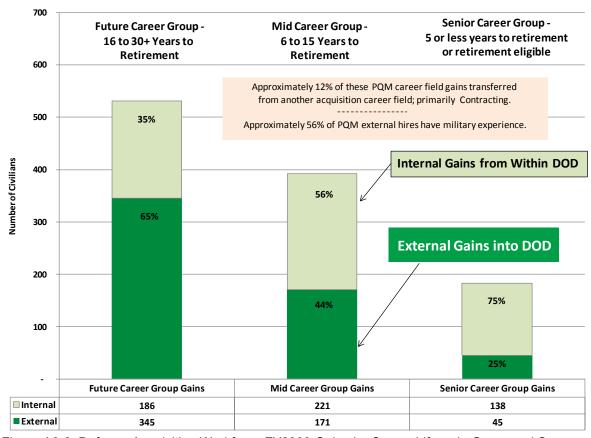


Figure A6-6. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (PQM Career Field) (Civilians)<sup>12</sup>

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<sup>11</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{12}</sup>$  AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 122 of a total of 308 losses<sup>13</sup> (15 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 186 (23 percent) were to the mid-career group, and 517 (63 percent) were to the senior career group. This represents a 7 percent increase in losses in FY2009 when compared to FY2008 for the future career group, a 10 percent decrease in the mid-career group, and a 27 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A6-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

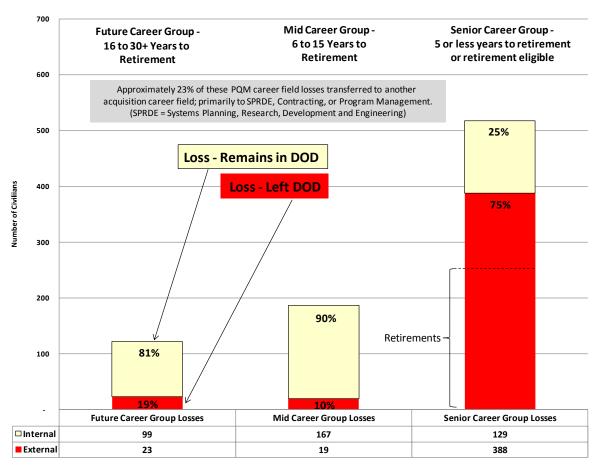


Figure A6-7. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (PQM Career Field) (Civilians)<sup>14</sup>

<sup>13</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{14}</sup>$  AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. Figure A6-8 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

### Defense Acquisition Workforce Turnover - PQM

(FY07, FY08, FY09)(by Career Lifecycle Group)(Civilian)

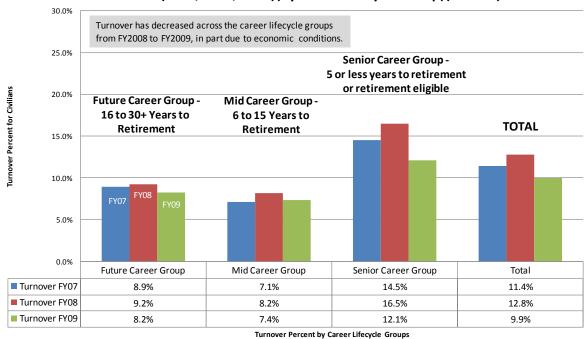


Figure A6-8. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (PQM Career Field) (Civilians)<sup>16</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

**Retirement Eligibility.** Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A6-9 indicates that 29 percent (2,426) of the civilian PQM workforce are eligible for full retirement benefits and an additional 21 percent (1,768) will become eligible within the next five years. An average of 322 members (approximately 4 percent) of the civilian PQM workforce per year will become fully retirement eligible each year through FY2019. Approximately 31 percent of the PQM workforce is under the Civil Service Retirement System (CSRS) and 68 percent are under the Federal Employee Retirement System (FERS), the two

<sup>&</sup>lt;sup>15</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>16</sup> AT&L HCl generated from HCl/RAND analysis using DMDC data (end of FY08 and end of FY09 data).

major retirement systems used in the federal government.<sup>17</sup> The rate of separation for PQM spikes from 4.1 percent at one year before retirement eligibility to approximately 20 percent during the first year of eligibility. Based on past retirement patterns, approximately 50 percent of the PQM workforce members that become fully retirement eligible will likely separate within the first four years of eligibility. Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

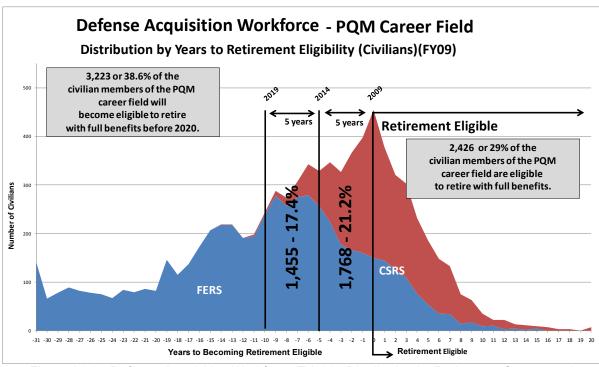


Figure A6-9. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (PQM Career Field) (Civilians)<sup>18</sup>

### **PQM Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including PQM. Updated acquisition functional competency models will enable workforce assessments and improved, data-driven human capital planning. Results of the assessments provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications. As part of a phased approach, AT&L will work with the PQM community to update and validate the PQM competency model and to conduct initial workforce assessments. The PQM follow-on competency effort is projected to begin during FY2010. The current PQM

<sup>&</sup>lt;sup>17</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) *The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense.* p. 25.

<sup>&</sup>lt;sup>18</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

baseline competency set will be used as the starting point for development of a more formal competency model for the PQM career field.

#### Certifications/Standards

The DOD Functional Leader for PQM establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The PQM career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A6-3 shows the PQM certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (end of FY2009)  Production, Quality & Manufacturing (PQM)											
DAWIA DAWIA DAWIA Level III Total DAWIA Level II (%)											
Army	88	1,184	658	1,930	4.6%	61.3%	34.1%				
Navy	209	1,288	566	2,063	10.1%	62.4%	27.4%				
Air Force	10	360	19	389	2.6%	92.5%	4.9%				
DCMA	170	3,337	467	3,974	4.3%	84.0%	11.8%				
DLA	37	581	25	643	5.8%	90.4%	3.9%				
Other Defense	0	0	13	13	0.0%	0.0%	100.0%				

Table A6-3. Acquisition Positions - Certification Level Requirements by Component (PQM Career Field)(FY2009)(All positions –Military and Civilians)<sup>19</sup>

Certification standards for the PQM career field have been relatively stable over time with minor enhancements and some additional distance-learning training at Level I and Level II related to basic mathematical skills, risk management and technical reviews. Based on component-reported data, the percentage of PQM acquisition workforce members who have met or exceeded certification requirements was 63 percent in FY2007 and is now 62 percent in FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the PQM career field as a whole, assessment indicates 38 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or

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<sup>&</sup>lt;sup>19</sup> AT&L Workforce Data Mart (End of FY09 data)

exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A6-10 summarizes certification rates for the Services and 4th Estate.

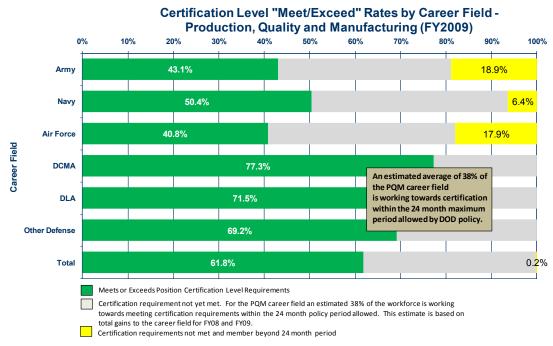


Figure A6-10. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the PQM Career Field by Component (Military and Civilians)<sup>23</sup>

### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the PQM workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD PQM career field builds the foundation for data-driven decision making to improve the PQM workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

(military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

<sup>&</sup>lt;sup>23</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains

### Appendix 7

# DOD Mission Critical Acquisition Career Field Systems Planning, Research, Development and Engineering (SPRDE) Systems Engineering (SPRDE-SE) & Program Systems Engineer (SPRDE-PSE)

Human Capital Fact Sheet FY2009									
Defense Acquisition Workforce (DAW) Systems Planning, Research, Development and Engineering (SPRDE - (Program/Systems Engineering)(SE/PSE)	Civilian (Civ) SPRDE - (SE/PSE)	Military (Mil) SPRDE - (SE/PSE)	Total SPRDE - (SE/PSE) (Civ + Mil)	Defense Acquisition Workforce					
Size & Composition									
FY09 Workforce Size	34,511	2,193	36,704	133,103					
Change in size 2008-2009	6%	4%	6%	6%					
Civilian/Military Composition	94%	6%	-	89% / 11%					
DAW Growth Target 2015			16%	15%					
Educational Attainment									
Bachelor's Degree or Higher	98%	97%	98%	79%					
Graduate Degree	36%	46%	36%	29%					
Certification (Cert)									
Level I or Higher Achieved	78%	61%	77%	72%					
Level II or Higher Achieved	69%	28%	67%	60%					
Level III Achieved	57%	8%	54%	36%					
Position Cert Requirement Met or Exceeded	66%	34%	64%	59%					
Planning Considerations									
% Baby Boomer/Traditional Generations	55%	7%	53%	58%					
Average Age	44.1	32.3	43.4	45					
Workforce Life-Cycle Model (YRE)	38/34/28			32/33/35					
% Future/Mid-Career/Senior	(%)(Civ)	-	_	(%)(Civ)					
Average Years of Service	15.9	8.8	15.5	16.3					
Retirement Eligible	4,087 (12%)	-	-	19,395 (16%)					
Retirement Eligible w/i 5 Years	5,405 (16%)	-	_	21,567 (18%)					
Total Career Field Gains/Losses	5,662/3,586	-	-	19,786/13,042					
Training Statistics		SPRDE SE/PSE 2008	SPRDE SE/PSE 2009	AT&L 2009					
DAU Course Graduates (Classroom)		3,651	4,172	39,568					
DAU Course Graduates (Web)		13,310	17,561	154,399					
DAU Continuous Learning Completions		36,036	40,757	494,568					

### Defense Acquisition SPRDE-SE and SPRDE-PSE Functional Leader



Mr. Stephen Welby Director, Systems Engineering OUSD (AT&L)

Mr. Stephen Welby is the senior leader and proponent for the SPRDE Systems Engineering community within the defense acquisition workforce.<sup>1</sup> In this role he provides advice to the Under Secretary of

Defense for Acquisition, Technology and Logistics (USD (AT&L)) to implement 10 U.S.C. 1702, Defense Acquisition Workforce Improvement Act, responsibilities and provides leadership and oversight of career development requirements for the SPRDE career field. Mr. Welby establishes and maintains the education, training, and experience requirements. This includes competencies, certification standards, and position category descriptions. The DOD SPRDE Systems Engineering Functional Integrated Product Team (FIPT) supports Mr. Welby in this role. The FIPT includes Component functional experts, acquisition career managers, and is supported by advisors from the Defense Acquisition University (DAU).

The Human Capital Fact Sheet<sup>2</sup> above and horizontal enterprise analysis presented in this appendix, builds the foundation for data-driven decision making to improve the

<sup>&</sup>lt;sup>1</sup> For additional information on DOD's systems engineering priorities, leadership message, news and upcoming events go to http://www.acc.osd.mil/se/index.html

<sup>&</sup>lt;sup>2</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

SPRDE SE/PSE workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

# The SPRDE-SE and SPRDE-PSE Workforce Within the Defense Acquisition Workforce

The Defense Acquisition Guidebook uses the following definition for systems engineering:

Systems engineering is an interdisciplinary approach encompassing the entire technical effort to evolve and verify an integrated and total Life cycle balanced set of system, people, and process solutions that satisfy customer needs. Systems engineering is the integrating mechanism across the technical efforts related to the development, manufacturing, verification, deployment, operations, support, disposal of, and user training for systems and their life cycle processes. Systems engineering develops technical information to support the program management decision-making process. For example, systems engineers manage and control the definition and management of the system configuration (system's technical baseline) and the translation of the system definition into work breakdown structures.

Members of this mission critical acquisition workforce are responsible for the systems planning, research, development, and engineering management of defense acquisition programs. The SPRDE-SE workforce community includes a wide range of members from different disciplines and backgrounds. To meet DAWIA certification requirements, SPRDE-SE workforce members must have either a baccalaureate or graduate degree in a technical or scientific field such as engineering, physics, chemistry, biology, mathematics, operations research, engineering management, or computer science. They may hold positions such as systems engineer, project officer, project engineer, scientist, supervising project engineer, computer engineer/scientist, operations research analyst, software engineer, or naval architect. SPRDE-SE workforce members may also hold specialty engineering positions such as materials or structures engineer, reliability engineer, designing engineer, or cost engineer. While the variety of disciplines and experience provides a robust pool of well-educated and trained scientists and engineers, it has been challenging to identify those in the SPRDE-SE workforce performing critical systems engineering functions at a program systems integration level.

The need to identify systems engineers led to the creation of the SPRDE–PSE career path to facilitate the development of a select cadre of more experienced systems engineers that possess cross-disciplinary technical skills grounded in broad-based training. These skills and training will better prepare them for critical senior positions such as Program Lead Systems Engineer or Chief Engineer. The SPRDE-PSE career path certification experience and training standards have been expanded with a variety of technical courses added to the core functional Systems Engineering courses. This career path also enables a more accurate analysis and accounting of those in the SPRDE-SE workforce who perform critical systems engineering functions.

Some acquisition workforce career fields, such as SPRDE, are part of a larger DOD community. Forty-six percent of the DOD Science, Technology, Engineering, and Mathematics (STEM) workforce is part of the defense acquisition workforce. Initiatives to strengthen recruitment and the capability of the broad community workforce benefit the defense acquisition workforce.

Within the Defense acquisition workforce, SPRDE-SE senior leaders have established several objectives to revitalize systems engineering.

- Improve the systems engineering environment
- Provide effective systems engineering policies, practices, procedures, methods, and tools
- Provide a well educated, trained, and experienced systems engineering workforce
- Improve program balance of cost, schedule, performance, and risk
- Reduce the life cycle cost of defense systems
- Use developmental test results to assess system technical maturity and readiness for operational testing

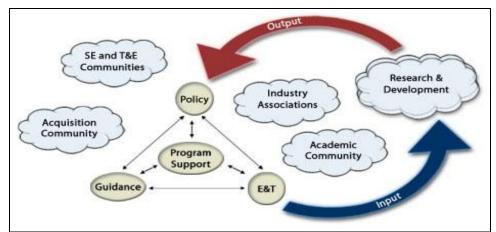


Figure A7-1. Systems Engineering Collaboration Process<sup>3</sup>

These objectives are addressed through the process shown in Figure A7-1 to determine sound system engineering (SE) practices through collaboration with the acquisition community, SE community, T&E community, industry associations, and academia. The goal is to develop appropriate policy, guidance, education, and training; directly engage and support programs to institutionalize lessons learned and best practices; and conduct systemic analyses to feed back into future policy, guidance, education, and training updates.

Members of the SPRDE career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, Section 1721 establishes various requirements for Defense acquisition positions. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management, contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. SPRDE PCDs for the Systems Engineering and Program Systems Engineering career paths are available at http://www.dau.mil/workforce/pages/pcds.aspx.

As shown in Table A7-1, the Defense acquisition SPRDE (SE/PSE) workforce had 36,704 members as of the end of FY2009 and is comprised of 94 percent civilian (34,511) and 6 percent military (2,193). The SPRDE (SE/PSE) career paths constituted

<sup>4</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DoD Instruction 5000.66.

<sup>&</sup>lt;sup>3</sup> ODUSD (A&T) Systems and Software Engineering website. http://www.acq.osd.mil/se/approach.html

28 percent of the organic<sup>5</sup> defense acquisition workforce at the end of FY2009. It is the largest of the defense acquisition career fields.

Defense Acquisition Workforce Civilian/Military Composition SPRDE Career Field (FY09)(SE and PSE Career Paths)											
Acquisition Career Field FY09 Count Count % Civ Mil Civ % Mil %											
Army	10,208	28%	10,101	107	99%	1%					
Navy/Marine Corps	18,085	49%	17,884	201	99%	1%					
Air Force	7,197	20%	5,312	1,885	74%	26%					
DCMA	660	2%	660	0	100%	0%					
DLA	16	0%	16	0	100%	0%					
Other	538	1%	538	0	100%	0%					
Total	36,704	100%	34,511	2,193	94%	6%					

Table A7-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (SPRDE SE/PSE Career Field) (by Component)<sup>6</sup>

The SPRDE (SE/PSE) civilian workforce represents various occupational series, of which the primary series are identified in the PCDs. Table A7-2 provides a breakout of the top five occupation series within this career field by major Component. The highest percentage of civilians is in the Electronics Engineering (0855) series (26 percent).

Top 5 Occupation Series (end of FY2009)  SPRDE - (SE/PSE) (Civilian)											
Occ Series - Description   Total   Total (%)   Cum (%)   Army   Navy   AF   Other											
0855 - Engineer, Electronics	9,398	25.6%	25.6%	1,999	5,506	1,702	191				
0801 - Engineer, General	5,648	15.4%	41.0%	2,280	1,596	1,172	600				
0830 - Engineer, Mechanical	5,277	14.4%	55.4%	1,604	3,243	391	39				
0861 - Engineer, Aerospace	2,876	7.8%	63.2%	587	1,311	880	98				
0854 - Engineer, Computers	2,292	6.2%	69.5%	1,052	1,023	126	91				

Note: There are 18 records with null values for OCC series #Occ Series in Career Field = 109

Table A7-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the SPRDE SE/PSE Career Field (FY2009)<sup>7</sup>

<sup>5</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>6</sup> AT&L Workforce Data Mart (end of FY09)

<sup>&</sup>lt;sup>7</sup> AT&L Workforce Data Mart (end of FY09)

### SPRDE (SE/PSE) Career Field Challenges

The Department must strengthen and sustain this mission critical workforce capability. Strengthening the DOD SPRDE workforce, especially the systems engineering talent in the workforce, is a USD (AT&L) high priority. On December 4, 2009, the USD (AT&L) issued direction implementing the Weapon Systems Acquisition Reform Act of 2009 (Public Law 111-23). A key purpose of the law is to promote sound development planning, systems engineering, cost estimating, and developmental testing early in the life cycle of a program. In response to WSARA, DOD recently provided a report to Congress, the "Department of Defense Developmental Test and Evaluation and Systems Engineering FY2009 Annual Report." This report includes additional Component and command level details on strengthening systems engineering workforce capability.

The Director for Systems Engineering (DSE) is establishing procedures for overseeing Components' organization and capability to conduct development planning and systems engineering. Areas of review will include policies, processes, and governance procedures; resource allocation; workforce education and training; and overall organizational performance metrics. The DSE will also perform assessment activities annually across Component commands and centers to review and assess systems engineering and development planning capability, to review baseline and implementation plans to achieve those requirements where there may be deficiencies, and to assess the progress of the plan in working to achieve full compliance.

The high demand for SPRDE (SE/PSE) expertise will continue given the acquisition community supports 102 major acquisition programs and over 200 programs identified for special oversight. Since 2001 the number of major defense acquisition programs has increased by 36 percent. Meanwhile, the overall SPRDE (SE/PSE) workforce count (civilians + military) remained stable from 2005 through 2008. The loss of experienced systems engineering workforce members is expected to increase risks in acquisition program performance and outcomes. The DSE and DOD leadership are taking decisive actions to further strengthen systems engineering capability to ensure high quality, affordable, supportable, and effective defense systems are fielded.

The DSE is working with professional organizations such as the International Council on Systems Engineering (INCOSE) and the National Defense Industrial Association (NDIA) to strengthen systems engineering capability. For example, DSE representatives worked with a team of INCOSE members to provide an Acquisition extension to the INCOSE Certified Systems Engineering Professional (CSEP) certification. In addition to the requirements for the CSEP certification, achieving this Acquisition extension requires that the candidate demonstrate understanding of the DOD systems engineering competencies as described in Chapter 4 of the Defense Acquisition Guidebook and taught in the DAU Systems courses SYS 101 Fundamentals of SPRDE

and SYS 202 Intermediate SPRDE. DAU has granted equivalency status to the INCOSE CSEP-Acquisition certification for these courses. This means that anyone who achieves this certification also receives credit for these two courses.

Within the Systems Engineering Division of NDIA there is an Education and Training Committee. This committee is co-chaired by a representative each from DSE, DAU, and industry. The purpose of this committee is to strengthen systems engineering capabilities through education, training, and experience opportunities across the Government, industry, and academic sectors. The DSE recently tasked this committee to identify industrial base workforce challenges and to determine how to best attract, foster, and develop future DOD engineering leaders. Raising the bar for the systems engineering workforce through education, training, and experience applies not only to individuals working for the DOD but to workforce members from the industrial and academic communities as well. The DSE strategy is to include these partners as we execute our strategic plan for the workforce.

**DOD Systems Engineering Revitalization Efforts.** An October 2003 joint DOD-National Defense Industry Association (NDIA) Systems Engineering summit and followon analyses highlighted the following systemic issues:

- More disciplined DOD systems engineering processes are needed
- Cost & schedule, not technical excellence, are driving many DOD programs
- Need for more systems engineering tools and guides for DOD
- Some Program Managers do not place a value on Systems Engineering
- Technical investment and systems engineering involvement was inadequate
- Complex education, training and recruitment issues exist: alignment of career paths, role of university education and DAU training resources is critical

This DOD-NDIA summit formed the basis for an extensive USD (AT&L) plan of action to revitalize systems engineering in DOD. This plan of action included policy, guidance, assessment and human capital components, the latter encompassing both education and training. Following an extensive competency analysis that was baselined in 2004, a complete re-engineering of the SPRDE career field certification training curriculum was completed in partnership with DAU during 2006. These efforts have helped to increase the overall certification levels of the SPRDE workforce, which are considerably higher at all certification levels than the acquisition workforce as a whole.

**SPRDE (SE/PSE) Competency Model and Assessment.** The competency set that emerged from the systems engineering revitalization efforts was used as the starting baseline for development of a more formal competency model that has been developed and will soon be used for workforce assessments. The initial SPRDE-SE competency model, which fine-tunes the existing legacy competency set and adds several new software engineering and systems assurance competencies, has been vetted by an expert panel and has completed subject matter expertise validation. This competency

model will now be used to assess the current SPRDE (SE/PSE) workforce to determine current capabilities and to identify any gaps in systems engineering competencies.

SPRDE-Program Systems Engineer (PSE) Career Path. While the revitalization and subsequent competency assessment efforts are necessary, they are not sufficient. As a complementary initiative to these efforts, a new career path, called SPRDE-Program Systems Engineer, (SPRDE-PSE) was put into effect in October 2007. A primary goal of the SPRDE-PSE career path is to facilitate the development of a select cadre of more experienced systems engineers that possess cross-disciplinary technical skills grounded in broad-based training. These skills and training will better qualify them for critical senior positions such as Program Lead Systems Engineer or Chief Engineer. The experience standards established for the SPRDE-PSE career path certification have been significantly increased and the training standards have also been expanded to include a variety of additional technical courses, in addition to the core functional Systems Engineering courses. As of end of the first quarter of FY2010, the Army, Department of the Navy, and Air Force coded 29, 86, and 90 Program Systems Engineering positions, respectively. Effective implementation of the SPRDE-PSE career path will enable better definition and enhancement of the critical systems engineering talent in the SPRDE workforce.

This systems engineering talent must be identified and quantified to enable a shortfall analysis so we can determine how many more systems engineers are needed and what competencies they need to perform this critical function. Analysis of the competency assessment results will enable us to enhance the competency model for systems engineers and to better define those workforce members who perform critical systems engineering functions and should be placed in the SPRDE-PSE career path.

In addition, the following major factors can be addressed by effective implementation of the SPRDE–PSE career path initiative.

Impact of Increased Systems Complexity. Increasing engineering technical complexity of DOD systems to include emerging interrelated and joint-based Systems-of-Systems has resulted in a variety of engineering challenges. Root cause analysis of many troubled programs has consistently identified fundamental issues related to lack of robust systems engineering on both the industry and government side. The growth of such sophisticated systems, which frequently push the state-of-the-art, is expected to continue as the DOD responds to a variety of demands. Increased systems complexity must be answered by increased talent in the systems engineering workforce.

Inadequate Early-Stage Systems Engineering. The challenge of inadequate systems engineering technical investment was documented in a 2008 National Academy of Sciences study. This study found that many systems-level risks in interface and system complexity, requirements stability, technology maturity, software development as well as technical leadership could all be mitigated by sufficient investments in early-phase

systems engineering. These recommendations, now being implemented via various DOD and policy changes, over the long term will require, as part of the organization planning for most projects, an increase in systems engineering positions in the research establishments of the services and agencies. This will result in modifications to the required skills and competencies and the need to produce employees with these abilities to mitigate many systems level risks.

Wide Variety of SPRDE-SE Workforce Mix. As described previously, specific duties and qualifications of a SPRDE workforce member vary widely. Examples can range from assignment as the lead or chief engineer on an acquisition program to such technical activities as implementation of acquisition engineering technical objectives and policies to the creation of detailed technical specifications. A wide variety of engineering disciplines performing tasks on systems at all stages in the defense lifecycle are represented by this large career field, complicating any single, standard approach to certification training. The SPRDE-PSE career path will be used to better define and quantify the systems engineering talent in the SPRDE workforce and enable us to develop a standard approach to certification.

Baby Boomer Departure. As with the DOD as a whole, the Defense acquisition workforce, including the SPRDE (SE/PSE) workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of experienced SPRDE (SE/PSE) workforce members represents increased performance risk associated with the Business functions needed to support DOD acquisition programs. As of the end of FY2009, 55 percent of the SPRDE (SE/PSE) civilian workforce is in the Baby Boomer or Traditional generations. Analysis indicates 12 percent of the SPRDE (SE/PSE) civilian workforce is eligible for full retirement and approximately 16 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The Declining Science and Engineering Talent Pool. National workforce demographics and advanced technical degree concerns represent significant future challenges. Based on the challenge of recruiting from a smaller national workforce and forecasted shortage of technical degrees in U.S. educational institutions, competition from industry should increase. This situation will be exacerbated by a shortage of U.S. citizens with bachelor's degrees and advanced degrees in defense-related mathematics, science, and engineering disciplines. In addition, the ability to hire sufficient numbers who can obtain required security clearances must be addressed.

The combination of challenges is significant, especially in the context of the increasing complexity of DOD systems. Risk can be mitigated through continued effective recruiting, development, and retention efforts, adequate compensation models for science and engineering personnel, mentoring programs, as well as robust intern programs focused on key technical science and engineering disciplines. Effective

implementation of the SPRDE-PSE career path and proper application of the updated competency model will enable us to target those critical positions that require systems engineering expertise. These will in turn enable us to better target our recruiting, development and retention efforts for systems engineers.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management; improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

**SPRDE Workforce Count - FY2005 to FY2009.** An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The DOD SPRDE workforce count increased by 5.6 percent, from 34,752 in FY2005 to 36,704 in FY2009 (Figure A7-2). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes.

# Count and Composition SPRDE - (SE/PSE)

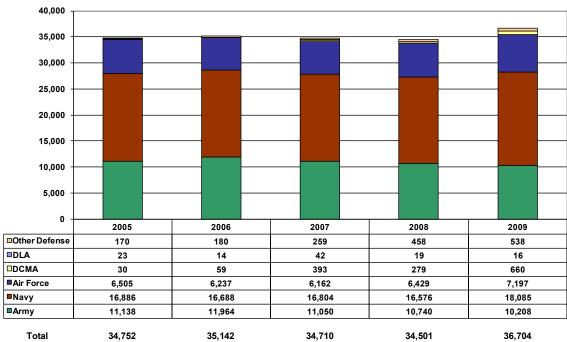


Figure A7-2. Historical Size of Defense Acquisition Workforce SPRDE SE/PSE Career Field (FY2005 – FY2009) (Military & Civilian)<sup>8</sup>

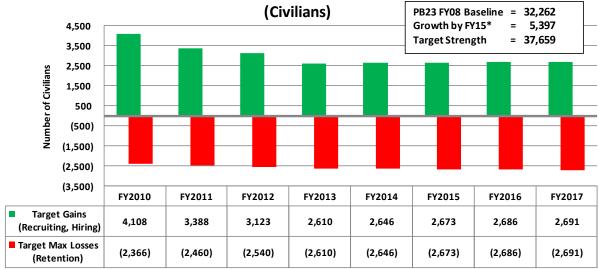
#### **Assessment of Projected Workforce Growth**

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the SPRDE (SE/PSE) career field is projected to grow approximately 5,400 (16%) by FY2015. Part of this growth, approximately 3,100, is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DoD policy/guidance, was used for FY2005 through FY2009 workforce counts.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 4,108 for FY2010 and 3,388 in FY2011. Corresponding retention needs require losses at levels below 2,366 for FY2010 and 2,460 in FY2011. In FY2009, the SPRDE (SE/PSE) career field within the defense acquisition workforce experienced approximately 4,000 gains and 1,800 losses. Noted is that this analysis, with projections through FY2017 (Figure A7-3), provides a very top level view of projected gains and losses.

## Gains and Losses to Achieve & Maintain Target Strength Defense Acquisition Workforce - DOD-Wide (SPRDE SE/PSE)



\*Growth estimates are as of Oct 2009 Senior Steering Board Component Inputs and include DOD and Component initiatives

Figure A7-3. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (SPRDE SE/PSE Career Field) (Civilians)<sup>9</sup>

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<sup>&</sup>lt;sup>9</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

SPRDE – SE/PSE Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The AT&L Workforce Lifecycle Model (WLM) (Figure A7-4) provides a visual display of a workforce in three cohort groups - future (early career) workforce, mid career and senior cohort groups. As of the end of FY2009, the breakout across the defense acquisition workforce civilians is 32/33/35 percent; the distribution of the SPRDE (SE/PSE) workforce is 38/34/28 percent respectively. This distribution indicates success in hiring and building the workforce - the challenge is to continue that success. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce life cycle, retirement eligibility, and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives.

### Defense Acquisition Workforce Lifecycle Model - SPRDE SE/PSE by Years to Retirement Eligibility (YRE) - Civilians (FY09)

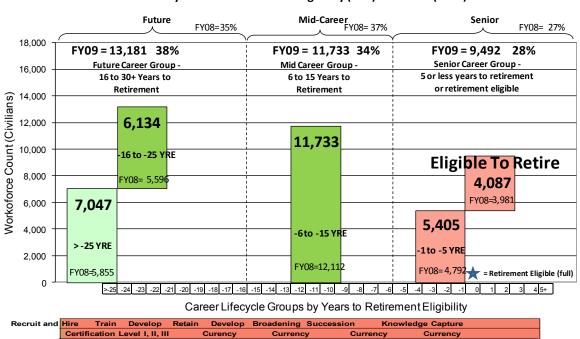


Figure A7-4. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (SPRDE SE/PSE Career Field) (Civilians)<sup>10</sup>

Acquisition Corps Critical Acquisition Positions

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<sup>&</sup>lt;sup>10</sup> AT&L Workforce Data Mart (End of FY09)

SPRDE-SE/PSE Workforce Gains and Losses. Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A7-5 depicts the gains/losses for SPRDE (SE/PSE), to include substantive and administrative switches in and out of the SPRDE (SE/PSE) acquisition career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

### Defense Acquisition Workforce (Civilian) (FY09) - SPRDE SE/PSE Gains and Losses by

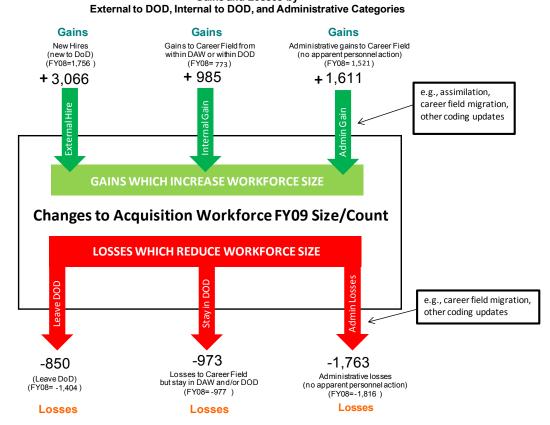


Figure A7-5. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (SPRDE SE/PSE Career Field) (Civilians)<sup>11</sup>

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<sup>&</sup>lt;sup>11</sup> AT&L HCI and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and FERS.

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains. External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on a SPRDE SE/PSE acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help improve targeting of hiring, retention and career management strategies. Figure A7-6 depicts the Defense acquisition workforce civilian gains and losses for the SPRDE (SE/PSE) career field that took place during FY2009 by "years to retirement eligibility" groups.

# Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\*- SPRDE (SE/PSE) (by Years to Full Retirement Eligibility)

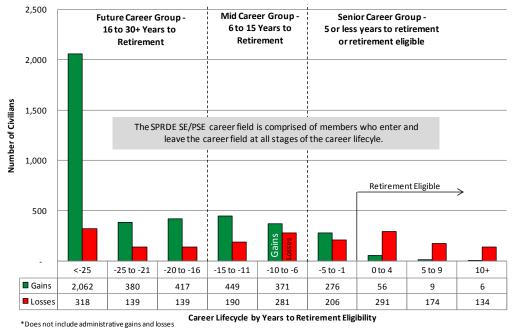


Figure A7-6. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (SPRDE SE/PSE Career Field) (Civilians)<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> HCI generated based on HCI/RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 2,859 of 3,679 gains<sup>13</sup> (71 percent) (less administrative gains) in the civilian (SPRDE SE/PSE) workforce were in the future career group, 820 (20 percent) were in the mid-career group, and 347 gains (9 percent) were in the senior career group. This represents a 59 percent increase in FY2009 gains above FY2008 for the future career group, a 62 percent increase in the mid-career group, and a 68 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (position coding updates). Figure A7-7 depicts the external hires and internal gains by lifecycle career group.

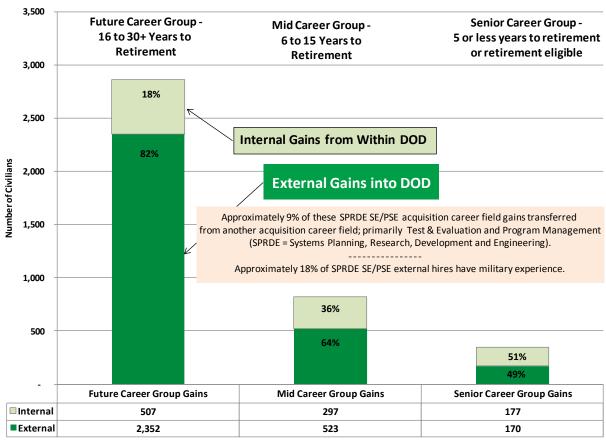


Figure A7-7. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (SPRDE SE/PSE Career Field) (Civilians)<sup>14</sup>

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<sup>&</sup>lt;sup>13</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

<sup>&</sup>lt;sup>14</sup> AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 596 of 1,807 losses<sup>15</sup> (33 percent) (less administrative losses) to the civilian SPRDE (SE/PSE) workforce were to the future career group, 471 (26 percent) were to the mid-career group, and 740 (41 percent) were to the senior career group. This represents a 20 percent decrease in losses in FY2009 when compared to FY2008 for the future career group, a 17 percent decrease in the mid-career group, and a 30 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (position coding updates). Figure A7-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

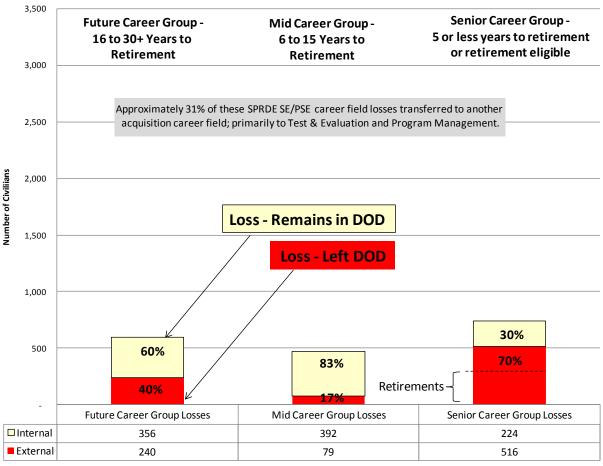


Figure A7-8. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (SPRDE SE/PSE Career Field) (Civilians)<sup>16</sup>

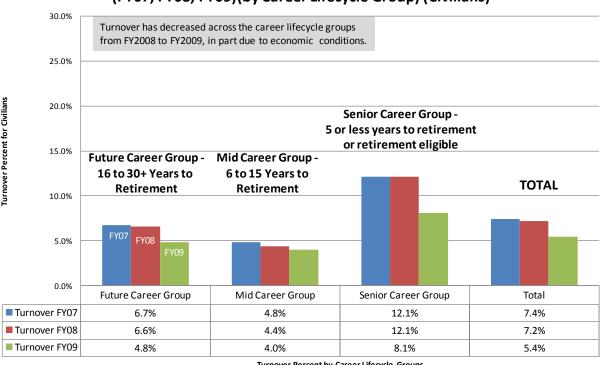
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<sup>&</sup>lt;sup>15</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{16}</sup>$  AT&L HCl generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure. <sup>17</sup> Figure A7-9 provides a comparison of SPRDE (SE/PSE) turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

### Defense Acquisition Workforce Turnover - SPRDE (SE/PSE) (FY07, FY08, FY09) (by Career Lifecycle Group) (Civilians)



Turnover Percent by Career Lifecycle Groups

Figure A7-9. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (SPRDE SE/PSE Career Field) (Civilians) 18

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

Retirement Eligibility. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and the anticipated retirement bow wave. The retirement profile in Figure A7-10 below indicates that 12 percent (4,087) of the civilian SPRDE-SE/PSE workforce is eligible for full retirement benefits and an additional 16 percent (5,405) will become eligible within the next five years. Approximately 17 percent of the SPRDE workforce is under the Civil Service Retirement System (CSRS) and the 83 percent are under the Federal Employee Retirement System (FERS), the

<sup>&</sup>lt;sup>17</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

AT&L HCI generated from HCI/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

two major retirement systems used in the federal government. The rate of separation for SPRDE spikes from 3.7 percent at one year before retirement eligibility to 18 percent during the first year of eligibility. Based on past retirement patterns, approximately 49 percent of the SPRDE workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

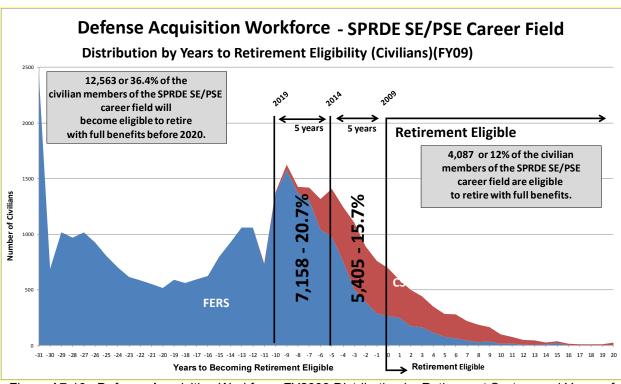


Figure A7-10. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (SPRDE SE/PSE Career Field) (Civilians)<sup>2</sup>

### **SPRDE Competency Model and Assessment**

Senior AT&L leaders are partnering with the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including SPRDE (SE/PSE). Updated acquisition functional competency models are enabling workforce assessments and improved, data-driven human capital planning. As noted on page A7-6, significant competency efforts have been completed since 2006 as

<sup>&</sup>lt;sup>19</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense. p. 25.

RAND analysis using DMDC data (end of FY08 and end of FY09 data).

part of revitalizing systems engineering and additional efforts are underway. The recent baseline has been used as a starting point for further model updates and workforce assessment work which is expected to begin in April 2010. Results of the assessments will provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications.

### Certification/Standards

The DOD SPRDE (SE/PSE) Functional Leader establishes workforce certification standards (Levels I, II, III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The SPRDE (SE/PSE) career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. To promote career long development and currency, defense acquisition workforce members are required to complete 80 continuous learning points every two years. SPRDE-SE and PSE development guides (Core Plus guides) have been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guides are available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A7-3 shows the SPRDE (SE/PSE) certification level requirements established by the Components for designated acquisition positions.

Certification Level Requirements by Service (FY2009) SPRDE - (SE/PSE)											
DOD Component    DAWIA   Level II											
Army	477	2,441	7,286	10,204	4.7%	23.9%	71.4%				
Navy	1,284	3,358	13,428	18,070	7.1%	18.6%	74.3%				
Air Force	858	4,261	2,077	7,196	11.9%	59.2%	28.9%				
DCMA	80	366	210	656	12.2%	55.8%	32.0%				
DLA	1	12	3	16	6.3%	75.0%	18.8%				
Other Defense	66	41	430	537	12.3%	7.6%	80.1%				

Note: There are 10 records with null in the Career Level Required Code field

Table A7-3. Defense Acquisition Positions - Certification Level Requirements by Component (SPRDE SE/PSE Career Field)(FY2009)(All positions –Military and Civilians)<sup>21</sup>
In 2008 DOD expanded the training and experience requirements necessary to ensure that the SPRDE workforce is fully qualified. Future systems engineers, such as those in

<sup>&</sup>lt;sup>21</sup> AT&L Workforce Data Mart (End of FY09 data)

the SPRDE-PSE career path, will have to meet higher acquisition workforce certification qualification standards. Re-engineering of the SPRDE-SE career path resulted in a 20 percent increase in the SPRDE functional training curriculum at DAU, the creation of a new Level I certification course where none existed before, and a special emphasis for Level III training on Technical Leadership.

Based on component-reported data, the percentage of SPRDE acquisition workforce members who have met or exceeded certification requirements was 63 percent in FY2006 and 65 percent for FY2009. This exceeds the overall workforce average of 59 percent. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the SPRDE (SE/PSE) career field, assessment indicates 33 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. DOD is further assessing all factors that impact the calculated percentage to develop a more comprehensive quality metric. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A7-11 summarizes certification rates for the Services and 4th Estate.



Figure A7-11. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the SPRDE SE/PSE Career Field by Component (Military and Civilians)<sup>22</sup>

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<sup>&</sup>lt;sup>22</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated

### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the SPRDE (SE/PSE) workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD SPRDE (SE/PSE) career field builds the foundation for data-driven decision making to improve the Business workforce. It is understood that vertical analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

# Appendix 8 DOD Acquisition Mission Critical Career Field Test and Evaluation (Acquisition)

Human Capital Fact Sheet 2009 <sup>1</sup>							
Defense Acquisition Workforce (DAW) Test and Evaluation (T&E)	Civilian (Civ) T&E	Military (Mil) T&E	Total T&E (Civ + Mil)	Defense Acquisition Workforce			
Size & Composition			<u> </u>				
FY09 Workforce Size	6,152	1,740	7,892	133,103			
Change in size 2008-2009	10%	-4%	6%	6%			
Civilian/Military Composition	78%	22%	-	89% / 11%			
DOD DAW 2015 Growth Target			5%	15%			
Educational Attainment							
Bachelor's Degree or Higher	95%	93%	94%	79%			
Graduate Degree	30%	42%	33%	29%			
Certification (Cert)							
Level I or Higher Achieved	75%	53%	70%	72%			
Level II or Higher Achieved	67%	27%	58%	60%			
Level III Achieved	51%	9%	42%	36%			
Position Cert Requirement Met or Exceeded	65%	30%	58%	59%			
Planning Considerations							
% Baby Boomer/Traditional Generations	54%	6%	43%	58%			
Average Age	43.6	34.2	41.5	45			
Workforce Life-Cycle Model (YRE)	40/34/26			32/33/35			
% Future/Mid-Career/Senior	(%)(Civ)	•	-	(%)(Civ)			
Average Years of Service	15.1	11.2	14.2	16.3			
Retirement Eligible	629 (10%)	-	-	19,395 (16%)			
Retirement Eligible w/i 5 Years	952 (16%)	•	-	21,567 (18%)			
Total Career Field Gains/Losses	1,187/641	•	-	19,786/13,042			
Training Statistics		T&E 2008	T&E 2009	AT&L 2009			
DAU Course Graduates (Classroom)		1,312	1,289	39,568			
DAU Course Graduates (Web)		2,316	2,217	154,399			
DAU Continuous Learning Completions		-		494,568			

### Defense Acquisition Test and Evaluation Functional Leader



Mr. Edward R. Greer Director, Developmental Test & Evaluation OUSD (AT&L)

Mr. Edward Greer is the senior leader and proponent for the Developmental Test & Evaluation (DT&E) community within the

defense acquisition workforce. In this role he is the principle advisor to the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) to implement 10 U.S.C. 1702 workforce responsibilities and provides leadership and oversight of career development requirements for the T&E (acquisition) community. Mr. Greer establishes and maintains the education, training, and experience requirements, as well as competencies, certification standards, and position category descriptions for the T&E (acquisition) career field. The DOD T&E Functional Integrated Process Team (FIPT) supports Mr. Greer in this role. The FIPT includes Component functional experts, acquisition career managers, and is supported by advisors from the Defense Acquisition University (DAU).

On December 4, 2009, the USD (AT&L) issued direction implementing the Weapon Systems Acquisition Reform Act (WSARA) of 2009 (Title 10 U.S.C Section 139d). A key purpose of the law is to promote sound systems engineering, cost estimating and developmental testing early in the life of a program.

<sup>&</sup>lt;sup>[1]</sup>Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

As part of implementation, Mr. Greer, in addition to monitoring and reviewing DT&E for all programs listed for DT oversight on the Office of the Secretary of Defense Calendar Year Test &Evaluation Oversight List, also approves the test and evaluation strategy (TES) and Test and Evaluation Master Plans (TEMPS). In his leadership role he also establishes policy and champions Developmental Testing and Evaluation (DT&E) across the acquisition community. The DT&E office also promotes best practices, including reaching out to the Services, academia, and industry. DT&E provides T&E expertise and support for testing in a joint environment and test resources. DT&E also provides oversight of modeling and simulation and technical maturity as applied to weapon systems acquisition. In response to WSARA and as Functional Leader, the Director, DT&E is leading efforts with the Components to continue assessing and updating DT&E workforce capability and capacity needs.

The Human Capital Fact Sheet on page A8-1 and horizontal enterprise analysis presented in this appendix builds the foundation for data-driven decision making to improve the T&E workforce. It is understood that Components conduct force planning and their organizational-specific analysis is essential for successful targeted implementation of workforce strategy and initiatives.

# The Test and Evaluation Community Within the Defense Acquisition Workforce

The defense acquisition T&E workforce contributes to the successful acquisition and management of major weapon platforms/systems, C4ISR, and IT systems. Each area requires special T&E skills and experiences. This workforce executes critical test and evaluation functions to include planning, monitoring, conducting, and evaluating tests of prototype, new, or modified weapon systems equipment or materiel. T&E (acquisition) professionals also analyze, assess, and evaluate test data and results; prepare assessments of the data; and report findings. They are usually engineers, scientists, operations research analysts, computer scientists, and other degree-holding technical personnel.

Members of the T&E career field are identified based on the responsibilities of their position. The Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, establishes various requirements for Defense acquisition positions<sup>2</sup>. Each DOD Component (e.g., Army, Navy, Air Force and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by type (critical acquisition position, key leadership position, other) and by career path within a functional career field category (program management,

<sup>&</sup>lt;sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

contracting, etc.). DOD uses a Position Category Description (PCD) as a tool for consistently identifying acquisition positions throughout the DOD Components. The T&E (acquisition) PCD is available at http://www.dau.mil/workforce/pages/pcds.aspx.

As shown in Table A8-1, the defense acquisition Test and Evaluation workforce has 7,892 members and is comprised of approximately 78 percent civilians (6,152) and 22 percent military (1,740). The T&E career field constituted 6 percent of the organic<sup>3</sup> Defense acquisition workforce as of the end of FY2009.

Defense Acquisition Workforce Civilian/Military Composition  Test & Evaluation Career Field (FY09)									
Acquisition Career Field	FY09 Count	Count %	Civ	Mil	Civ %	Mil %			
Army	2,235	28%	2,222	13	99%	1%			
Navy/Marine Corps	2,833	36%	2,383	450	84%	16%			
Air Force	2,630	33%	1,353	1,277	51%	49%			
DCMA	23	0%	23	0	100%	0%			
DLA	2	0%	2	0	100%	0%			
Other	169	2%	169	0	100%	0%			
Total	7,892	100%	6,152	1,740	78%	22%			

Table A8-1. Defense Acquisition Workforce FY2009 Military/Civilian Composition (T&E-acquisition Career Field) (by Component)<sup>4</sup>

The Test and Evaluation civilian workforce represents various occupational series, of which the primary series are identified in the PCD. Table A8-2 provides a breakout of the top five series by Service. The highest percentage of civilians is in the Electronics Engineering (0855) series (22 percent).

Top 5 Occupation Series (end of FY2009)  Test and Evaluation (Civilian)									
Occ Series - Description	Total	Total (%)	Cum (%)	Army	Navy/MC	AF	Other		
0855 - Engineer, Electronics	1,764	22.4%	22.4%	409	873	470	12		
0801 - Engineer, General	1,202	15.2%	37.6%	475	261	362	104		
0830 - Engineer, Mechanical	779	9.9%	47.5%	346	356	76	1		
0861 - Engineer, Aerospace	444	5.6%	53.1%	25	274	141	4		
1515 - Operations Research Analyst	388	4.9%	58.0%	310	31	35	12		

Note: There are 17 records with null values for OCC series #Occ Series in Career Field = 56

Table A8-2. Defense Acquisition Workforce Top Five Civilian Occupation Series in the T&E-acquisition Career Field (FY2009)<sup>5</sup>

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<sup>&</sup>lt;sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>4</sup> Source: AT&L Workforce Data Mart (end of FY2009)

<sup>&</sup>lt;sup>5</sup> Source: AT&L Workforce Data Mart (end of FY2009)

#### Test and Evaluation (Acquisition) Workforce Challenges

The demand for T&E expertise will remain strong as the acquisition community supports 102 major acquisition programs, the number of which has increased by 36 percent since 2001. T&E acquisition workforce personnel also directly support oversight for over 200 other programs on the OSD DT&E Oversight List. The loss of experienced T&E workforce members represents increased performance risk associated with T&E functions that ensure high quality, affordable, supportable, and effective defense systems are delivered.

**Joint Interoperability Emphasis.** DOD is increasingly moving to jointly-developed and operated system-of-systems. To be effective, these complex systems depend critically on seamless interoperability. Testing and validating such systems has T&E impacts in the areas of more complex planning, implementation and execution to adequately evaluate product and system performance.

**Information and System Assurance.** Today's defense systems are critically dependent on software for mission effectiveness. Growing complex and significant information and systems assurance vulnerabilities exist for such systems. Increased T&E emphasis and workforce skills are required to adequately identify and evaluate system vulnerabilities in these areas.

**Baby Boomer Departure.** As with the DOD as a whole, the Defense acquisition workforce, including the T&E (acquisition) workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of these experienced workforce members represents increased performance risk associated with the T&E functions needed to support DOD acquisition programs. As of the end of FY2009, 54 percent of the T&E (acquisition) civilian workforce is in the Baby Boomer or Traditional generations. Analysis indicates 10 percent of the (T&E) civilian workforce is eligible for full retirement and 16 percent will become eligible for full retirement over the next five years. Although various factors impact the actual rate of departure, the eventual loss requires risk mitigation through effective human capital initiatives.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

Significant progress has been made to ensure a comprehensive workforce data and analysis capability is available and used for all acquisition functional communities. This includes improving the quality of workforce acquisition-unique data; standing up an acquisition workforce data mart; partnering with OSD(P&R), the Defense Manpower Data Center, and the Components to improve data practices and processes; leveraging competency management;

improving analysis tools, and conducting ongoing enterprise-wide analysis as represented by this section. Efforts to improve the tools will continue. OSD (P&R) has led a DOD-wide working group to leverage workforce analysis tools and best practices across the enterprise.

**Defense Acquisition Test and Evaluation Workforce Count – FY2005 to FY2009.** An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The defense acquisition T&E workforce count increased by 7 percent, from 7,384 in FY2005 to 7,892 in FY2009 (Figure A8-1). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, gains and losses to include transfers and changes in coding of positions designated by the Components as acquisition. Efforts continue which will improve the accuracy of the count, to include improving workforce data management and processes.

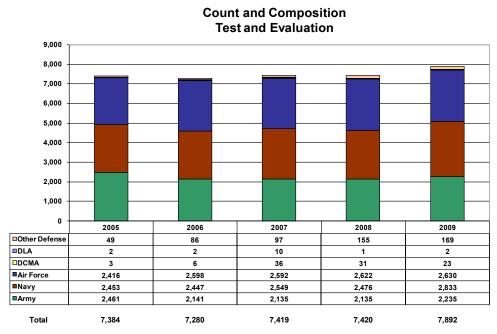


Figure A8-1. Historical Size of Defense Acquisition Workforce T&E-acquisition Career Field (FY2005 – FY2009) (Military & Civilian)<sup>6</sup>

### Assessment of Projected Workforce Growth

Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the defense acquisition T&E career field is projected to grow approximately 400 (5%) by

<sup>&</sup>lt;sup>6</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts.

FY2015. Part of this growth, approximately 200, is associated with the DOD initiative to rebalance the workforce through in-sourcing. Each of the military services and other DOD components has been actively planning and deploying initiatives that support the DOD acquisition workforce growth strategy. Components have submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

Replenishment hiring, normal losses and actions to fill recurring vacancies, is a critical factor in total hiring and retention requirements. Current analysis and modeling based on the current growth strategy, suggests that success will require annual hiring levels of approximately 360 for FY2010 and 360 in FY2011. Corresponding retention needs require losses at levels below 430 for FY2010 and 430 in FY2011. In FY2009, the Test and Evaluation career field within the defense acquisition workforce experienced approximately 900 gains and 400 losses. Noted is that this analysis, with projections through FY2017 (Figure A8-2), for the defense acquisition T&E career field is across DOD Components. Other Component specific factors will impact projected gains and losses.

# Gains and Losses to Achieve & Maintain Target Strength Defense Acquisition Workforce - DOD-Wide (T&E) (Civilians)

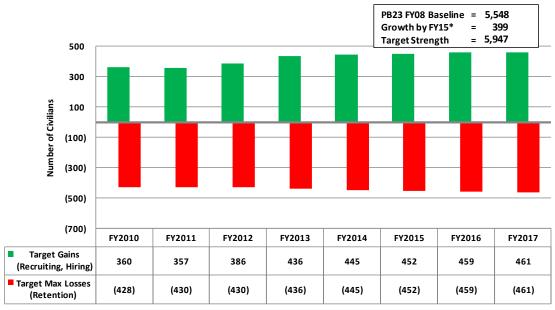


Figure A8-2. Projected Gain and Loss Targets through FY2017 Supporting DOD-wide Acquisition Workforce Improvement Initiatives (T&E-acquisition Career Field) (Civilians)<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> AT&L HCI and RAND analysis using DMDC data (end of FY2009) and RAND/HCI inventory projection model. Target strength based on Component inputs for August 2008 PB23 (baseline) and October 26, 2009 Defense Acquisition Workforce Senior Steering Board.

Testing and Evaluation Workforce Lifecycle Assessment. A key workforce assessment tool is the Workforce Lifecycle Model (WLM). The Workforce Lifecycle Model (WLM) (Figure A8-3) provides a visual display of a workforce in three cohort groups - Future workforce, Mid-career and Senior cohort groups. The Years to Retirement Eligibility distribution for the Defense acquisition workforce is 32/33/35. The distribution of the defense acquisition T&E workforce members between the three cohorts is 40/34/26. This distribution indicates success in hiring and building the career field - the challenge is to continue that success. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession needs, cohort migration and retirement risk. The analysis following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce lifecycle. retirement eligibility, and retirement patterns. This information helps to assess risks and serves as part of the foundation for data-driven decisions on hiring. development and retention initiatives.

Defense Acquisition Workforce Lifecycle Model (WLM) - T&E (acquisition)

#### by Years to Retirement Eligibility (YRE) - Civilians (FY09) Mid-Career Senior **Future** FY08= 37% FY08=24% 4,000 FY09 = 2,46740% FY09 = 2,084 34% FY09 = 1,581 26% 3.500 Future Career Group -Mid Career Group -Senior Career Group -16 to 30+ Years to 6 to 15 Years to 5 or less years to retirement Norkoforce Count (Civilians) 3,000 Retirement Retirement or retirement eligible 2,500 1,107 2,000 16 to -25 YRE 2,084 **Eligible To Retire** FY08=980 1,500 629 6to -15 YR 1.360 1,000 952 >-25 YRE 500 -1 to -5 YRE FY08=2 089 FY08= 781 = Retirement Eligible (full) Career Lifecycle Groups by Years to Retirement Eligibility

Figure A8-3. Defense Acquisition Workforce Lifecycle Model (WLM) (FY2009) (T&E-acquisition Career Field) (Civilians)<sup>8</sup>

Critical Acquisition Position

<sup>&</sup>lt;sup>8</sup> AT&L Workforce Data Mart (End-of-FY09)

**Defense AcquisitionT&E Workforce Gains and Losses.** Acquisition workforce gains and losses are analyzed to assess workforce changes and to inform hiring and retention planning and assessment of progress. Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses. Figure A8-4 depicts the gains/losses for T&E, to include substantive and administrative switches in and out of the T&E acquisition career field. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

# Defense Acquisition Workforce (Civilian) (FY09) - T&E (Acquisition) Gains and Losses by External to DOD, Internal to DOD, and Administrative Categories

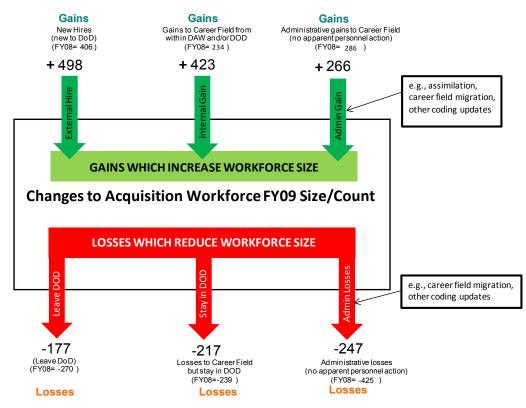


Figure A8-4. Defense Acquisition Workforce FY2009 Gains and Losses by Three Major Categories – External, Internal, and Administrative (T&E-acquisition Career Field) (Civilians)<sup>9</sup>

Gains are divided into three categories for analysis purposes: 1) external or new hires to DOD; 2) substantive internal gains; and 3) administrative internal gains.

FERS.

<sup>&</sup>lt;sup>9</sup> AT&L HCI and RAND Analysis using DMDC data (end of FY08 and FY09). Gain and loss categories are further described in RAND Report TR-572-OSD, Chapters 2 & 3. Substantive gains are defined as those that coincide with changes to one or more of the following fields in the personnel record: occupational series, functional occupation group, agency, bureau or pay plan. We are currently exploring refinements to this definition. Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and

External or new hires to DOD are those who were not part of the DOD civilian workforce in the prior fiscal year. Substantive internal gains are those who were part of the DOD civilian workforce in the prior year but not on a T&E acquisition position – there is a significant personnel action (e.g., change in occupation series, change in organization) associated with the gain. Administrative internal gains are individuals who transfer without a significant personnel action (e.g., no change in occupation series, no change in organization, and no change in apparent job). Administrative gains and losses appear to be "in-place" changes in which an encumbered position is designated acquisition (a "gain"), the acquisition designation is removed (a "loss"), or the acquisition career field designation is updated. Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help highlight hiring, retention and career management needs. Figure A8-5 depicts the defense acquisition T&E civilian gains and losses that took place during FY2009 by "years to retirement eligibility" groups.

# Defense Acquisition Workforce Workforce Lifecycle FY09 Gains & Losses\* - T&E (Acquisition) (by Years to Full Retirement Eligibility)



\*Does not include administrative gains and losses

Figure A8-5. Defense Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (T&E-acquisition Career Field) (Civilians)<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

FY09 data indicates that 546 of 917 gains<sup>11</sup> (60 percent) (less administrative gains) in the civilian acquisition workforce were in the future career group, 232 (25 percent) were in the mid-career group, and 139 gains (15 percent) were in the senior career group. This represents a 18 percent increase in FY2009 gains above FY2008 for the future career group, a 77 percent increase in the mid-career group, and a 209 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A8-6 depicts the external hires and internal gains by lifecycle career group.

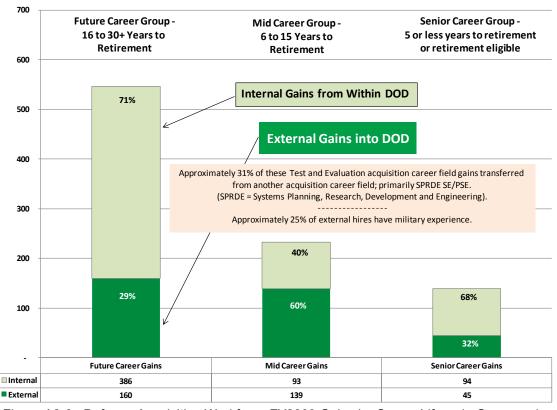


Figure A8-6. Defense Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (T&E-acquisition Career Field) (Civilians)<sup>12</sup>

<sup>&</sup>lt;sup>11</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{12}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 137 of 386 losses<sup>13</sup> (35 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 114 (30 percent) were to the mid-career group, and 135 (35 percent) were to the senior career group. This represents a 28 percent decrease in losses in FY2009 when compared to FY2008 for the future career group, a 12 percent decrease in the mid-career group, and a 28 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A8-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

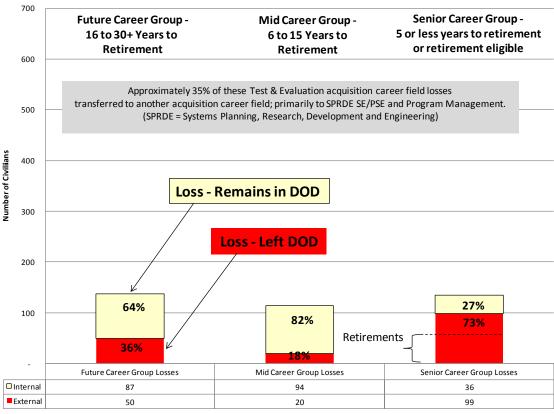


Figure A8-7. Defense Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source - External and Internal (T&E-acquisition Career Field) (Civilians)<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

<sup>&</sup>lt;sup>14</sup> AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Workforce turnover is a common assessment measure.<sup>15</sup> Figure A8-8 provides a comparison of defense acquisition workforce turnover rates for the workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall, turnover rates decreased in FY2009, most likely due to economic conditions.

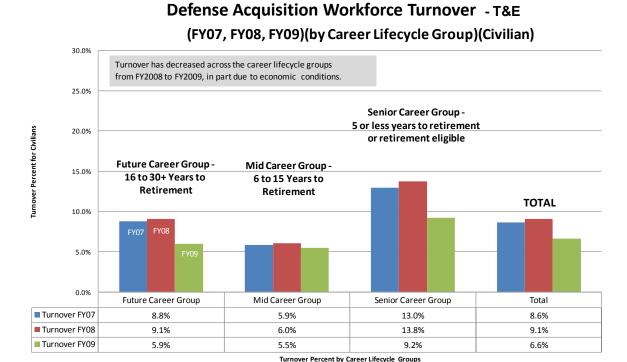


Figure A8-8. Defense Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (T&E-acquisition Career Field) (Civilians)<sup>16</sup>

Analysis capability on gain/loss patterns and factors will evolve to support improved targeting and adjustments to workforce initiatives.

**Retirement Eligibility.** Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A8-9 below indicates that 10 percent (629) of the civilian T&E (acquisition) workforce are eligible for full retirement benefits and an additional 16 percent (952) will become eligible within the next five years. Approximately 15% of the T&E workforce is under the Civil Service Retirement System (CSRS) and the 85% are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government.<sup>17</sup> The rate of separation spikes from 6 percent at one year before retirement eligibility to 19 percent during the first year of eligibility. Based on past

<sup>&</sup>lt;sup>15</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

AT&L HCI generated from HCI/RAND analysis using DMDC data (end of FY08 and end of FY09 data).
 Asch B., Haider S., and Zizzimopoulos, J. (2003) The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense. p. 25.

retirement patterns, approximately 60 percent of the T&E workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

Ongoing workforce initiatives and effective workforce planning and management will help mitigate the loss of these experienced workforce members.

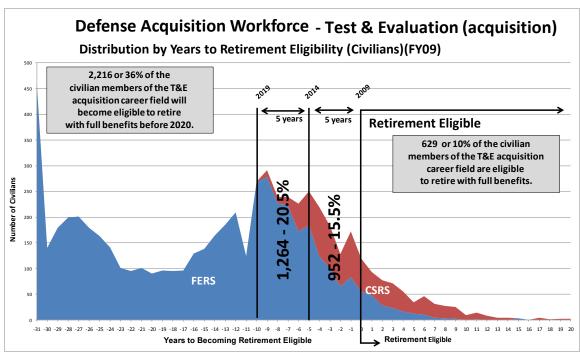


Figure A8-9. Defense Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (T&E-acquisition Career Field) (Civilians)<sup>18</sup>

## **Test and Evaluation Competency Model and Assessment**

Past studies and efforts have evolved the competencies of the defense acquisition T&E workforce. A 2005 joint OSD, Service and agency workgroup analyzed and identified needed T&E workforce competencies. The identified T&E competencies were used as the basis for a gap analysis of certification courses; ultimately resulting in a major DAU T&E curriculum re-engineering effort that culminated in a series of new T&E certification courses as well as substantial increased functional certification requirements for the defense acquisition T&E career field. This effort was supported by a 2006 National Research Council (NRC) study which recommended a variety of specific changes impacting T&E in general and workforce key skills in particular. That NRC study addressed technical maturity issues emphasized early testing, policy streamlining and the need for greater access to expertise in software engineering and software

<sup>&</sup>lt;sup>18</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

testing, better use of modeling and simulation (M&S), and the need for greater technical expertise in the T&E community.

Senior AT&L leaders are partnering with the OSD (Personnel and Readiness), Functional Leaders, and the Components to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities, including defense acquisition T&E. Updated acquisition functional competency models will enable workforce assessments and improve data-driven human capital planning. Results of the assessments will provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications. AT&L will work with the T&E Functional leader and community to ensure currency of the competency model and ensure readiness for workforce assessments and other workforce applications. The phased process leading to defense acquisition T&E workforce assessments will begin in FY2010.

#### Certification/Standards

The DOD Test and Evaluation (acquisition) Functional Leader establishes workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. As part of the DOD acquisition position designation process, Components establish certification level requirements by career path within a functional career field category for each position. The incumbent is required to meet the certification requirements of that position within 24 months. The defense acquisition T&E career field is organized around a "Core Plus" learning architecture that seamlessly links acquisition, functional certification standards with a variety of assignment-specific short courses. Notably, to qualify for T&E certification, one must have a baccalaureate degree and at least 24 semester hours in technical or scientific courses [e.g., mathematics (e.g., calculus, probability, and statistics), physical sciences, psychology, engineering, etc.]. Re-engineering of the T&E career field has resulted in a 30 percent increase in overall functional training to include additional selected cross-training in Systems Engineering as well as modeling & simulation (M&S). To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A Test and Evaluation (acquisition) development guide (Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx. Table A8-3 shows the T&E certification level requirements established by the components for designated acquisition positions.

Certification Level Requirements by Service (FY2009)  Test and Evaluation (T&E)								
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)	
Army	165	679	1,391	2,235	7.4%	30.4%	62.2%	
Navy	374	501	1,956	2,831	13.2%	17.7%	69.1%	
Air Force	264	2,037	328	2,629	10.0%	77.5%	12.5%	
DCMA	0	16	7	23	0.0%	69.6%	30.4%	
DLA	0	1	1	2	0.0%	50.0%	50.0%	
Other Defense	1	22	146	169	0.6%	13.0%	86.4%	

Table A8-3. Defense Acquisition Positions - Certification Level Requirements by Component (T&E-acquisition Career Field)(FY2009)(All positions –Military and Civilians)<sup>19</sup>

Based on component-reported data, the percentage of T&E acquisition workforce members who have met or exceeded certification requirements was 53 percent in FY2007 and 58 percent for FY2009. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For the T&E career field as a whole, assessment indicates 42 percent may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage may actually decrease due to the increase in workforce size. Leadership emphasis continues on achieving required certifications as well as improving data quality and reporting. Figure A8-10 summarizes certification rates for the Services and 4th Estate.

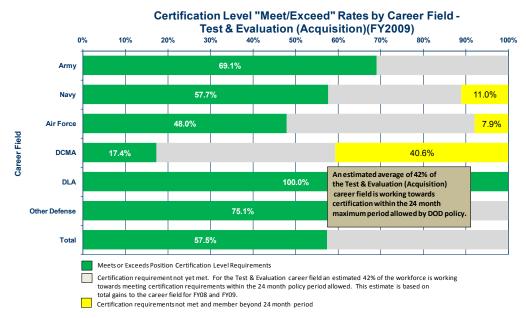


Figure A8-10. Defense Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates for the T&E-acquisition Career Field by Component (Military and Civilians)<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> AT&L Workforce Data Mart (End of FY09 data)

### **SUMMARY**

DOD's acquisition workforce improvement strategy, to include improvements to the Test and Evaluation (acquisition) workforce, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The horizontal enterprise analysis presented in this appendix on the DOD Business career field builds the foundation for data-driven decision making to improve the Business workforce. It is understood that vertical analysis by the Component and at organizational levels is necessary for successful implementation of workforce strategy and initiatives.

This report provides for improved transparency and is a dynamic living document which will capture ongoing updates at <a href="https://acc.dau.mil/acquisitionworkforce">https://acc.dau.mil/acquisitionworkforce</a>.

<sup>20</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification

AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (military and civilian)(including administrative/recoding) for FY2008 and FY2009; and transfers between career fields. Gains, losses and migration data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

# Appendix 9 - Army Defense Acquisition Strategic Workforce Plan

(Appendix 1 of the 2009 DoD Civilian Human Capital Strategic Plan Update)

Human Capital Fact Sheet 2009 - Army							
Defense Acquisition Workforce (DAW) Army	Civilian (Civ) Military (Mil) Army Army DAW DAW		Total Army DAW (Civ + Mil)	Total Defense Acquisition Workforce			
Size & Composition							
FY09 Workforce Size	38,612	1,744	40,356	133,103			
Change in size 2008-2009	0%	10%	0%	6%			
Civilian/Military Composition	96%	4%	-	89% / 11%			
DAW 2015 Growth Target			14%	15%			
Educational Attainment							
Bachelor's Degree or Higher	75%	84%	75%	79%			
Graduate Degree	24%	64%	26%	29%			
Certification (Cert)	•						
Level I or Higher Achieved	70%	63%	70%	72%			
Level II or Higher Achieved	58%	55%	58%	60%			
Level III Achieved	40%	33%	40%	36%			
Position Cert Requirement Met or Exceeded	55%	50%	55%	60%			
Planning Considerations							
% Baby Boomer/Traditional Generations	63%	22%	61%	58%			
Average Age	46.3	40.0	46.1	45			
Workforce Life-Cycle Model (YRE)	33/31/36			32/33/35			
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)			
Average Years of Service	16.7	16.8	16.7	16.3			
Retirement Eligible	6,675 (17%)	-	-	19,395 (16%)			
Retirement Eligible w/i 5 Years	7,111 (19%)	-	-	21,567 (18%)			
Total Career Field Gains/Losses	6,113/6,503	-	-	19,786/13,042			
Training Statistics		2008 Army	2009 Army	AT&L 2009			
DAU Course Graduates (Classroom)		11,233	12,856	39,568			
DAU Course Graduates (Web)		31,003	39,827	154,399			
DAU Continuous Learning Completions		117.653	169.144	494.568			



Honorable Malcolm R. O'Neill
Assistant Secretary
of the Army for
Acquisition, Logistics
and Technology



LTG William N. Phillips
Principal Military Deputy
Assistant Secretary
of the Army for
Acquisition, Logistics
and Technology
Director, Acquisition Career
Management



Mr. Craig Spisak
Deputy Director,
Acquisition Career Management
Army

The Department of the Army, Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology [OASA (ALT)] is led by the Honorable Malcolm R. O'Neill. Dr. O'Neill is the Army's Acquisition Executive. In this role, he provides oversight for the life cycle management and sustainment of Army weapons systems and equipment from research and development through test and evaluation, acquisition, logistics, fielding, and disposition. He is also responsible for appointing, managing, and evaluating program executive officers and managing the Army Acquisition Corps and the Army Acquisition workforce. Dr. O'Neill represents the Department of the Army to USD (AT&L) and to Congress on all acquisition policy and program-related matters. He is supported by an acquisition leadership team which includes Principal Military Deputy Assistant Secretary of the Army for ALT, Lieutenant General (LTG) William Phillips, and the Principal Civilian Deputy Assistant Secretary of the Army for ALT. LTG Phillips, as the Army Director of Acquisition Career Management (DACM), carries out workforce responsibilities for acquisition education, training, and career management with support from the Deputy DACM, Mr. Craig Spisak. This OASA (ALT) senior leadership team and the Army acquisition workforce proudly serve our nation's warfighters.

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

The mission of the US Army is to "protect and defend our Nation's vital security interests and to provide support to civil authorities in response to domestic emergencies." In order to meet this mission, the Army must have an "expeditionary, campaign-quality Army capable of dominating across the full-spectrum of conflict, at any time, in any environment and against any adversary-for extended periods of time." In addition, the Army is undergoing their largest organizational change since World War II. The impact of the Base Realignment and Closure initiative (BRAC) over the next few years has played a vital role in how the Army will need to adjust and realign its workforce capabilities. To address these concerns, the Army has implemented strategic directives and operation plans to ensure an optimal and capable workforce is maintained while

Mission Statement
Effectively and efficiently
develop, acquire, field, and
sustain materiel by leveraging
domestic, organic,
commercial, and foreign
technologies and capabilities
to meet the Army's current and
future mission requirements

-Office of the Assistant Secretary of the Army for Acquisition, Logistics & Technology undergoing its transformation. The Army Modernization Strategy defines the Army's approach to meeting current and future challenges. Through the execution of this strategy, the goal is to bring the Army "back into balance" by 2011. The "Grow the Army" (GTA) initiative will support this goal through the increase of 74,200 soldiers in Army end strength across the Active, Guard and Reserve components to help meet strategic demands, mitigate persistent capability shortfalls, and reduce stress on soldiers and families. An agile, right-sized, right skilled acquisition workforce is imperative to support the Army's growth and transformation.

The Army's status report to Congress documented evaluation of recommendations made in the Report of the Commission on Army

Acquisition and Program Management in Expeditionary Operations (Gansler Commission). The report outlined initiatives and corrective actions that have been implemented to help strengthen the Army's acquisition and contracting capabilities. A few examples of these initiatives include establishment of the U.S. Army Contracting Command and the Army Contracting Campaign Plan to help guarantee continuous improvement in contracting activities.

The Army recognizes that strategic alignment is critical in ensuring Army mission goals and objectives are successfully met. The ASA (ALT) has identified key strategic objectives (also known as "Ends") that are in direct alignment with the Army enterprise strategy. The Army Balanced Scorecard tool was developed to monitor and communicate progress in meeting these key objectives (ends). Figure A9-1 lists the five key objectives that support the ASA (ALT) vision and mission.

<sup>&</sup>lt;sup>2</sup> Army Modernization Strategy



Figure A9-1. Key ASA (ALT) Strategic Objectives (Ends).

#### **Army Acquisition Workforce Initiatives**

Strategic Shaping. The strategic reshaping of Army acquisition career fields will be realized through planned growth. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. Table A9-1 reflects a snapshot of ongoing planning to grow the acquisition workforce and reflects areas targeted for reshaping such as Program Management, Contracting, and Systems Planning, Research, Development and Engineering (SPRDE). The planning supports the Secretary of Defense acquisition workforce growth strategy, implementation of the Weapon Systems Acquisition Reform Act of 2009, and Army objectives.

Army Acquisition Career Field/Path/Other	% of Total DAW Growth	% Career Field Growth
Contracting	28%	17%
SPRDE	22%	12%
Program Management	20%	32%
Life Cycle Logistics	13%	12%
BCEFM (includes cost estimating & pricing)	10%	16%
Information Technology	3%	8%
Other	1.4%	n/a
Test & Evaluation	1.1%	3%
Facilities Engineering	0.9%	5%
PQM	0.42%	1%
Purchasing	0.14%	2%

Table A9-1. DOD Acquisition Workforce Projected Functional Growth

The following are additional improvement initiatives to strengthen the Army's acquisition workforce:

**Succession Planning**. The Army's Contracting Career Program (CP) office issued the "Senior Contracting Leadership Succession Plan." The plan addresses strategic, systematic and deliberate activity the community is pursuing to ensure the Army's capability to appropriately fill senior contracting positions. The plan includes a dual succession planning structure for executive level and non-executive level succession planning for the Army Contracting community. The plan also addresses recruitment, development and retention strategies for the community.

Army Workforce Data Collection and Analysis Tools. Maintaining workforce data enables the Army to assess retirement behaviors and facilitates the development and forecasting of training and other opportunities for the workforce in whole or targeted to a specific acquisition career field, organization, or geographic location. One of the tools used for a variety of purposes within the Army ALT community is a document called the Acquisition Career Record Brief (ACRB). The ACRB is a one-page display of civilian pertinent Army ALT information which contains personal, position, assignment, training, education, awards and certification information. It is also a critical part of the application package for various Army Acquisition selection boards. Workforce members can view their personal and professional data and are encouraged to review and update this information periodically. The U.S. Army Acquisition Support Center (USAASC) manages the ALT workforce database and supports the Army's DACM in his overall workforce responsibilities.

Army Materiel Command (AMC) Fellows Program. A 5-year fast-track, planned approach to developing future civilian leaders. At the completion of the program, each graduating Fellow will be fully-functional in at least two specialties. During the first 13 months of the program, Fellows attend formal classes at the AMC Logistics Leadership Center (ALLC) and Texas A&M in Texarkana, Texas. Each Fellow is offered the opportunity to earn a Masters Degree in Business. The remainder of the 5-year period is structured on-the-job training at various rotational assignments. Fellows sign a mobility agreement, which provides maximum flexibility to place them where needed throughout the Army upon graduation. Since the inception of the program, AMC has hired 591 Fellows and boasts a retention rate of approximately 94 percent.

**Recruitment Efforts.** Army Materiel Command directs its recruitment and retention efforts toward two opposing age spectrums of the workforce: the 29 and younger age group in order to grow a new generation of civil servants and the 50+ age category in order to retain a select number of highly skilled full-time and part-time employees to serve as mentors and trainers for the new generation of civilian employees.

Recent AMC focus has been on attracting additional high school and college graduate students into training and mentorship programs. Managers are

encouraged to establish high school, technical school, and college co-op programs as a way to expand their pool of candidates and provide training opportunities to develop a new generation of skilled and knowledgeable employees.

Veterans are another important recruitment source since they are already government trained individuals who can bring marketable skills and experiences into the workforce. Retention of a select number of the 50+ age group employees is under consideration as a strategy to retain sufficient experience. This approach involves offering retirees with critical skills an option to retire and return to the workforce as part-time employees or limited full-time workers to serve as mentors and trainers for the new generation of workers, as well as employees in the 30 to 49 age group category.

Senior Leadership Development Program (SLDP). This 18-month program offers a unique, interagency learning experience for Army contracting personnel by developing core leadership competencies. The program consists of a three 1-week classroom sessions and external experiential activities such as individual and small group work activities. The classroom component includes a program orientation, a leadership assessment experience, mentor selection and training, a strategic leadership seminar, a focused skills seminar, individual learning classes, and guest speakers. The on-the-job component includes a mentor, a faculty coach, developmental assignments, team projects, leadership forums, field experiences, focused reading, and web-based learning.

**Greening Program**. The Army's Program Executive Office (PEO) for Missiles and Space (M&S) in Huntsville, Alabama has established a Greening Program in partnership with the University of Alabama. This program provides participants with the knowledge needed to support Army Technology-based project—management programs. It also prepares student participants for upcoming changes in business opportunities in the Huntsville area as a result of the Base Realignment and Closure (BRAC) process and helps them gain the knowledge needed to successfully support Army project-managed programs.

**Rotational Assignments**. Many of the Army's Program Executive Offices support the structured development of Army interns from the disciplines that underpin acquisition. For example, Program Executive Office (PEO) Missiles and Space (M&S) has rotated approximately 33 Federal Career Intern Program (FCIP) interns through its offices where they gain an overall understanding of the relationship between the PEO staff and its PM elements.

The Army's PEO for Combat Support and Combat Service Support (CS&CSS), located in Warren, Michigan, worked with its Life Cycle Management Center (LCMC) partners to develop a three-year cross development program for ALT workforce members. Participants work with a mentor to develop a personalized

program with a broad range of learning opportunities/situations in various acquisition career fields.

RED Box Relocation Kit. Under the 2005 Base Re-alignment and Closure (BRAC) decision, the Communication-Electronics Command (CECOM) Life Cycle Management Center (LCMC) located at Ft. Monmouth, New Jersey, is moving to Aberdeen Proving Ground (APG), MD. To mitigate the potential loss of skilled employees, CECOM LCMC developed a comprehensive relocation communications strategy to ensure that its workforce was provided the most accurate information about BRAC- related activities. One tool which was developed was the RED Box (Relocation, Information, Entitlements, and Decision-making) which contains basic relocation information, including community profiles, maps, financial benefits of relocating, moving tips, etc. to help impacted employees make informed decisions about relocating to the LCMC's new location.

Relocation incentives are available for the Army Team Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR). In a joint effort to reduce the potential of losing employees occupying critical, hard-to-fill positions, the U. S. Army Acquisition Support Center (USAASC)/Army Materiel Command (AMC), and C4ISR offered employees relocation incentives to remain with the organization to ensure the continuation of the mission at Aberdeen Proving Ground (APG). These positions required specialized skills that were in high demand at APG and would have required extensive effort to fill if the personnel did not relocate.

**Coaching/Mentoring Program**. The Army Medical Research Acquisition Activity established a mentoring program that ensures that new ALT workforce members in the organization are quickly assigned a mentor to help them navigate the activity's processes and manage their workload. There are also mentoring teams that support the entire community upon their graduation from the mentoring program.

Knowledge Sharing – Lessons Learned. Both DOD and the Department of the Army value the vast talent, varied experiences, and historical perspective that the current ALT workforce provides to a project or acquisition program. In the planning and performance of critical acquisition duties, Army ALT workforce members take full advantage of available information and precedent scenarios when crafting acquisition plans, strategy and decision documents. Some of this information resides on DOD websites including Defense Acquisition University's (DAU) Acquisition Community Connection (ACC), the AT&L Knowledge Portal, and the DAU Ask-A-Professor (AAP) program. These sources of information assist new and existing ALT workforce members as they encounter changing work assignments for which they may not have personal experience or any inhouse expertise.

The Army also recognizes the merits of capturing information and best practices. The Army's Center for Army Lessons Learned (CALL) collects and processes lessons learned, tactics, techniques, and procedures, operational records, and other military records for archiving and dissemination through the CALL archives and the CALL Request for Information (RFI) system. CALL also supports Subject Matter Experts (SMEs) and practitioners throughout the Armed Forces by providing links to various training sites and resources, such as those linked to Contracting Training Sites, Contracting Resources and Training Support Packages.

**U.S.** Army Acquisition Education, Training and Experience Portfolio. The Army ALT workforce and its leadership must be appropriately trained and educated in order to perform its current mission and prepare for future challenges. Various leadership training opportunities are available to members of this workforce at all levels, beginning at the entry level and continuing to the Senior Executive Service level. These programs provide Army ALT workforce members leadership development, support retention initiatives and serve to attract new employees into the ALT community. Table A9-2 is a partial list of available programs:

Program	Description
School of Choice Program	Provides civilian ALT workforce members an opportunity to obtain or complete an undergraduate or graduate degree during duty hours with 24 months. All colleges and universities must be nationally accredited and offer degree programs in disciplines that underpin acquisition functions.
Competitive Development Group/Army Acquisition Fellowship (CDG/AAF) Program	A 3-year professional and leadership developmental education and training program offering expanded leadership education, leadership opportunities and developmental assignments for competitively selected GS-13 (broadband/payband equivalents) Army Acquisition Corps (AAC) members. CDG/AAF fellows are detailed to developmental assignment profiles throughout the U.S. Army acquisition community based on individual education, experience and training needs, as well as current or anticipated needs of the Army.
Leadership for a Democratic Society	Offered through the Federal Executive Institute (FEI), focuses on personal leadership, organizational transformation, policy, and global perspectives. Members of the Army Acquisition Corps who are 6S-15/COL and above or equivalent pay band are eligible to apply for this opportunity offered at various times during the year.
Harvard University, JFK School of Government	Centered on the case method pioneered at Harvard, and explores issues such as cooperative versus competitive interaction with governmental agencies and political appointees. This program is for middle managers and builds executive skills in political and public management, negotiation, human resources management, policy making, organizational strategy, communication, ethics and leadership.
Council for Excellence in Government (EIG) Fellowship Program with an Acquisition Concentration	The EIG is a year- long hands-on leadership development program specifically designed for federal and state government professionals. EIG meets the interagency training requirements necessary for OPM-approved candidate development programs and is designed to complement the core qualifications for members of the Senior Executive Service. The program enables participants to develop their leadership/management abilities while creating strategies and achieving results for their agencies. The Acquisition concentration ensures that Fellows will most effectively use that which they have experienced while in the program.
Executive Leadership Program – Team Learning Event	This is a capstone senior executive leadership, acquisition and sustainment course for current Army Acquisition Corps/ GOs/SESs and high performing O-6s and GS-15s (broadband/payband equivalents). The course is designed to facilitate review, analysis, and discussions about major issues impacting the ALT workforce.
Reserved	Reserved
The Senior Service College Fellowship Program (SSC- FP)	A 10- month educational opportunity conducted under the auspices of the Defense Acquisition University (DAU) at Huntsville, AL, Warren, MI and Aberdeen Proving Ground, MD. The purpose of the SSC-FP is to provide leadership and acquisition training to prepare senior level civilians for senior acquisition leadership roles such as Product and Project Managers, Program Executive Officers and key acquisition positions.
Industrial College of the Armed Forces (ICAF)	This Senior Service College (SSC) prepares selected military officers and civilians for senior leadership and senior staff positions by conducting postgraduate, executive-level courses of study and associated research dealing with the resource component of national power. The Army Acquisition Corps is allocated seven civilian acquisition slots annually for senior acquisition professionals (GS-14/15/broadband/payband equivalent) to attend this 10 month program and the selection is competitive through a Department of the Army board section process.
Naval Postgraduate Master of Science in Program Management (MSPM) - Distance Learning	The two year MSPM curriculum provides acquisition professionals with the knowledge, skills and abilities to lead and manage effectively. Students engage in the study of concepts, methodologies and analytical techniques necessary for successful leadership of programs/projects within complex organizations.

Table A9-2. Key Army Acquisition Training, Education and Experience Programs

### **WORKFORCE ANALYSIS**

**Fiscal Year 2009 Acquisition Workforce Count – Army.** As shown in Table A9-3, the Army acquisition workforce had 40,356 members as of the end of FY2009 and is comprised of 96 percent civilian (38,612) with 4 percent military (1,744). The Army acquisition workforce constitutes 31 percent of the organic<sup>3</sup> Defense acquisition workforce.

Defense Acquisition Workofrce Count and Composition Army (Military+Civilian)(FY09)									
Career Field	FY09	FY09 (%)	Civ	Mil	Civ (%)	Mil (%)			
SPRDE (PSE)(SE)	10,208	25.3%	10,101	107	99.0%	1.0%			
CON	8,391	20.8%	7,741	650	92.3%	7.7%			
LCL	7,952	19.7%	7,952	0	100.0%	0.0%			
PM	3,452	8.6%	2,529	923	73.3%	26.7%			
BCEFM	2,771	6.9%	2,771	0	100.0%	0.0%			
T&E	2,235	5.5%	2,222	13	99.4%	0.6%			
PQM	1,930	4.8%	1,930	0	100.0%	0.0%			
IT	1,843	4.6%	1,794	49	97.3%	2.7%			
Other	1,345	3.3%	1,345	0	0.0%	0.0%			
Unknown	229	0.6%	227	2	99.1%	0.9%			
Total	40,356	100.0%	38,612	1,744	95.7%	4.3%			

Table A9-3. Size and Composition of Army Workforce<sup>4</sup>

Army Acquisition Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The Army acquisition workforce count decreased by 17 percent; from 48,697 members in FY2005 to 40,356 in FY2009 (Figure A9-2). From FY2008 to FY2009 the Army acquisition workforce count increased from 40,269 to 40,356. This increase represents the net impact of various factors to include gains and losses associated with personnel actions such as hiring, separations and transfers. Additional factors that can impact workforce count include statutory requirements, count methodology, Total Obligation Authority, force change initiatives, and administrative coding changes to acquisition positions.

<sup>&</sup>lt;sup>3</sup> For the purposes of this report, the word "organic" is used to help the reader distinguish between 1) government employees and military members (both organic); and 2) contractor support. Each group contributes as part of a Total Force to accomplish the defense acquisition mission.

<sup>&</sup>lt;sup>4</sup> AT&L Workforce Data Mart (end of FY09)

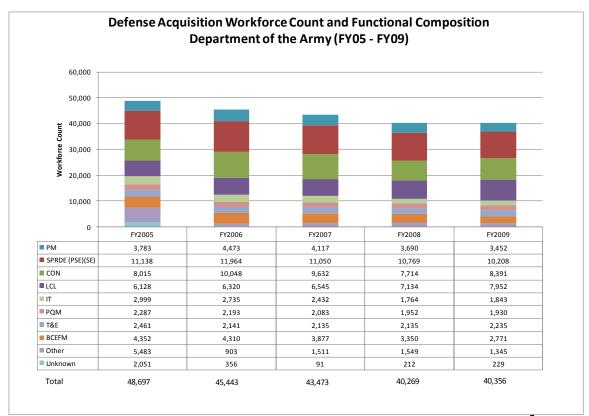


Figure A9-2. Historical Size of Army Workforce (Military & Civilian)<sup>5</sup>

The Army acquisition civilian workforce represents various occupational series. Table A9-4 provides a breakout of the top five series in the Army acquisition workforce. The highest percentage of civilians is in the Contract Specialist (1102) series (15.6 percent).

Top 5 Occupation Series (FY09) Army (Civilian)							
Occupation Series - Description	Total	Total (%)	Cumulative (%)				
1102 - Contract Specialist	6,307	15.6%	15.6%				
0346 - Logistics Management Specialist	4,484	11.1%	26.7%				
0801 - Engineer, General	3,471	8.6%	35.3%				
0301 - Administration & Program Staff	2,720	6.7%	42.1%				
0855 - Engineer, Electronics	2,521	6.2%	48.3%				
#Occ Series in Career Fields = 142							

Table A9-4. Top 5 Army Civilian Acquisition Workforce Occupation Series<sup>6</sup>

A9-10

<sup>&</sup>lt;sup>5</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2009 workforce counts.
<sup>6</sup> AT&L Workforce Data Mart (end of FY09)

Assessment of Projected Workforce Growth. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, the Army acquisition workforce is projected to grow approximately 5,891 (14%) by FY2015. Part of this growth, approximately 4,006 is associated with the DOD initiative to rebalance the workforce through insourcing. The Army is actively planning and deploying initiatives that support the defense acquisition workforce growth strategy. The Army has submitted planning and progress updates to OSD and to the Defense Acquisition Workforce Senior Steering Board. Growth is underway.

Normal losses and hiring to fill vacancies, also referred to as replenishment hiring, must be considered as part of assessing total hiring and needed retention through 2015. Analysis indicates that to sustain the growth strategy for the Army acquisition workforce requires that gain levels, including replenishment hiring, should be at approximately 5,260 for FY2010, 4,250 for FY2011 - FY2012, 4,300 for FY2013, and then declining to 3,700 through FY2019. Corresponding retention needs require losses at or below 3,238 for FY2010, 3,400 for FY2011, 3,500 for FY2012, and then average approximately 3,660 in following years. In FY2009, the Army acquisition workforce experienced approximately 5,100 gains and 3,300 losses. This analysis does not include the administrative gains (coding) of approximately 1,100 facilities engineers and assumes an increase of growth hiring through FY2015 of approximately 2,900. Noted is that this analysis by OUSD (AT&L) may not include other Component specific factors that impact projected gains and losses.

Army Acquisition Workforce Lifecycle Assessment. The Workforce Lifecycle Model (WLM) (Figure A9-3) provides a visual display of a workforce in three cohort groups - Future (early career) workforce, Mid-career and Senior-career cohort groups. The Years to Retirement Eligibility (YRE) distribution for the Defense acquisition workforce is 32/33/35. The distribution of the Army acquisition workforce members between the three cohorts is similar at 33/31/36 percent respectively. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce lifecycle, retirement eligibility and the "bow wave," and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives.

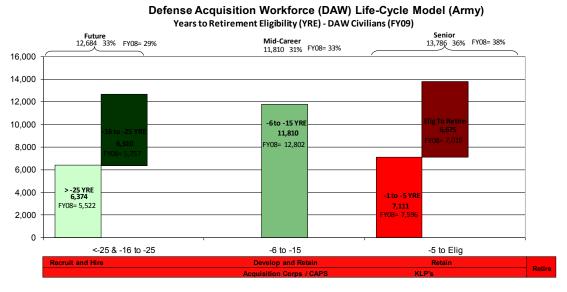


Figure A9-3. Army Acquisition Workforce (Civilian) Lifecycle Model (WLM)<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> AT&L Workforce Data Mart (End of FY09)

**Army Workforce Gains and Losses.** Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the Army acquisition workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses.

For this analysis gains to the Army acquisition workforce are categorized in two ways: 1) a new hire to DOD who becomes an incumbent on an Army position designated acquisition or 2) a "switch-in" which is a gain from within DOD who newly occupies an Army acquisition position (i.e., they were not recorded as being on a Army acquisition position in the prior fiscal year). The "switch-in" category is divided into two sub-categories: 1) switch-ins that are substantive gains, and 2) administrative gains. Losses are categorized in the same manner. Figure A9-4 depicts the gains/losses for the Army acquisition workforce, to include substantive and administrative switches. Corresponding FY2008 (prior year) gains and loss numbers are provided in parentheses.

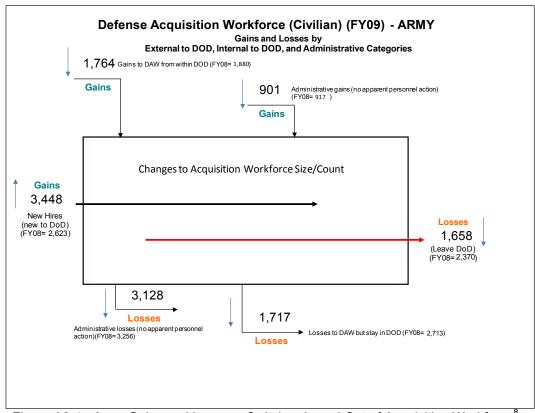


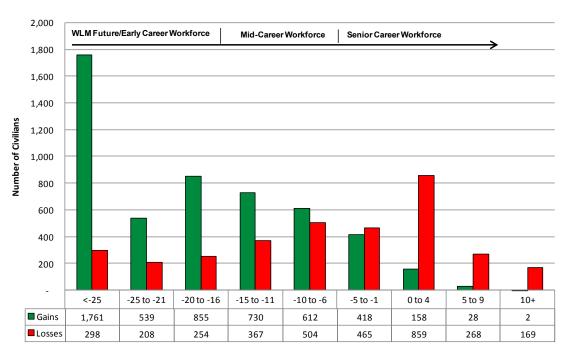
Figure A9-4. Army Gains and Losses - Switches In and Out of Acquisition Workforce<sup>8</sup>

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<sup>8</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

Substantive gains are those in which a person newly occupies a Defense acquisition position in the Army acquisition workforce during the fiscal year and is associated with a transfer involving a lateral transfer or change in occupation series. For this analysis, substantive gains can come from elsewhere in DOD, to include from others in the Army that were not members of the acquisition workforce in the prior fiscal year. Losses are categorized in the same manner. Administrative gains and losses appear to be "in-place" changes in which an encumbered position is designated acquisition (a "gain"), the acquisition designation is removed (a "loss"), or the acquisition career field designation is updated. Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help highlight hiring, retention and career management needs. Figure A9-5 depicts the Army acquisition workforce civilian gains and losses by "years to retirement eligibility" groups that took place during FY2009.



 $<sup>{\</sup>bf *Does\ not\ include\ administrative\ gains\ and\ losses}$ 

Figure A9-5. Gains vs. Losses (Army Civilians)<sup>9</sup>

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<sup>&</sup>lt;sup>9</sup> RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

FY09 data indicates that 3,155 of 4,497 gains<sup>10</sup> (62 percent) (less administrative gains) to the civilian acquisition workforce were to the future career group, 1,342 (26 percent) were to the mid-career group, and 606 gains (12 percent) were to the senior career group. This represents an 18 percent increase in gains from FY08 to FY09 for the future career group, a 15 percent increase in the mid-career group, and a 15 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A9-6 depicts the external hires and internal gains by lifecycle career group.

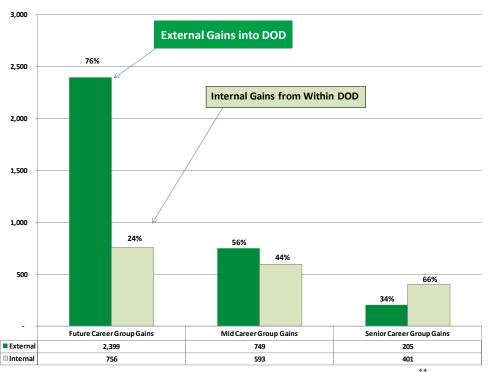


Figure A9-6. Army Acquisition Workforce (Civilians) Gains (FY09)<sup>11</sup>

11 RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

<sup>&</sup>lt;sup>10</sup> Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans

FY09 data indicates that 760 of 3,311 losses<sup>12</sup> (23 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 871 (26 percent) were to the mid-career group, and 1,680 gains (51 percent) were to the senior career group. This represents a 34 percent decrease in losses from FY08 to FY09 for the future career group, a 30 percent decrease in the mid-career group, and a 36 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A9-7 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

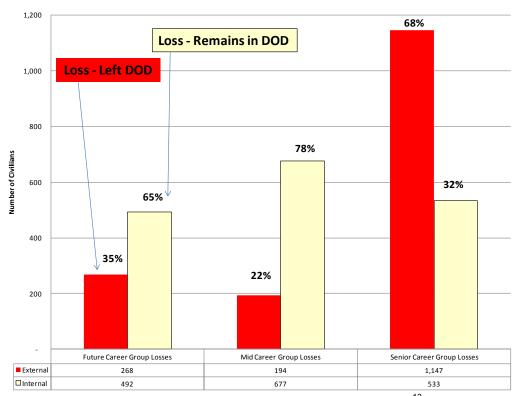


Figure A9-7. Acquisition Workforce (Civilians) Losses (FY09)<sup>13</sup>

<sup>13</sup> RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

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<sup>12</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

Workforce turnover is a common workforce assessment measure.<sup>14</sup> Figure A9-8 provides a comparison of historical turnover rates for the Army acquisition workforce as a whole and then by Future, Mid-career, and Senior-career groups. Overall and across the career group categories, turnover rates decreased in FY2009, likely due in part to economic conditions.

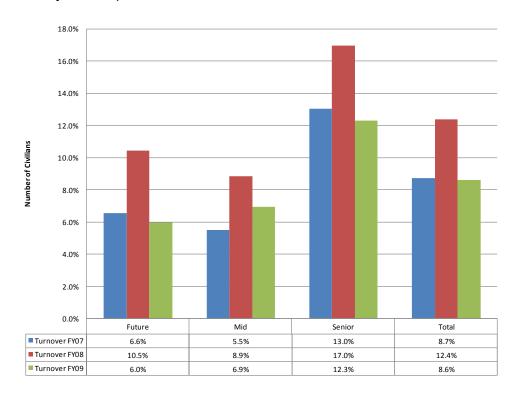


Figure A9-8. Historical Turnover – Army Acquisition Workforce (Civilians)<sup>15</sup>

Retirement Eligibility. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. Sixty-three percent of the Army acquisition civilian workforce is in the Baby Boomer or Traditional generations. The retirement profile in Figure A9-9 indicates that 17 percent (6,675) of the Army civilian workforce is eligible for full retirement benefits and an additional 19 percent (7,111) will become eligible within the next five years. An average of 1,410 members (approximately 4 percent) of the Army civilian workforce per year will become fully retirement eligible each year through FY2019. Approximately 23 percent of the Army civilian workforce is under the Civil Service Retirement System (CSRS) and the 77 percent are under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government. The rate of separation for the Army civilian workforce spikes from 5 percent at one year

<sup>&</sup>lt;sup>14</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>15</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

<sup>&</sup>lt;sup>16</sup> Asch B., Haider S., and Zizzimopoulos, J. (2003) The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense. p. 25.

before retirement eligibility to 19 percent during the first year of eligibility. Based on past retirement patterns, approximately 53 percent of the Army civilian workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

As with the DOD as a whole, the Army acquisition workforce, is experiencing the departure of the Baby Boomers from the workforce. The loss of experienced

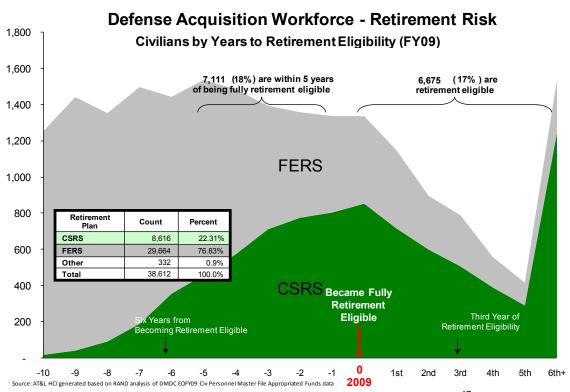


Figure A9-9. Retirement Eligibility of Civilian Army Workforce<sup>17</sup>

#### Certification/Standards

The DOD Acquisition Functional Leaders establish workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. The Army assigns certification level requirements to positions designated as acquisition. DOD acquisition career fields are organized around a "Core Plus" learning architecture that links acquisition, functional certification standards with a variety of assignment-specific short courses. Incumbents are required to meet position certification requirements within 24

<sup>&</sup>lt;sup>17</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

months. To promote career long development and currency, Army acquisition workforce members are required to complete 80 continuous learning points every two years. A career development guide (the Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and job-specific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A9-5 shows the Army certification level requirements for designated acquisition positions.

Certification Level Requirements by Service Army (FY09)									
Acquisition Career Field	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)		
SPRDE (PSE)(SE)	477	2,441	7,286	10,204	4.7%	24%	71%		
CON	1,113	4,766	2,489	8,368	13.3%	57%	30%		
LCL	471	4,521	2,960	7,952	5.9%	57%	37%		
PM	165	976	2,256	3,397	4.9%	29%	66%		
BCEFM	302	1,252	1,217	2,771	10.9%	45%	44%		
T&E	165	679	1,391	2,235	7.4%	30%	62%		
PQM	88	1,184	658	1,930	4.6%	61%	34%		
IT	111	908	820	1,839	6.0%	49%	45%		
FE	5	417	297	719	0.7%	58%	41%		
Purchasing	174	148	8	330	52.7%	45%	2%		
SPRDE (ST)	2	60	142	204	1.0%	29%	70%		
Property	4	72	16	92	4.3%	78%	17%		
Auditing	0	0	0	0	0.0%	0%	0%		

Table A9-5. Position Certification Requirements – Army Acquisition Workforce<sup>18</sup>

Based on component-reported data, the percent of Army acquisition workforce members (DOD-wide) who have met or exceeded certification requirements for Army acquisition positions increased from 42 percent in FY2007, to 49 percent in FY2008, and 55% in FY2009. This improvement was driven by leadership emphasis on achieving certifications and ensuring improved data quality. Noted is that a large segment of the remainder of the workforce is within the 24 month grace period established by policy for meeting position certification requirements. Normal turnover and replenishment hiring creates a large group that is pursuing certification within the 24 month policy time period. For the Army acquisition workforce as a whole, approximately 36 percent may be within the 24 month period allowed to achieve certification. Figure A9-10 summarizes certification rates for the Army as of the end of FY2009.

<sup>&</sup>lt;sup>18</sup> AT&L Workforce Data Mart (End of FY09 data)

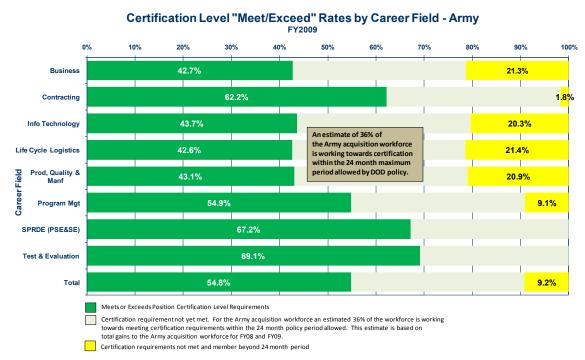


Figure A9-10. Percent Army Acquisition Workforce Meeting Position Certification Requirements<sup>25</sup>

#### **SUMMARY**

Air Force.

The Army has significant efforts underway to increase the size and improve the quality of its acquisition workforce. DOD's and the Army acquisition workforce improvement strategy, is supported by a comprehensive and evolving workforce analysis capability. This capability is necessary for data-driven acquisition workforce planning and strategy decisions. The enterprise analysis tools and analysis presented in this appendix builds the foundation for data-driven decision making to improve the Army acquisition workforce. It is understood that Army analysis at the organizational level is necessary for successful implementation of workforce strategy and initiatives. This appendix and additional information on the Defense acquisition workforce is available at

www.dau.mil/defenseacquisitionworkforce (pending)

<sup>&</sup>lt;sup>25</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCl-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCl estimate of in-progress certifications within 24 month policy period based on number of all gains (including administrative/recoding) for FY2008 and FY2009. Gains and loss data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCl. DoN and Air Force percentages directly provided by DoN and

#### Appendix 10 – Department of the Navy **Defense Acquisition Strategic Workforce Plan**

(Appendix 1 of the 2009 Implementation Report for the DoD Civilian Human Capital Strategic Plan)

Human Capital Fact Sheet 2009 - Dept of Navy							
Defense Acquisition Workforce (DAW) Department of Navy (DON)	Civilian (Civ) DoN DAW	Military (Mil) DoN DAW	Total DoN DAW (Civ + Mil)	Defense Acquisition Workforce			
Size & Composition							
FY09 Workforce Size	42,726	4,246	46,972	133,103			
Change in size 2008-2009	11%	-5%	9%	6%			
Civilian/Military Composition	91%	9%	-	89% / 11%			
DAW 2015 Growth Target			12%	15%			
Educational Attainment							
Bachelor's Degree or Higher	80%	82%	80%	79%			
Graduate Degree	24%	30%	24%	29%			
Certification (Cert)							
Level I or Higher Achieved	72%	66%	71%	72%			
Level II or Higher Achieved	61%	44%	60%	60%			
Level III Achieved	42%	23%	41%	36%			
Position Cert Requirement Met or Exceeded	62%	59%	62%	60%			
Training Statistics		2008 DoN	2009 DoN	2009 DAU Total			
DAU Course Graduates (Classroom)		9,453	10,375	39,568			
DAU Course Graduates (Web)		27,422	35,544	154,399			
DAU Continuous Learning Completions		46,774	56,572	494,568			







Ms. Rene Thomas-Rizzo Director, Acquisition Career Management Department of the Navy

#### **Background**

Success in Department of Navy (DoN) acquisition is dependent on having the right people with the right skills in all phases of the acquisition lifecycle. In 2009, the Acquisition Workforce (AWF) represented just over 8% of the DoN's total military and civilian force, but was responsible for executing nearly 45% of it's Total Obligation Authority (TOA).

Since the 1990's, the value of DoN contracting increased by more than 50%, while at the same time, the AWF declined by nearly 50%. This has resulted in an AWF that now has less time to focus on the critical "up-front" steps in the acquisition process, including understanding the requirements, early systems engineering, government/industry prototyping, competition and contract administration. In essence, with these significant AWF losses and attendant workload increases, the DoN has lost some ability to manage the technical-cost tradespace of the 45% of the DoN TOA it is responsible to execute, including major weapons systems acquisition. The consequence is that DoN has less knowledge of the cost and complexity of the systems that DoN procures under contract.

#### **Secretary of Defense AWF Initiative**

In his March 2009 memorandum, the President communicated his intent that the federal acquisition workforce have the capacity and ability to develop, manage, and oversee acquisitions appropriately. On April 6, 2009, the Secretary of Defense announced three principal objectives that are key for improving the Department of Defense (DOD):

- Take care of the all-volunteer force which represents America's greatest strategic asset
- Rebalance the department's programs and enhance capabilities to fight the wars we are in today and the scenarios we are most likely to face in the future, while at the same time providing a hedge against other risks and contingencies
- Reform how and what we buy, meaning a fundamental overhaul of our approach to procurement, acquisition, and contracting

#### **AWF Strategic Plan Alignment**

On April 6, 2009 the Secretary of Defense announced his intent to in-source approximately 33,400 contractor support positions which includes 10,000 positions supporting acquisition. Strategic sizing and rebalancing the multi-sector acquisition workforce are critical elements of the DOD and DoN acquisition improvement strategy. Rebuilding the DoN AWF requires alignment and strategic imperatives to deliver the Navy's total workforce outlined in the Navy's total Force Vision for the 21st Century (NTF 21) of January 2010. The NTF 21 specifically calls out the need to develop a "learning organization" to provide a career continuum of training, education, and experiential learning and development, recognizing the Navy's workforce is becoming a leaner more versatile and highly technology-centric force.

In 2009, the DoN developed innovative programs and policies designed to recruit, develop and retain a high quality workforce, including the AWF. CNO set the standard that DoN should strive to become a Top 50 employer. Chief of Naval Personnel highlighted the Navy's efforts to be recognized in that elite group with his assessment: "We believe that a Top 50 organization is one that has innovative programs for its people, that recognizes people as their most valuable asset, and rewards them with an environment that is personally and professionally rewarding and challenging, that promotes a climate of respect and trust that encourages development and provides the rewarding work of service."

To achieve the CNO's NTF 21 Vision, the DoN's Human Capital Plan (HCSP) addresses personnel policies and resource management changes that are being pursued to support the Total Naval Force. The two DoN documents align with and support the OSD Human Capital Initiative (HCI) (Figure A10-1). The DoN HCSP focuses on leveraging leadership, exploiting scientific and technological advancements, and aligning personnel capability and expertise in "competencies." The HCSP spells out the attributes of a high performing Navy workforce:

- Responsive to the Joint Warfighter
- Competitive for the Best Talent in the Nation
- Diverse
- A Learning Organization
- Leader in Human Resource Solutions

Figure A10-1: NTF 21, Human Capital Strategic Plan and the OSD Human Capital Initiative (HCI)



The Assistant Secretary of Navy for Research, Development and Acquisition (ASN RDA) announced five Acquisition Excellence Initiatives in November 2009:

- Getting the Requirements Right
- Making Every Dollar Count
- Performing to Plan
- Minding a Healthy Industrial Base
- Acquisition Workforce

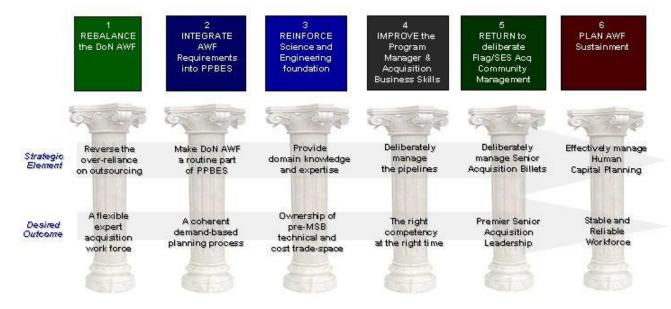
The DoN AWF Strategic Plan specifically addresses the Acquisition Workforce Initiatives and is in alignment with the DoN HCSP, the OSD HCI and CNO's NTF 21. It outlines a framework specific to the AWF to rebuild capacity and capability. It is fundamentally built on a precept that current and future DoN warfighing capability requires material solutions that are often complex, interoperable, and highly technical, which, in turn, demands technical, business, and leadership skills in the AWF capable of delivering it.

#### **DoN's Rebuilding the AWF Initiative**

The DoN AWF Strategic Plan is built upon a six-pillar foundation, as shown in Figure A10-2, that recognizes the need to (1) rebalance the current workforce (contractor and government), (2) make AWF a part of the DoN's annual planning, programming, and budgeting system, (3) strengthen DoN's science & engineering domain expertise, (4) improve program management, contracting, and business competencies, (5) deliberately coordinate leadership acquisition billets, (6) sustain the AWF.

The success of this plan, however, is dependent upon specific processes (and process improvements) that will enable acquiring, retaining, sustaining, and measuring a healthy AWF. These processes include: (1) requirements and demand, (2) outreach, recruiting and hiring, (3) retention and compensation, (4) education and training, (5) career management, (6) planning, programming and budgeting, (7) alignment.

Figure A10-2: Rebuilding the Acquisition Workforce



### Pillar 1 Re-balance the AWF

#### **Background:**

Based upon a 2007 and 2008 ASN(RDA) review of the acquisition workforce, with emphasis on program offices that develop and procure major weapons systems, it was determined that the DoN AWF is between 12-15% below the requirements threshold. The independent study found that many of DoN's major program offices were typically staffed with up to 50% contractor support performing core acquisition functions. It was also found that DoN's contractor support services and advisory services had grown to over 240,000 Full Time Equivalents (FTE) in 2008, a dramatic increase over the 2003 contractor totals. Hiring restrictions by some Systems Commands also resulted in outsourcing core Science and Engineering functions at the Navy's Warfare Centers. The result has been an over-reliance on contractors performing core acquisition functions.

To reverse this trend, DoN is in-sourcing 3505 acquisition positions between FY 10-15. DoN will add 1590 positions to meet demand by using the Section 852 funds (Defense Acquisition Workforce Development Funds), and other growth strategies to achieve a total growth of at least 5000 personnel over a six-year period.

Planned growth in each of the DoN Civilian Career Fields is shown in Figure A10-3. This chart indicates the number of civilian personnel in FY09 and the growth plan through FY15 in each of the Civilian Workforce Career Fields. Figure A10-4 shows the planned growth of the AWF and the concomitant reduction in contractors. This is an alternative look at the growth of the acquisition force and indicates, by three different means, the rebalancing of the AWF. The combination of "Other" and Section 852 related growth, results in a net 8% increase in the Total Acquisition Workforce.

Figure A10-3: DoN Civilian Workforce Career Fields

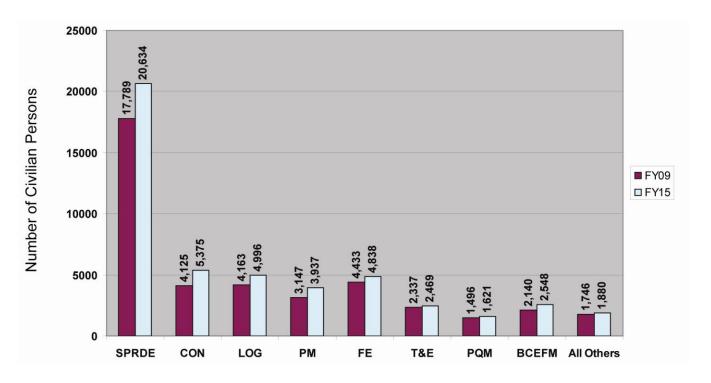
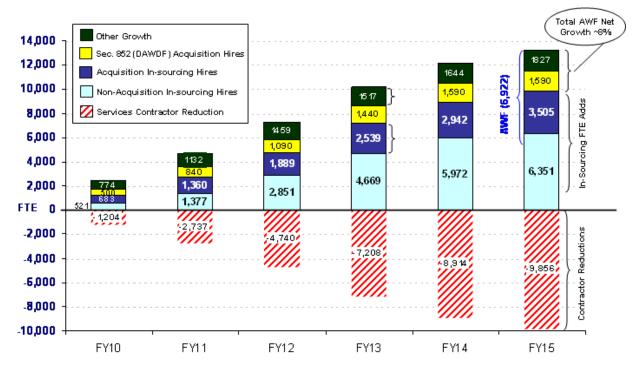


Figure A10-4: DoN Combined Civ AWF Growth Plan



#### **Objectives:**

- 1. Execute the AWF growth plan over Future Years Defense Plan (FYDP) to include in-sourcing of 3,500+ civilian personnel in addition to hiring 1,590 civilians with Section 852 funding.
- 2. Establish a comprehensive, data driven AWF analysis and decision-making capability through Total Force Analytical Models, leveraging N1 and USMC Modeling
- 3. Determine and improve AWF requirements based on System Command/Program Executive Office (SYSCOM/PEO) demand signal
- 4. Significantly improve knowledge of Contractor Support Services to understand their contribution to the total Acquisition Workforce.

Bottom Line – Appropriately increase the numbers of AWF government civilians based upon credible demand signals and improve AWF competence and expertise. <u>Reverse the Over-reliance on Outsourcing.</u>

## Pillar 2 Integrate AWF Requirements into PPBES

#### Background:

Planning, programming, and budgeting is a natural result from a disciplined requirements process. In 2009, SECNAVINST 5300.38 was established to ensure maximum coordination among multiple stakeholders with the goal of establishing AWF requirements and integrating them into the annual budget cycle. Key organizations involved in coordinating AWF requirements include SYSCOMS/PEOs, ASN(MR&A), OPNAV N1, ASN (FM&C), HQMC P&R, and ASN(RD&A). The desired effect is to implement a coordinated and repeatable demand-based planning process which produces more informed decisions regarding AWF funding and POM/PR execution.

#### **Objectives:**

- 1. Complete implementation of policies/processes defined in SECNAVINST 5300.38
- 2. Assess risks to matching budget with AWF requirements as part of Planning, Programming, Budgeting and Execution System (PPBES) process
- 3. Establish a standardized forum / tool with PEOs via SYSCOMs to communicate staffing plans and associated risks

Bottom Line - Implement a repeatable and coherent staffing process to vet AWF requirements in the PPBES to meet requirements. *Make AWF a Routine Part of PPBES*.

# Pillar 3 Reinforce Science and Engineering foundation

#### Background:

The DoN has a longstanding heritage of in-house expertise in Science and Engineering (S&E), both in the military and civilian communities. Without a strong Science and Engineering foundation, the AWF becomes no more than an administrative interface with limited knowledge of the systems it develops and procures. DoN relies on its Chief of Naval Research, Naval Research Laboratory and its Warfare Centers for much of its S&E foundation. Since the 1990's however, capacity has decreased by 47% with a corresponding increase of workload by 26%.

Restricted hiring at some Warfare Centers in the last decade contributed to diminished S&E capacity in DoN with approximately 60% fewer personnel under the age of 31 serving in Warfare Centers and the Naval Research Laboratory. The desired effect is to restore S&E talent to DoN to maintain a technological advantage, and to regain responsible DoN ownership of the technical-cost tradespace of technology and acquisition programs.

#### Objectives:

- 1. Increase in-house technical Domain Expertise (networks, ships, missiles, sonar, etc.) and increase Systems Engineering capacity by 14% over FYDP
- 2. Re-start Navy Laboratory/Center Coordinating Group as well as DoN Systems Engineering stakeholders groups to improve System Engineering competency
- 3. Reinvest in DoN's S&E workforce by attracting, rewarding, and retaining the Nation's most capable Scientists and Engineers
- 4. Leverage DoN Science & Technology community through Section 219 and other approved methods to make immediate changes
- 5. Investigate and improve current DoN policy regarding Independent Research and Development (IRAD) partnerships with industry

Bottom Line – Hire scientists and engineers at our Warfare Centers and the Naval Research Laboratory with the expertise that DoN needs to regain knowledge of the technical/cost trade-space of Naval Acquisition programs. <u>Provide Domain Knowledge and Expertise.</u>

# Pillar 4 Objectives – Improve the Program Manager & Acquisition Business Skills

#### Background:

Stated requirements for Acquisition billets and Program Office tours may not provide the appropriate exposure time and experience to fully prepare candidates in the AWF. Although Major Program Managers (MPMs) are currently meeting the minimum requirements for Acquisition and Program Office Experience, jobs identified as counting toward "Acquisition Experience" are not always serving that purpose adequately. This pillar addresses more than Program Managers; it also extends to the Acquisition skill competencies: Contracting, Financial Management, Production Quality Management, Logistics and Cost Estimating. The desired effect is to have fully trained and certified candidates competing for Critical Acquisition Positions (CAP) and Key Leadership Positions (KLP) with the right experience, education, skill-sets and certification. This is achieved by shaping the pipeline for each of the acquisition force competencies in such a way that candidates are properly prepared to handle the duties and responsibilities attendant to the job for which they are applying. Each acquisition competency pipeline must have active and forward thinking leadership oversight, meaningful experience and education standards, as well as mentoring and career planning regimes. The effect is that over a career, members of the AWF mature in their disciplines and are effective and efficient in each job they hold.

#### Objectives:

- 1. Standardized slating process for ASN (RDA)
- 2. Conduct reviews of current qualification requirements and assess need for qualifying versus quantifying experience and knowledge
- 3. Review waiver policies for all AWF positions

- 4. Reduce seat cancellations in required courses and ensure candidates applying for CAP/KLP billets are meeting statutory training requirements in the allotted timeframe
- 5. Develop Career Paths for all AWF competencies

Bottom Line - Get the right people, in the right job, at the right time with the right certification in all acquisition competencies. <u>Deliberately Manage the Pipelines.</u>

## Pillar 5 Return to deliberate Flag/SES Acquisition Community Management

#### Background:

There is a need to ensure that the Acquisition Community senior leadership have customized pipelines and career management. Currently, there are Flag-level Community leaders and dedicated Community Managers (O-5 level) who actively work military acquisition community issues. Additionally, there is an Acquisition Corps Manager at the Bureau of Navy Personnel (BUPERS) involved in community pipeline improvements. However, there is no designated, overarching Acquisition Community (AC) Leader for military/civilian acquisition professionals. The desired effect is to have healthy acquisition leadership pipelines through coordinated SES and Flag Acquisition Community succession plans.

#### **Objectives:**

- 1. Establish the Principal Military DASN (PMD) with oversight responsibilities across military communities within the DoN AT&L AWF
- 2. Establish Principal Civilian DASN (PCD) as SES Acquisition Community Leader
- 3. Establish Acquisition Community Management Board
- (3-star/SES) to coordinate senior acquisition billets/assignments, leveraging the SES talent management process
- 4. Establish and mentor healthy military and civilian Acquisition leadership pipelines

Bottom Line – Deliberately manage Senior AWF Leadership and the leadership succession plan. *Deliberately Manage Senior Acquisition Billets*.

## Pillar 6 Plan AWF Sustainment

#### Background:

With a substantial effort and investment in rebalancing the AWF over the next five years, there is a need to focus not only on the recruitment and hiring but on the retention and sustainment of people as well. Investing in people is a career-long commitment and not just an early upfront commitment. AWF members must be provided with career development paths and opportunities for personal and professional growth throughout all phases of their careers.

In order to maintain a sustainable workforce, gaps in capacity and capability need to be identified and examined within the current AWF profile. The desired effect is to have a stable and reliable workforce which will be realized through the establishment of effective recruitment and retention programs, certification goals and by addressing training and other workforce needs.

#### **Objectives:**

- 1. Identify sustainment areas of interest within AWF that could be targeted for improvement by Acquisition Leadership issuance of policy and guidance
- 2. Define attrition and establish AWF attrition benchmarks
- 3. Analyze root causes of current AWF attrition rates through a geographic and competency perspective
- 4. Explore strategies to improve retention

Bottom Line - Use analytical forecasting to optimize AWF recruitment, retention and hiring and establish a strong management process to align billets, qualified people and competencies. <u>Effectively Manage Human Capital Planning.</u>

#### Important Acquisition Workforce Policy and Legislation

The Congress has included more than 35 provisions for AWF in the last three Defense bills. Several of these statutes are critical components of the DoN's AWF Strategy, including: Inventories and Reviews of Contracting for Services (FY08 Section 807, NDAA); Acquisition Workforce Expedited Hiring Authority (FY09 Section 833, NDAA); Career Path and Other Requirements for Military Personnel in the Acquisition Field (FY09 Section 834, NDAA); Mechanisms to provide funds for defense laboratories for research and development of technologies for military missions (FY09 Section 219, NDAA), and Requirement for Department of Defense Strategic Workforce Plans (FY10 Section 1108, NDAA). All of these provisions are important components of DoN's AWF Strategic Plan and leverages these policies and legislation to make the plan successful.

#### Rebuilding the Navy Acquisition Work Force – The Next Steps

DoN's warfighting capability requires material solutions that are complex, interoperable, and highly technical. The Acquisition Workforce must be properly staffed if DoN is to successfully deliver that capability and be effective stewards of the tax payers' resources. Growing the AWF; converting core functions back to government; recruitment and retention of world class engineers and scientists; improved pipeline planning; and deliberate and thoughtful leadership preparation all play a part. The DoN AWF Strategic Plan is aligned to National Policy and supports DoD and DoN objectives; it is built upon the strong foundation of six pillars. To implement the strategic plan, a number of specific initiatives have already begun for FY10. Figure A10-5 highlights 10 specific "process" areas, mapped to the 6 strategic pillars that must be leveraged, adjusted or changed in order to successfully meet the plan's objectives. An action plan has been developed for these initiatives under separate cover, with metrics to assess progress. Future year initiatives will be planned based upon the success and lessons learned from FY10.

Figure A10-5: AWF Strategy Initiatives Mapping

	Mapping AWF Strategy to Actions						
		1. Rebalance the AWF	2. Integrate AWF into PPBES	3. Reinforce Science & Engineering Foundation	4. Improve Program Manager & Business Skills	5. Deliberate Flag/SES Community Management	6. AWF Sustainment
A.	AWF Requirements & Demand	<b>✓</b>	*	*	*	<b>✓</b>	<b>✓</b>
B.	AWF Outreach, Recruiting & Hiring	*	1	1	*	*	
C.	Retention & Compensation	<b>✓</b>		<b>✓</b>	<b>✓</b>	*	1
D.	Education & Training		*	1	*		
E.	Career Management	<b>✓</b>		<b>✓</b>	<b>✓</b>	<b>✓</b>	*
F.	Planning/Programming & Budgeting	<b>✓</b>	<b>✓</b>	*			
G.	Alignment	1	<b>✓</b>	1			<b>✓</b>

✓ Initiative Identified

#### The Department of the Navy Acquisition Workforce Initiatives

In order to ensure the successful attainment of the objectives identified with each Strategic Pillar, the following initiatives are being pursued to respond to current and future challenges.

**Strategic Shaping.** The strategic reshaping of DoN acquisition career fields will be realized through planned growth. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. Ongoing planning will support the Secretary of Defense acquisition workforce growth strategy and Navy objectives. Figure A10-6 reflects a snapshot of ongoing planning to grow the acquisition workforce and reflects areas targeted for reshaping such as Contracting and Systems Planning, Research, Development and Engineering (SPRDE). The planning supports the Secretary of Defense acquisition workforce growth strategy and implementation of the Weapon Systems Acquisition Reform Act of 2009. Supports Strategic Pillars 1, 3, 4, and 5.



# DON Civ AWF Total Growth Functional Allocation (7,565)



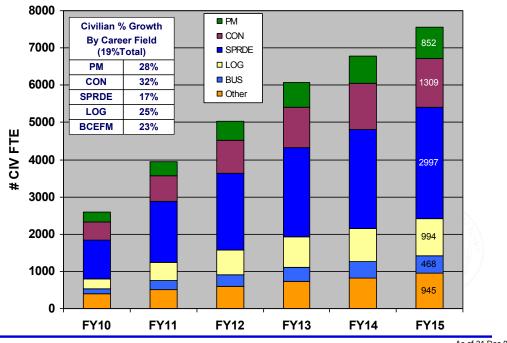


Figure A10-6 DoN Acquisition Workforce Projected Functional Growth

As of 31 Dec 09

The following are additional improvement initiatives to strengthen the Navy's acquisition workforce:

**Acquisition Governance Program.** Formation of a Governance board comprised of Navy and Marine Corps senior leadership designed to promote senior leadership engagement, transparency, and greater discipline at every phase of the acquisition lifecycle. Supports all Strategic Pillars.

**Secretary of the Navy Monthly Reviews (SMR).** Establishment of a monthly leadership forum which will focus on department-wide transparency; address complex problems; set and accomplish strategic goals and objectives; and help the Navy be better positioned for future challenges. Supports all Strategic Pillars.

**Expansion of Navy Acquisition Senior Leadership team**. Establishment of new senior acquisition role; Principal Civilian Deputy Assistant Secretary of the Navy for Research, Development and Acquisition. Supports all Strategic Pillars.

**Systems Command Business Model**. Develop a common business model that can be leveraged across Systems Commands to allow maximum flexibility of workforce utilization and help sharpen the skill sets of acquisition professionals. Also develop

common templates for acquisition program leaders to ensure adequate staffing throughout the program life cycle. Supports Strategic Pillars 1, 3, 4, and 6.

**Continue Process Improvement Initiatives**. Continue department-wide deployment integrated business management system, Enterprise Resource Planning (ERP) program (first implementation took place at Naval Air Systems Command in October 2007); continue deployment of Lean Six Sigma training for acquisition professionals. Supports all Strategic Pillars.

Succession Planning. DoN succession planning efforts include identifying the demand signal, determining and validating workload requirements, developing sourcing/workforce plans, gaining the proper budgetary and manpower agreements, and reporting. These efforts are supported by the results of recent program assessments which conducted workforce sizing and functional mix analyses for several Navy major acquisition programs. The DoN has made it a priority to ensure that the proper expertise is in the acquisition workforce. DoN Major Acquisition Commands are developing a time-phased strategy to increase acquisition workforce organic capabilities by reducing dependence on outsourced core acquisition functions of program management, engineering, contracting, logistics, business and financial management, and cost estimating. The commands have also been tasked to provide a projected view of the required future acquisition workforce based on the demand signal as compared to their plan to meet the requirements. This will provide an overall view of the in-house acquisition workforce size as compared to requirements. Senior Executive Talent Management has been implemented to ensure a DoN-level perspective on SES assignments and rotations. Supports all Strategic Pillars.

Navy SPRDE SE Community Initiative. The Systems Engineering (SE) community is working initiatives to grow and develop effective naval engineers. There are four major SE human resources focus areas. The first is a SE development and certification framework which includes graduate education, SPRDE Defense Acquisition University (DAU) training, and rotational opportunities. The second is the System Commands FY09 SE Revitalization efforts which provide resources for people, processes, and tools. The third involves accounting for the SE Community. The final area addresses the need to support undergraduate science and engineering education to increase the number of students studying in those areas. Supports Strategic Pillar 3.

Navy Contracting Community Initiative. To meet the specific needs of the contracting community, the DoN has also established the Contracting Professional Development Program. This 36-month developmental program, established under the authority of USC 10, Section 1724, prepares employees to meet requirements for assignment to positions in the contracting community. It provides a tool to reach high potential individuals who do not meet contracting education requirements by assigning them to developmental positions and providing the opportunity to complete statutory requirements within a 36-month period. Supports Strategic Pillar 4.

**2010 Recruitment Goals for Intern Programs.** The Naval Acquisition Intern and Associate Programs (NAIP) recruit, develop, and prepare acquisition interns and associates to assume many of DoN's top acquisition workforce positions in the areas of business cost estimating and financial management; contracting; information technology; life cycle logistics; facilities engineering; and systems planning, research, development and engineering. The 2010 recruitment target is 780 interns and an additional 100 associates. Contracting specialists and engineers account for more than 70% of all hires. Supports Strategic Pillar 1.

**DoN Acquisition Workforce Training Initiatives.** The DoN is committed to developing and maintaining a highly skilled acquisition workforce. The DoN participates in numerous groups that address the education, training, and career development of the acquisition workforce such as the Defense Acquisition Workforce Senior Steering Board (SSB), the Defense Acquisition Workforce Management Group (WMG), and the Functional Leader Integrated Product Teams (FLIPTs). DoN has numerous initiatives that partner with institutions of higher learning such as the Naval Post Graduate School (NPS) Masters in Science and System Engineering (MSSE); Indiana University, Tuskegee University, St. Mary's College, University of North Carolina, to name just a few. This enables the SYSCOMs to provide consistent education and to develop the special level of competence required to meet today's challenges. Seminars such as the Executive Learning Seminar which highlighted on the Government – Industry Relationship in Acquisition are focused on awareness and knowledge of how Defense/Commercial industry operate. DoN has been working closely with DAU and the major DoN Commands to determine training trends and shortfalls and manage mandatory acquisition workforce training. In addition, DoN uses specialized training programs to further focus on specific areas of need. This includes the SYSCOMs Contracting Boot camps which help new contracting employees gain hands-on experience. Also, DoN has developed a "Ships Are Different" course that will target the ship building process. Because ship design and production is a long and complex endeavor that must use a tailored DoD 5000 process, the Navy's "Ships Are Different" course was developed to fill the gap in product knowledge and unique ship requirements for new acquisition professionals. The DoN is also pursuing a distance learning program to train senior military and civilian personnel, who transition into acquisition or program management late in their careers. This program will provide Navy and Marine Corps unique PM training integrated with DoD training. Supports Strategic Pillar 1.

Acquisition Intern Leadership Development Program. In an effort to close competency gaps particularly in junior, intermediate, and senior acquisition leadership skills, the DoN has implemented the Acquisition Intern and Journeyman Leadership Development Programs which provide baseline and intermediate leadership training and education to NAIP interns and Acquisition Workforce journeyman, respectively. DoN is also actively pursuing the development of an executive level leadership training and education. Supports Strategic Pillar 1.

#### **DoN Acquisition Workforce Demographic Information**

Workforce Composition. As reflected in Table A10-1, the DoN AWF has 46,972 members and is comprised of approximately 91 percent civilian (42,762) with 9 percent military (4,246) and constituted 34 percent of the organic Defense acquisition workforce at the end of FY09. Contractor support is used to augment the DoD organic workforce in accomplishing the acquisition mission.

Defense Acquisition Workforce Count and Composition Department of the Navy (FY09)							
Career Field	FY09	FY09 (%)	Civ	Mil	Civ (%)	Mil (%)	
BCEFM	2,286	4.9%	2,211	75	96.7%	3.3%	
CON	5,516	11.7%	4,336	1,180	78.6%	21.4%	
IT	1,240	2.6%	1,197	43	96.5%	3.5%	
LCL	4,784	10.2%	4,329	455	90.5%	9.5%	
PQM	2,064	4.4%	1,514	550	73.4%	26.6%	
PM	4,598	9.8%	3,335	1,263	72.5%	27.5%	
SPRDE (PSE&SE)	18,085	38.5%	17,884	201	98.9%	1.1%	
T&E	2,833	6.0%	2,383	450	84.1%	15.9%	
Other	5,566	11.8%	5,537	29	99.5%	0.5%	
Unknown/Not Listed	0	0.0%	0	0	0.0%	0.0%	
Total	46,972	100.0%	42,726	4,246	91.0%	9.0%	

Table A10-1. Size and Composition of Navy Workforce<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The word "organic" is used to help the reader distinguish between government acquisition workforce members and civilians that are contractor support.

<sup>2</sup> AT&L Workforce Data Mart (end of FY09)

**Navy Acquisition Workforce Count - FY2005 to FY2009.** The DoN AWF count increased by 14 percent from 41,070 members in FY2005 to 46,972 in FY2009 (Figure A10-7).

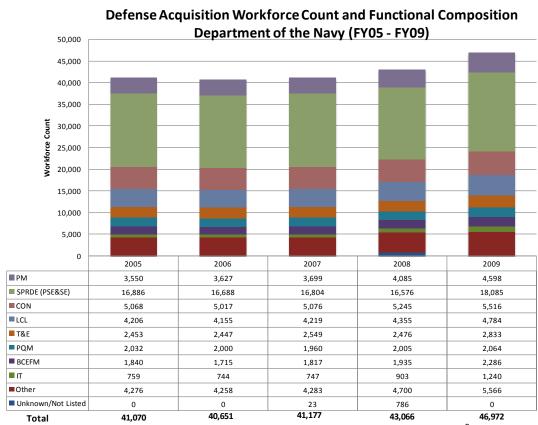


Figure A10-7. Historical Size of DoN Workforce (Military & Civilian)<sup>3</sup>

The DoN civilian AWV represents various occupational series. Table A10-2 provides a breakout of the top five series. The highest percentage of civilians is in the Electronics Engineer (0855) series (14 percent).

Top 5 Occupation Series (FY09)  Department of the Navy (Civilian)							
Occupation Series - Description	Total	Total (%)	Cumulative (%)				
0855 - Engineer, Electronics	6,569	14.0%	14.0%				
1102 - Contract Specialist	4,279	9.1%	23.1%				
0830 - Engineer, Mechanical	4,060	8.6%	31.7%				
0346 - Logistics Management Specialist	3,557	7.6%	39.3%				
0801 - Engineer, General	3,168	6.7%	46.1%				
#Occ Series in DON acquisition w orkforce = 131							

Table A10-2. Top 5 Navy Civilian Occupation Series<sup>4</sup>

<sup>4</sup> AT&L Workforce Data Mart (End of FY09)

<sup>&</sup>lt;sup>3</sup> AT&L Workforce Data Mart (End of FY09)

#### **Certification/Standards**

The Components assign certification level requirements to positions designated as acquisition. Incumbents are required to meet position certification requirements within 24 months. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. Career field development guides (the Core Plus guide - Attachment 1) are tools for individuals as they identify appropriate certification, career path, and job-specific training.

Table A10-3 shows the DoN certification level requirements for designated acquisition positions.

Certification Level Requirements by Service Department of the Navy (FY09)								
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)	
BCEFM	254	693	1,336	2,283	11.1%	30.4%	58.5%	
CON	1,282	2,271	1,943	5,496	23.3%	41.3%	35.4%	
IT	123	452	662	1,237	9.9%	36.5%	53.5%	
LCL	449	2,332	2,000	4,781	9.4%	48.8%	41.8%	
PQM	209	1,288	566	2,063	10.1%	62.4%	27.4%	
PM	357	766	3,474	4,597	7.8%	16.7%	75.6%	
SPRDE (ST)	9	44	190	243	3.7%	18.1%	78.2%	
SPRDE (SE)	1,282	3,352	13,354	17,988	7.1%	18.6%	74.2%	
T&E	374	501	1,956	2,831	13.2%	17.7%	69.1%	

Note: There are 2 records with Unknown in the Career Level Required Code field

Table A10-3. Position Certification Requirements – Navy<sup>5</sup>

Based on component-reported data, 58.8 percent of Navy acquisition workforce members (DoD-wide) have met or exceeded certification requirements for acquisition positions. This is expected to increase due to improvements in data quality and reporting as well as continued leadership emphasis on achieving required certifications. For those in the DoN AWF that have not met their certification requirements, approximately 29.9 percent are within the 24-month window for obtaining the certification level required for their position. Figure A10-8 summarizes certification rates for the DoN Acquisition career fields.

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<sup>&</sup>lt;sup>5</sup> AT&L Data Mart (End of FY09)

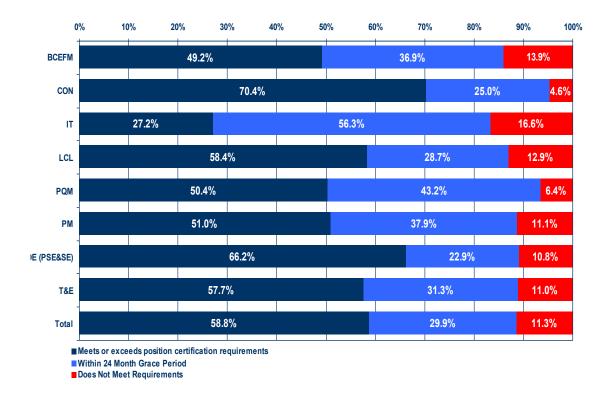


Figure A10-8. Percent Workforce Meeting Position Certification Requirements<sup>7</sup>

#### **SUMMARY**

The Department of the Navy has significant efforts underway to increase the size and improve the quality of its acquisition workforce. A comprehensive acquisition workforce data and analysis capability, supporting workforce assessment and decisions will continue to evolve. This appendix and additional information on the Defense acquisition workforce are available at <a href="https://www.dau.mil/defenseacquisitionworkforce">www.dau.mil/defenseacquisitionworkforce</a>.

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<sup>&</sup>lt;sup>7</sup> Separately provided by DoN Director, Acquisition Career Management office

# Appendix 11 DoD Military Department Department of the Air Force

Human Capital Fact Sheet 2009							
Defense Acquisition Workforce (DAW) Air Force	Civilian (Civ) Air Force DAW	Military (Mil) Air Force DAW	Total Air Force DAW (Civ + Mil)	Defense Acquisition Workforce			
Size & Composition							
FY09 Workforce Size	18,506	8,668	27,174	133,103			
Change in size 2008-2009	15%	-1%	9%	6%			
Civilian/Military Composition	68%	32%	-	89% / 11%			
DAW 2015 Growth Target			26%	15%			
Educational Attainment							
Bachelor's Degree or Higher	86%	83%	85%	79%			
Graduate Degree	48%	48%	48%	29%			
Certification (Cert)							
Level I or Higher Achieved	74%	62%	70%	72%			
_evel II or Higher Achieved	62%	40%	55%	60%			
_evel III Achieved	35%	15%	29%	36%			
Position Cert Requirement Met or Exceeded	62%	41%	55%	59%			
Planning Considerations							
% Baby Boomer/Traditional Generations	66%	8%	47%	58%			
Average Age	46.8	34.1	42.7	45			
Workforce Life-Cycle Model (YRE)	30/35/35			32/33/35			
% Future/Mid-Career/Senior	(%)(Civ)	-	-	(%)(Civ)			
Average Years of Service	16.3	11.3	14.7	16.3			
Retirement Eligible	2,746 (15%)	-	-	19,395 (16%			
Retirement Eligible w/i 5 Years	3,649 (20%)	-	-	21,567 (18%			
Total Gains/Losses	3,991/1,989	-	-	19,786/13,04			
Fraining Statistics		2008 Air Force	2009 Air Force	2009 Total			
DAU Course Graduates (Classroom)		7,420	8,270	39,568			
DAU Course Graduates (Web)		21,754	28,271	154,399			
DAU Continuous Learning Completions		67,622	90.205	494,568			



Mr. David M. Van Buren Acting Assistant Secretary of the Air Force for Acquisition

Mr. David M. Van Buren, the acting Assistant Secretary of the Air Force for Acquisition, is the Air Force's senior acquisition executive, responsible for all Air Force research, development and non-

space acquisition activities. He provides direction, guidance and supervision of all matters pertaining to the formulation, review, approval and execution of acquisition plans, policies, and programs. Mr. Van Buren also provides program support for Air Force's acquisition mission areas: Information Dominance, Global Power, Global Reach, and Space & Nuclear Deterrence. In addition, he develops policy and manages the workforce in functional areas: Acquisition Management, Contracting, and Science, Technology & Engineering. He is supported by the Military Deputy Assistant Secretary of the Air Force for Acquisition, Lt. Gen. Mark D. Shackelford. Air Force acquisition education, training and career management is led by the Air Force Director of Acquisition Career Management (DACM), Mr. Patrick Hogan.

In October 2008, Air Force leadership identified recapturing Acquisition Excellence as one of the five top strategic priorities to drive enterprise-wide actions over the next three to five years. The Air Force is committed to recapturing acquisition excellence by rebuilding an Air Force acquisition culture that delivers products and services as promised, on time, within budget, and in compliance with all laws, policies and regulations. The SECAF and CSAF released the Acquisition Improvement Plan (AIP) in May 2009. The AIP focuses Air Force efforts for the critical work of modernizing and recapitalizing air, space and cyber systems. The AIP established five

initiatives and thirty-three actions that ensure rigor reliability and transparency across the Air Force acquisition enterprise. The five initiatives entail: revitalizing the acquisition workforce, improving the requirements generations process, instilling budget and financial discipline, improving major systems source selections and establishing clear lines of authority and accountability within acquisition organizations. The Air Force projects closure on all 33 tasks by the end of 2010.

To guide long-term efforts to meet acquisition workforce challenges, SAF/AQ partnered with Air Force acquisition functional leaders and commands to develop an Air Force Human Capital Strategic Plan for the acquisition workforce, which was published in February of 2009. This plan established a strategic vision for a professional acquisition workforce with the right number and the right mix of people with the right education, training, skills and experience to effectively and successfully perform the Air Force acquisition mission. It serves as a roadmap for guiding workforce development in support of *Acquisition Excellence*.

Figure A11-1 lists the four acquisition human capital goals established by the Air Force.



Figure A11-1. AF Human Capital Goals for Acquisition Workforce<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> AF Human Capital Strategic Plan for Acquisition Workforce – published February 2009

#### Goal 1: Size the acquisition workforce based on program requirements

Under Goal 1, the Air Force will pursue initiatives to corporately address the need for the **right number** of military and civilian personnel in the Air Force acquisition workforce, augmented by the right number of support contractors, to execute and oversee approved technology development, acquisition and sustainment programs.

The key long-term objective under Goal 1 is to develop a corporate Air Force-sanctioned, objective-based, workload-driven manpower model that predicts, defines and validates the manpower requirements needed to effectively develop, acquire and manage weapon systems. Such a model is required to support program resource allocation decisions during the POM process, enabling Air Force leaders, including the acquisition, financial management, requirements and manpower/personnel communities, to determine and agree on what manpower is required for an Air Force-sanctioned acquisition program to be successfully executed.

A manpower model for acquisition and sustainment units will define the requirements at various levels within product and logistics centers, taking into consideration the Air Force organizational infrastructure.

Once manpower determinants are established, acquisition and sustainment program office manpower requirements can be objectively defined and resources can be funded and allocated on the basis of SECAF and CSAF program prioritization and acceptable probability of program success.

While pursuing this long-term strategic objective, the Air Force will develop more tactical near-term initiatives (such as use of its Non-Rated Prioritization Plan) to cope with program office manpower shortfalls by managing and equitably allocating experienced acquisition professionals based on Air Force priorities. Also mindful of the need to maintain core organic capabilities, Air Force acquisition is reviewing its use of the support contractor workforce and identifying potential in-sourcing to restore organic human capital.

## Goal 2: Shape and develop the acquisition workforce to meet current and future mission area demands

Goal 2 is focused on initiatives to attract, select, develop and foster talent with the competencies we need. The Air Force will determine the requirements for specific competencies needed to successfully perform the Air Force acquisition mission today and in the future, and will deliberately develop those specific competencies in the workforce. These requirements include acquisition occupational and Air Force institutional competencies for successfully performing in and leading the acquisition and

larger Air Force enterprise at all levels. Within the Air Force competency framework, the capabilities of the research laboratories and product, logistics and test centers are distinctive as reflected by the relative weight and importance of critical occupational competencies in acquisition and sustainment mission areas (for example, space, C4I, and test and evaluation). Air Force acquisition will define and develop these core *organizational competencies*, i.e., those competencies that are critical, yet common among occupations determined by the organization's leadership to be most important for mission success.

Through a focus on identifying and developing the right sets of competencies, Air Force will equip its acquisition professionals to make acquisition programs successful in delivering effective, timely, and sustainable capabilities to its warfighters.

Analysis of the gaps between required skills and competencies and those possessed by the current workforce will guide recruitment, selection, retention and development, and form the basis for succession planning for leadership positions.

#### Objectives include:

- Establish a competency management, knowledge transfer and succession planning framework for Air Force acquisition that supports Center and MAJCOM workforce strategic planning. Meeting this objective will require creating competency-based organizations, characterized by a holistic approach to recruiting and retaining employees; an organization that is "branded' as an attractive place to work; a competency-based recruitment approach; and using retention methods to close competency gaps, i.e., train and develop the workforce against known gaps. The competency structures will have applicability to both civilian and military workforce elements. By applying a corporate recruitment strategy that includes developing a staffing model, using standard tools to assess talent, and targeting quality talent, Air Force acquisition can ensure that a pool of highly qualified employees is available to meet mission needs. The acquisition community will apply a corporate retention strategy that combines programs that drive employee engagement with the flexibilities of work-life programs (such as flexible work schedules, tele-work, child care subsidies, elder care, leave flexibilities, and job sharing).
- Replenish the Acquisition Workforce. Air Force acquisition will seek to replenish and refresh the workforce at all levels as needed to maintain the skills and core organic acquisition competencies needed to perform today's acquisition and system sustainment missions, and to sustain required future organic capabilities. Because the reductions taken in field grade military manning can only be corrected over the long term, the Air Force will compensate for officer gaps by hiring additional journey-level civilians and use support contractors where appropriate. It will continue to seek improvements to the staffing process

including removing self-imposed constraints to filling jobs. The Air Force will make judicious use of civilian hiring flexibilities such as Expedited Hiring Authority and be vigilant in monitoring AF metrics that gauge the length of time from vacancy to fill in order to influence the process when it isn't adequately meeting the acquisition community's standards.

- Advance Air Force acquisition workforce development. The ability to respond to workforce requirements with effective competency development and succession planning is hampered today by shortcomings in Air Force civilian force development processes (e.g., incentivizing career broadening, developing high potential candidates, and managing developmental opportunities), supporting tools, and funding. In partnership with AF/A1 and the MAJCOMs, the acquisition community will advocate for process improvements and use Defense Acquisition Workforce Development Fund resources for incentives that support civilian career broadening, development and force shaping to meet acquisition requirements. Air Force acquisition will continue to advance deliberate development of acquisition leaders through its civilian and military Development Teams.
- Identify, protect and preserve critical expertise and capabilities. While
  continuing to define the exact sets of skills and competencies required in each
  mission areas and center, the demand across the enterprise will increase for
  acquisition professionals with a blend of technical aptitude and business acumen.
  Despite the challenges of the future environment, Air Force acquisition will be
  vigilant in its efforts to attract recent graduates with science, technology,
  engineering and mathematics degrees and retain experienced acquisition
  professionals with technical degrees. The community will monitor regional
  compensation and grade structure and when appropriate, initiate corrective
  actions to keep employment in Air Force acquisition competitive with other
  government agencies.
- Foster succession planning across the acquisition enterprise. Acquisition process improvements depend on continuity of leadership. A precept of DAWIA, and a key Air Force objective, is to develop a strong pool of qualified, talented candidates from which to choose leadership successors. Career field Force Development teams are key tools in the deliberate development of competencies and leadership experience to meet future leadership needs. As needed, the Air Force will invest in career broadening and mobility incentives. In addition, based on competency requirements, the Air Force will invest in cross-functional certification training, acquisition leadership training, and executive level acquisition training.
- Engage in aggressive knowledge transfer Initiatives. The acquisition workforce will be managed at all levels to facilitate the transfer of hard-earned

lessons and real-world acquisition savvy to the workforce. A process will be initiated to encourage employees to identify plans to retire or separate at an early stage for the purpose of ensuring effective knowledge management and transfer. Succession planning will incorporate development programs and technical solutions for the effective transfer of knowledge. In concert with acquisition workforce development efforts, employees approaching eligibility for retirement will be assessed early to identify those with the greatest potential as mentors, knowledge transfer champions, and technical experts. This will allow for offers of selective retention allowance, and early identification of a replacement for effective transition management.

#### Goal 3: Increase the effectiveness of the acquisition workforce

Goal 3 focuses on increasing the effectiveness of the acquisition workforce by improving the availability, timeliness and relevance of acquisition training, more effectively managing assignments to put the right person in the right job, and managing assignment tenure for individuals in Key Leadership and other Critical Acquisition Positions.

#### Objectives include:

- Identify and address training gaps. Because of the dynamics of the current environment, acquisition leaders and workforce managers must continue to identify training gaps that exist in the workforce. The Air Force will address some of these gaps by directing workforce members to assignment-specific training, building on the foundation they achieve through DAWIA certification. To keep pace with the dynamic nature of jobs in the program offices, the Air Force will make targeted training available just-in-time, on demand, and in the workplace, whenever possible. As part of the DACM's training responsibilities, the Air Force will advocate for DAU resources to address the needs of key acquisition process participants outside the acquisition workforce, including the legal, budget and requirements communities.
- Increase the rate at which individuals are fully trained prior to assignment to an acquisition position. Too often members of the Air Force acquisition workforce are thrust into new acquisition responsibilities without all the training they need. In some cases the cause is lack of course capacity; in others, mission demands prevent release of personnel for training. Resources provided by the Defense Acquisition Workforce Development Fund should enable Defense Acquisition University to more fully meet established training needs through added capacity and redesigned courses. The Air Force will continue to collaborate with DAU to get back to the original intent of DAWIA, i.e., that jobs be

filled from a pool of people who are prepared ahead of time with at least the minimum training needed to contribute to program success on day one. The Air Force will work to make more high quality training available "just-in-time," through increased resident course capacity, by making courses more modular and agile, and through the use of training tools and technologies such as interactive distance learning, games and simulation.

Increase the institutional competencies of the acquisition workforce. As an inherent element of its Force Development efforts, Air Force acquisition will promote deliberate development of acquisition professionals toward the standards embodied in the Air Force Institutional Competency List. The institutional competencies prepare Airmen to operate successfully across the widest array of Air Force tasks and requirements. These competencies provide a common language and a set of priorities for consistent development across the Air Force.

- Emphasize professional currency. The half-life of knowledge today is getting
  shorter and acquisition personnel must stay abreast of the changing technical,
  policy and business environment to ensure that they are operating with the most
  up-to-date information and acquisition strategies possible. Air Force acquisition
  leaders will emphasize using training, mentoring and experiential opportunities to
  maintain professional currency.
- Revitalize management of Key Leadership Position and Critical Acquisition Position qualifications and tenure. DAWIA places great emphasis on managing the selection and assignment of qualified individuals to executive oversight and program leadership positions. The Air Force will put more rigorous procedures in place to ensure its programs benefit from the leadership of experienced, fully qualified acquisition professionals who then serve in those programs with sufficient tenure.

## Goal 4: Continuously improve policies, programs and processes for acquisition workforce engagement, development and management

The objectives under Goal 4, which address supporting policy, process and program improvements, are critically important to the overall effectiveness of the Acquisition Professional Development Program, Force Development efforts, and the preceding goals of the Air Force Acquisition Human Capital Strategic Plan.

Objectives include:

- Improve the execution and effectiveness of the Air Force Acquisition Professional Development Program (APDP). The Air Force will continue to improve APDP by promulgating policy and guidance as needed, and by communicating goals, standards, requirements and opportunities more effectively to the acquisition community. The acquisition community will ensure positions requiring acquisition credentials are properly designated so that he hiring and assignment processes draw a properly prepared eligible person from a pool of candidates, and so incumbents are credited with valid functional experience toward certification. The Air Force will seek to improve the ability to forecast training requirements, a key element of APDP. The Air Force will continue to look for ways to use the tools of the Air Force Smart Operations for the 21<sup>st</sup> Century model (AFSO-21) to address acquisition workforce issues.
- Automate processes to the maximum extent possible. The Air Force will
  continue to automate APDP processes and provide user-friendly tools to reduce
  the burden of APDP on workforce members, supervisors, training managers and
  human resource offices. Targets include APDP certification, Acquisition Corps
  membership, currency management, position qualification and tenure waivers,
  assignment-specific training, and more proactive training management.
- Improve capability to provide accurate analysis, insightful reports and meaningful metrics relative to acquisition workforce management and development initiatives. The Air Force will continue developing and refining meaningful measures that address the key processes of acquisition personnel management. It will continue to investigate and develop data management tools that support metrics and improve the accuracy of underlying data.

#### Status in FY2009

In the fall of 2008, the Assistant Secretary of the Air Force for Acquisition directed the Air Force Program Executive Officers to reexamine and provide acquisition workforce requirements for the product centers. To date, after review by the Air Staff and Air Force Corporate Structure, the Air Force validated and has programmed over 5400 new acquisition positions from FY2010 -2015 to restore the organic capability of the acquisition workforce. This increase includes over 2000 new growth and 3400 insourced contract positions. In 2009, approximately 1600 additional requirements were validated for other parts of the acquisition enterprise including other contracting functions and acquisition positions at the Air Logistics Centers. The Air Force is currently considering funding these positions in the FY2012 budget cycle. The programmed and potential growth through FY2015 is over 7000 positions. Figure A11-2 shows the programmed growth reported in the PB-23.

To help guide strategic planning, the Air Force completed a RAND study of Air Force cost estimators, and has undertaken reviews of price analysts and future engineering requirements. A RAND review of the AF contracting workforce is also contemplated.

The long-term Air Force effort to develop a workload driven, objective, programmable model that determines the manpower required to effectively develop a weapon system program for the acquisition and sustainment community made significant progress in FY2009. In December, models were delivered for Major Command (MAJCOM) use to build their FY2012 planning inputs. This work, lead by the Air Force Manpower Agency in collaboration with SAF/AQX, AF/A4, AF/A1, Air Force Materiel Command (AFMC) and Air Force Space Command (AFSPC), endeavors to quantify the "art" of program management and the nature of dealing with technical innovation.

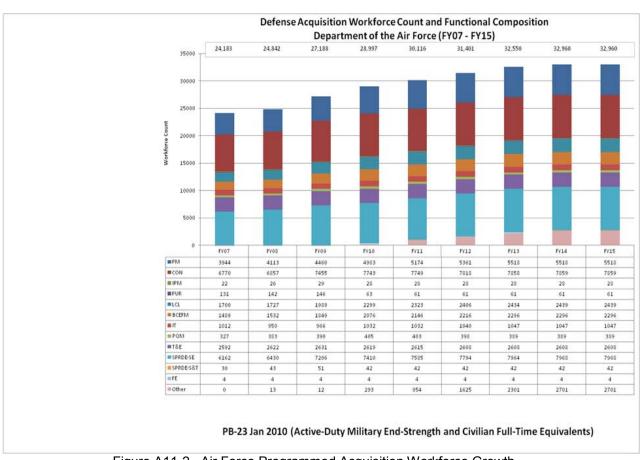


Figure A11-2. Air Force Programmed Acquisition Workforce Growth

The Air Force is making full use of the Defense Acquisition Workforce Development Fund established under FY2008 NDAA Section 852. Over 85% of Air Force DAWDF funding in FY2009 was devoted to recruiting and hiring. Section 852 funding enabled hiring to meet immediate needs while working through the corporate process to establish permanent civilian and military authorizations for a larger workforce, sized to meet program requirements. In FY2009, DAWDF funding was used to hire 285 interns and 311 journey-level personnel at the product, logistics, R&D and test centers (reaching 95% and 94%, respectively, of the FY2009 targets).

With regard to hiring authorities, the Air Force re-delegated the use of Expedited Hiring Authority (EHA), as authorized in FY2009 NDAA, to installation commanders and other appointing authorities. Next, the Air Force Personnel Center (AFPC) disseminated implementation guidance, posted the requisite public notices and held a web cast with Air Force Human Resource offices. Streamlined hiring processes were established in support of EHA for all acquisition functional positions at the mid and senior level positions (NSPS pay band 2 & 3). The AF goal is to fill positions within one pay period after receipt of the request for personnel action (RPA). Compared to what had been a months-long process, this is a notable improvement and enables hiring highly qualified individuals quickly. The Air Force continues to use individual and open continuous internal and external vacancy announcements to attract internal Air Force candidates, other current Federal employees, Veterans, and other noncompetitive appointment eligibles.

The Air Force is using a corporate recruitment strategy targeted to ensure the right talent applies for available acquisition positions. SAF/AQ partnered with the Office of Personnel Management (OPM) and the Air Force Personnel Center to create an employment brand, recruitment materials and website; and to create concise, easily understood, and user-friendly vacancy announcements and streamlined assessments and certification for featured vacancies. In FY2009, the Air Force established strategic recruiters at each Acquisition Center, who, in conjunction with their senior acquisition functionals, have overall responsibility for local recruitment plans, activities and events to target highly qualified candidates. The acquisition community is seeking diverse quality talent using external recruitment sources tailored to the types and levels of the positions. This includes searching for qualified job seekers through professional and community outreach to professional organizations, alumni associations, career building organizations, professional conferences, non-federal employment sites, job fairs, contractor-to-civilian conversions, transition centers for separating and retired military, employment agencies, and employee referrals. Thanks in part to DAWDF funding, Air Force acquisition is able to offer the full range of recruitment flexibilities to include recruitment and relocation incentives, student loan repayment, work-life programs such as alternate work schedules, transportation subsidies, fitness programs, and tuition assistance along with available pay setting flexibilities.

Also in 2009, the Air Force reinstituted its "Retaining Acquisition Excellence" program, which helps separating acquisition officers and enlisted discover job opportunities as Air Force acquisition civilians.

Air Force leveraged the DAWDF to address resident training capacity shortfalls, including sending more civilians to acquisition initial skills courses and increasing quotas in other courses believed to help improve acquisition outcomes. In FY2009, Air Force achieved a 100% increase in the capacity of its Intermediate Project Management skills course at the Air Force Institute of Technology, and a 50% increase in its highly acclaimed three-day Acquisition Leadership Challenge Program courses. Capacity in the initial skills course for contracting officers was increased by 200%; and the initial skills course for program managers, engineers and scientists increased by 50%. Also in FY2009, the Air Force was able to meet 650 additional student requests for DAWIA-related Tuition Assistance through the use of DAWDF funding.

DAWDF funding was instrumental in furthering adoption of competency-based workforce management, supporting selection, development and workforce planning in 2009. The successful competency management and succession planning effort piloted at Electronic Systems Center with OPM was extended to the Space and Missile Systems Center, the Air Force Flight Test Center, and the Air Force Nuclear Weapons Center in 2009. In addition, in partnership with AF/A1, the Air Force Competency Development Initiative addressed the Engineering, Program Management, Contracting and Financial Management / Costing Estimating career fields.

Section 834 of NDAA 2009 directs the Department of Defense to report on three objectives regarding military acquisition career paths, command positions, and contingency contracting. As documented in Appendix 14 of this report, the Air Force has a deliberate and well defined strategy for addressing these objectives and for paving the way forward for the acquisition workforce of today and the foreseeable future

The Air Force deliberately develops acquisition professionals according to well defined career path models which serve as a guide for developing both military officers and civilians through assignments, education, and training. These career models define career paths to greater rank and responsibility within the acquisition workforce. The development of acquisition workforce members is enhanced by the use of Career Field Development Teams consisting of senior leadership from within each Career Field. Using the published acquisition career path models as a guide, the Acquisition Development Teams provide each individual developmental guidance "vectoring" them on paths of progression and opportunity in the acquisition workforce. The DTs also nominate officers and civilians for service schools (developmental education), and identify military candidates for command leadership positions within the acquisition workforce. The Air Force has also established career field management and force development functional responsibility at the Headquarters Air Staff level to provide

strategic direction to the career fields, and oversight of the Developmental Team process.

The Air Force relies on a large pool of military contracting officers in order to meet Air Force and a fair share of joint, contingency contracting deployments. Today the Air Force maintains the Department of Defense's largest deployable contracting force and is filling the bulk of the contingency contracting and contract administration deployment requirements in Iraq and Afghanistan. The current operations tempo generated by the wars in Iraq and Afghanistan has made the contracting career field one of the most deployed career fields in the Air Force. Air Force leadership recognizes the threat the current ops tempo poses to the retention of the contracting force and has initiated numerous efforts to ensure the workforce remains the backbone of the contingency contracting mission. In 2009, the Air Force received OSD approval and began offering a Critical Skills Retention Bonus for contracting officers in targeted year groups and ranks/grades.

The Air Force acquisition workforce also has a contingent of enlisted personnel within the contracting career field. These Airmen serve in key positions throughout the Air Force in the operational and contingency contracting communities and are also developed in concert with the needs of the Air Force. The development of this invaluable resource is addressed both within the enlisted force and within the contracting community to ensure the right quality and numbers of contracting NCOs are retained for the Air Force contracting mission.

Significant progress was made in 2009 to strengthen acquisition career management capabilities. An agreement was reached to augment the DACM staff with representatives from Air Force Materiel Command and Air Force Space Command. The result will be a more robust ability to assess GO/SES requirements and inventory across the acquisition enterprise, and to build the supporting O-6 and GS-15 succession inventory. In addition, the integrated staff will support Air Force efforts to develop a stronger program to identify high potential O-4/O-5s and GS-14s and more deliberately manage these midlevel performers in acquisition jobs.

Finally, key acquisition workforce management processes, responsibilities and authorities were documented through the issuance of formal policy in 2009:

- DoDD 5000.52\_AFI 36-1301, Management of Acquisition Key Leadership Positions (KLPs), 1 Jul 2009
- AFI 63-101, Acquisition and Sustainment Life Cycle Management, Chapter 5, Acquisition Workforce Management and Professional Development, 17 Apr 2009
- AFI 36-2639, Education with Industry Program, 22 May 2009

#### Air Force Acquisition Workforce Demographic Information

Table A11-1 shows the manning (number assigned) in each acquisition functional area as of the end of FY2009.

Career Field	Civilian	Enlisted	Officer	TOTAL
Contracting	5378	1260	814	7452
SPRDE-Systems Engineering	5245	2	1870	7117
Program Management	2013		2447	4460
Test and Evaluation	1354	63	1214	2631
Acquisition Logistics	1519	281	189	1989
Business, Cost Estimating, Fin Mgt	1717	4	124	1845
Information Technology	734	28	204	966
Production, Quality & Manufacturing	273	20	97	390
Purchasing	144	2		146
SPRDE – S&T Manager	19		32	51
Industrial/Contract Property Management	29			29
Facilities Engineering	6			6
SPRDE – Program System Engineering	71		13	84
Other	17	1	4	22
TOTAL	18519	1661	7008	27189

Table A11-1. Size and Composition of the Air Force Acquisition Workforce

(4<sup>th</sup> Qtr FY2009 DoDI 5000.55 Report)

In FY2009, 57 percent of the Air Force acquisition workforce met or exceeded the certification requirements that were established for their position as shown in Figure A11-3. Overall, 93% met their position requirements or were still within the 24 month grace period DoD allows to achieve requirements after being assigned to a position.

The Air Force DACM is identifying those individuals who have exceeded the 24 month grace period to the acquisition commands for corrective actions.

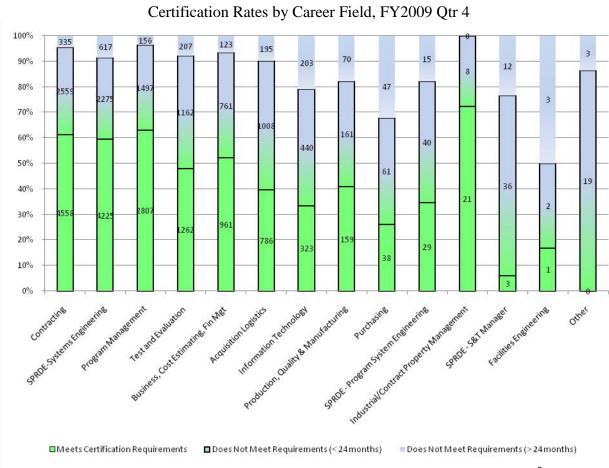


Figure A11-3. Percent Workforce Meeting Position Certification Requirements<sup>2</sup>

As shown in Figure A11-4, acquisition workforce professional currency rates, as evidenced by compliance with OUSD(AT&L) continuous learning standards, have continued to improve. Adoption of an automated tracking system makes it easier for members to report and track continuous learning points in accordance with DoD policy. The Air Force DACM has provided web-based tools to guide workforce members to relevant training, above and beyond that required for certification, based on immediate job needs as well as career development aspirations.

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<sup>&</sup>lt;sup>2</sup> AT&L Workforce Data Mart (End of FY2009 data)

#### **Professional Currency Rates**

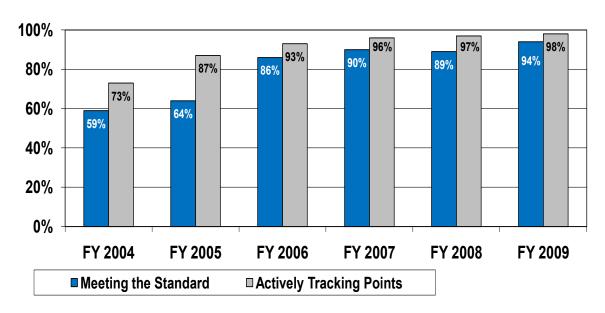
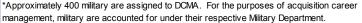


Figure A11-4. Percent Workforce Meeting Professional Currency Requirements (compliance with OUSD(AT&L) continuous learning standards)

# Appendix 12 Defense Contract Management Agency

Human Capital Fact Sheet						
Defense Acquisition Workforce (DAW) Defense Contract Management Agency¹	DCMA DAW Civilians*	Defense Acquisition Workforce (civilian and military)				
Size & Composition						
FY09 Workforce Size	7,909	133,103				
Change in size 2008-2009	8%	6%				
DOD DAW 2015 Growth Target	38%	15%				
Educational Attainment						
Bachelor's Degree or Higher	54%	79%				
Graduate Degree	15%	29%				
Certification (Cert)						
Level I or Higher Achieved	82%	72%				
Level II or Higher Achieved	75%	60%				
Level III Achieved	17%	36%				
Position Cert Requirement Met or Exceeded	73%	59%				
Planning Considerations						
% Baby Boomer/Traditional Generations	80%	58%				
Average Age	51.3	45				
Workforce Life-Cycle Model (YRE)	17/29/54	32/33/35				
% Future/Mid-Career/Senior	(%)(Civ)	(%)(Civ)				
Average Years of Service	21.4	16.3				
Retirement Eligible	2,480 (32%)	19,395 (16%)				
Retirement Eligible w/i 5 Years	1,735 (22%)	21,567 (18%)				
FY09 Gains/Losses	1,220/678	19,786/13,042				
*Approximately 400 military are assigned to DCMA. For		•				



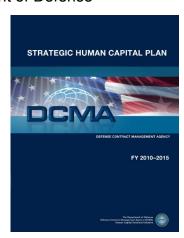


Mr. Charlie E. Williams, Jr. Director, Defense Contract Management Agency

Mr. Charlie E.
Williams, Jr. is the
senior leader and
proponent for the
acquisition workforce
in the Defense
Contract Management
Agency (DCMA). Mr.
Williams was

appointed as Director, DCMA in May 2008. He has authority, responsibility and accountability for all functions performed by DCMA including but not limited to providing Contract Administrative Services to the Department of Defense

Acquisition Enterprise and its partners to ensure delivery of quality products and services to the warfighter; on time and on cost. Mr. Williams represents DCMA to USD (AT&L) and to Congress on all acquisition policy and program-related matters. Under the leadership of Mr. Williams, the DCMA Human Resources team manages the education, training, and career management needs of the entire DCMA team to include its acquisition workforce. This team is proactively managing recruiting, hiring, development, recognition, and retention strategies, to include the Base Realignment and Closure (BRAC) move of DCMA Headquarters from Springfield, Virginia to Ft Lee, Virginia. DCMA's recently released Strategic Human Capital Plan



provides a comprehensive assessment and plan to address DCMA total team needs.

#### The Defense Contract Management Agency Acquisition Workforce

The Defense Contract Management Agency (DCMA) is the Department of Defense (DOD) component that works directly with Defense suppliers to help ensure that DOD, Federal, and allied government supplies and services are delivered on time, at projected cost, and meet all performance requirements. DCMA directly contributes to the military readiness of the United States and its allies, and helps preserve the nation's freedom. DCMA professionals serve as "information brokers" and in-plant representatives for military, Federal, and allied government buying agencies -- both during the initial stages of the acquisition cycle and throughout the life of the resulting contracts. Before contract award, DCMA provides advice and services to help construct effective solicitations, identify potential risks, select the most capable contractors, and write contracts that meet the needs of customers in DOD, Federal and allied government agencies. After contract award, DCMA monitors contractors' performance and management systems to ensure that cost, product performance, and delivery schedules are in compliance with the terms and conditions of the contracts.

#### DCMA's vision is:

"DOD's leading experts in Quality Assurance; Cost, Schedule, and Supply Chain Predictability; and Contract Administration; enabling our partners to achieve contract objectives."

DCMA is primarily responsible for providing services in the following areas:

- Acquisition Planning Support Services
- Contract Management
- Financial Management
- Engineering Support Services
- Property Management
- Quality Assurance and Product Acceptance
- Software Acquisition Management
- Small Business
- Specialized Safety

<sup>&</sup>lt;sup>1</sup> Source: The 2009 fact sheet is based on FY2009 data and was generated by OUSD (AT&L) Human Capital Initiatives (HCI) using the AT&L Workforce Data Mart and analysis support from RAND using DMDC data.

#### **DCMA Challenges**

The President, the Congress and the Secretary of Defense have strongly emphasized the need for a strong DOD contract management and oversight capability. The demand for this capability will continue as DCMA supports the acquisition community in providing oversight of 102 Major Defense Acquisition Programs (MDAPs) and 214 other programs designated for special interest oversight. The number of MDAPs has increased by 36 percent since 2001. Acquisition-related workload drivers include meeting operational near and long term needs, fielding new systems, and recapitalization of equipment and systems used to support contingency operations. Another indicator of increased workload is that dollars obligated on DOD contracts (actions over \$100,000) increased by 166 percent from FY2001 through FY2009. The loss of experienced acquisition workforce personnel represents increased performance risk associated with functions needed to support DOD acquisition programs. As identified in Figure A12-1 (page A12-5), the acquisition workforce of DCMA declined by 11 percent from FY2001 through FY2008. As part of the Secretary of Defense initiative to revitalize the defense acquisition workforce, growth of the DCMA acquisition workforce began in FY2009.

Other challenges impacting acquisition workforce capability, as with the DOD as a whole, is the departure of the Baby Boomers from the workforce. The loss of experienced acquisition workforce members within DCMA represents increased performance risk associated with DCMA functions needed to support DOD acquisition programs. As of the end of FY2009, 80 percent of the DCMA acquisition workforce is in the Baby Boomer or Traditional generations. Analysis indicates 32 percent of the civilians in the DCMA acquisition workforce are eligible for full retirement and 22 percent will become eligible for full retirement over the next five years. In addition to other mission drivers described above, these eventual significant losses also support the case for the Department's actions to mitigate workforce capability and capacity risk.

While this appendix focuses on those defined as "in the acquisition workforce," approximately 83 percent of DCMA, the entire DCMA team provides critical mission support. DCMA designates acquisition positions consistent with DOD policy and the Defense Acquisition Workforce Improvement Act (DAWIA), 10 USC Chapter 87, section 1721<sup>2</sup>. Each DOD Component (e.g., Army, Navy, Air Force, DCMA and other DOD agencies) is responsible for reviewing positions to determine if job responsibilities are predominately acquisition. If so, the position is designated as an acquisition position by functional category (program management, contracting, etc.). DOD uses Position Category Descriptions (PCDs) to ensure consistent identification of acquisition positions throughout the

<sup>2</sup> DOD policy and guidance implementing DAWIA and the DOD Acquisition, Education, Training and Career Development Program are established in DOD Directive 5000.52 and DOD Instruction 5000.66.

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DOD Components. PCDs are available at http://www.dau.mil/workforce/pages/pcds.aspx.

As of the end of FY2009 the DCMA workforce is composed of 7,909 civilian members of the defense acquisition workforce. The acquisition workforce within DCMA represents 6 percent of the total DOD organic<sup>3</sup> acquisition workforce. The acquisition mission at DCMA is also supported by 403 military from the Military Departments. This appendix focuses on the civilian acquisition workforce members within DCMA. For the purposes of acquisition workforce management, military are accounted for as part of their respective Military Departments.

The following is a review of recently completed (yet ongoing) analysis at the enterprise career field level.

### **WORKFORCE ANALYSIS**

DCMA is continuing to improve its capability to assess and manage its acquisition workforce. Improvements include leveraging the DCMA and OUSD (AT&L) Human Capital Initiatives partnership to improve acquisition workforce data and analysis capability. DCMA was a major user of the online AT&L Acquisition Workforce Data Improvement Tool (AWDIT) tool which enables workforce members and supervisors to review and update acquisition workforce unique data. Continued partnering includes a competency assessment targeted to key DCMA functions. The following is an assessment of the acquisition workforce within DCMA using the AT&L Workforce Data Mart, a key enterprise analysis tool.

The DCMA Workforce Count - FY2005 to FY2009. An accurate understanding of workforce count and changes is critical to effective workforce size assessment and initiative decisions. The DCMA acquisition workforce count decreased by 11 percent; from 8,266 civilian members in FY2005 to 7,333 in FY2008. Recent growth initiatives and other retention factors have enabled DCMA to rebuild it workforce to 7,909 (Figure A12-1). Various factors can impact the count, from statutory requirements, count methodology, Total Obligation Authority, force change initiatives, BRAC actions, gains and losses associated with personnel actions such as hiring, separations and transfers, and administrative coding changes to acquisition positions. Efforts continue to ensure accuracy of the acquisition workforce count in DCMA.

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<sup>&</sup>lt;sup>3</sup> The word "organic" is used to help the reader distinguish between civilians that are government employees and civilians that are contractor support.

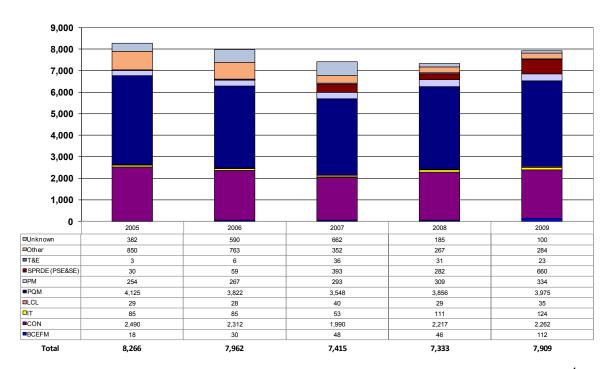


Figure A12-1. Historical Size of DCMA-acquisition workforce (FY2005 – FY2009)(Civilians)<sup>4</sup>

The DCMA acquisition workforce represents various occupational series reflecting the diversity of its mission. Table A12-1 provides a breakout of the top five occupational series within the DCMA acquisition workforce. The highest percentage of employees is in the Quality Assurance Specialist (1910) series (35 percent), followed by Contracting (1102) (26%).

Top 5 Occ Series (FY09)  Defense Contract Management Agency (Civilian)(Acquisition Workforce Only)							
Occ Series - Description Total Total (%) Cumulative (							
1910 - Quality Assurance Specialist	2,762	34.9%	34.9%				
1102 - Contract Specialist	2,037	25.8%	60.7%				
1101 - Business and Industry Specialist	1,191	15.1%	75.7%				
1150 - Industrial Specialist	470	5.9%	81.7%				
0801 - Engineer, General	285	3.6%	85.3%				
#Occ Series in Career Field = 30			·				

Table A12-1. DCMA Acquisition Workforce Top Five Civilian Occupation Series (FY2009)<sup>5</sup>

A12-5

<sup>&</sup>lt;sup>4</sup> The position responsibilities-based DAWIA count methodology, consistent with 10 U.S.C. Section 1721 and DOD policy/guidance, was used for FY2005 through FY2008 workforce counts.
<sup>5</sup> AT&L Workforce Data Mart (end of FY09)

Assessment of Projected Workforce Growth. Acquisition workforce size is a function of the force planning process that reflects deliberate enterprise decisions resulting from balancing of total mission needs and available resources, including budget. On April 6, 2009, the Secretary of Defense announced his intent to grow the acquisition workforce 15% by FY2015. As part of the Secretary's growth strategy and other initiatives, DCMA is projected to grow approximately 2,800 by FY2015. DCMA has been actively planning and deploying initiatives that support this DOD acquisition workforce growth and improvement strategy. As part of improving its capability, DCMA is standing up a Pricing Center of Excellence to support all Components. DCMA submitted planning inputs to OSD and to the Defense Acquisition Workforce Senior Steering Board, and growth is underway.

Normal losses and hiring to fill vacancies, also referred to as replenishment hiring, must be considered as part of assessing total hiring and needed retention through 2015. Enterprise-wide analysis indicates that to sustain the growth strategy for the acquisition workforce in DCMA requires that gain levels, including replenishment hiring, should be at approximately 1,500 for FY2010, 1,200 for FY2011-FY2013, and approximately 750 in following years. Corresponding retention needs require losses at or below 630 for FY2010, 680 in FY2011 and approximately 750 in following years. In FY2009, DCMA experienced approximately 1,100 gains and 600 losses in its acquisition workforce. Noted is that this is an enterprise assessment and that other DCMA factors will impact projected gains and losses.

The DCMA Workforce Lifecycle Assessment. The Workforce Lifecycle Model (WLM) (Figure A12-2) provides a visual display of a workforce in three cohort groups - Future (early career) workforce, Mid-career and Senior-career cohort groups. The Years Retirement Eligible distribution for the Defense acquisition civilian workforce is 32/33/35. The distribution of the DCMA workforce members between the three cohorts is 17/29/54 percent respectively. The WLM serves as a framework for additional discreet analysis of factors that impact the groups. Examples of factors include the nature and number of gains and losses, succession planning, cohort migration and retirement risk. The analyses following the WLM examines the nature and number of gains and losses, the distribution of gains and losses across the workforce lifecycle, retirement eligibility and the "bow wave," and retirement patterns. This information helps to assess risks and to build a foundation for data-driven decisions on hiring, development and retention initiatives. With 54 percent in the senior career group and 32 percent eligible for full retirement, DCMA is taking significant steps, as evidenced by its FY09 hiring and supported by increased retention, to both grow and meet succession needs across its acquisition workforce.

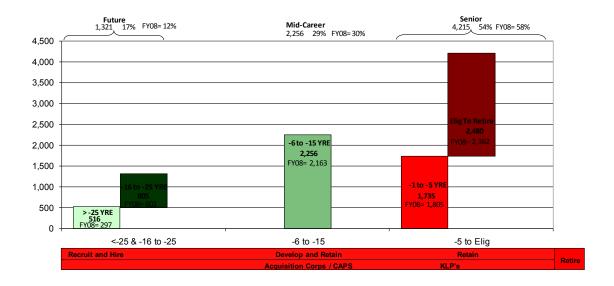


Figure A12-2. DCMA Acquisition Workforce Lifecycle Model (WLM) (FY2009) (Civilians) <sup>6</sup>

<sup>&</sup>lt;sup>6</sup> AT&L Workforce Data Mart (End of FY09)

**DCMA Acquisition Workforce Gains and Losses.** Analysis of end of FY2009 data is ongoing. This report documents gains, loss and retirement data based on completed analysis using FY2009 data. Gains and losses were assessed comparing end of year "member" lists for the workforce. Individuals on the latest end of year list but not on the prior year list are counted as gains. Those on the prior year list but not on the latest end of year list are counted as losses.

Gains to the acquisition workforce are categorized in two ways: 1) a new hire to DOD who becomes an incumbent on a DOD position designated acquisition and part of a DCMA acquisition career field or 2) a "switch-in," which is a gain from within DOD who newly occupies an acquisition position (i.e., they were not recorded as being on an acquisition position in the prior fiscal year). The "switch-in" category is divided into two sub-categories: 1) switch-ins that are substantive gains, and 2) administrative gains. Figure A12-3 depicts the gains/losses for DCMA, to include substantive and administrative switches in and out of acquisition career fields.

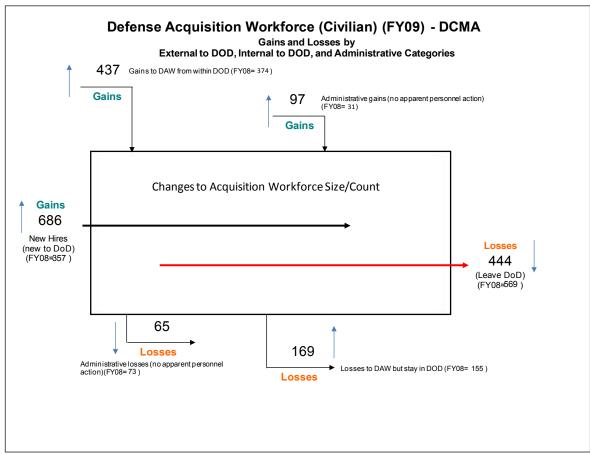


Figure A12-3. DCMA Acquisition Workforce FY2009 Gains and Losses by Three Major Categories

– External, Internal, and Administrative (Civilians)<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data). Numbers include all members regardless of retirement plan (CSRS, FERS and others). Other analysis in report focuses on members under CSRS and FERS.

Substantive gains are those in which a person newly occupies a Defense acquisition position in the DCMA acquisition workforce during the fiscal year and is associated with a transfer involving a promotion, lateral transfer, or change in occupation series. Substantive gains can come from non-acquisition workforce members within DCMA or other DOD Components. Losses are categorized in the same manner. Administrative gains and losses appear to be "in-place" changes in which an encumbered position is designated acquisition (a "gain"), the acquisition designation is removed (a "loss"), or the acquisition career field designation is updated. Administrative gains and losses must be considered appropriately when assessing projected hiring and retention needs.

Gains and losses occur throughout the workforce career lifecycle. Understanding the pattern of gains versus losses can help highlight hiring, retention and career management needs. Figure A12-4 depicts the DCMA's defense acquisition workforce civilian gains and losses by "years to retirement eligibility" groups that took place during FY2009.

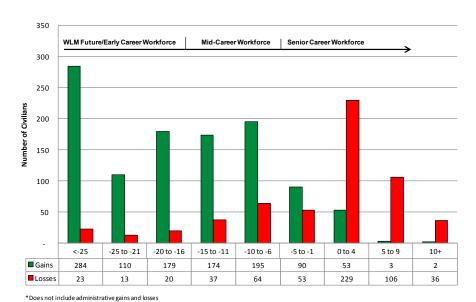


Figure A12-4. DCMA Acquisition Workforce FY2009 Gains and Losses during the Career Lifecycle by Years to Retirement Eligibility (Civilians)<sup>8</sup>

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<sup>8</sup> RAND analysis using DMDC data (end of FY2008and end of FY2009 data).

FY09 data indicates that 573 of 1,090 gains<sup>9</sup> (53 percent) (less administrative gains) to the civilian acquisition workforce were to the future career group, 369 (34 percent) were to the mid-career group, and 148 gains (14 percent) were to the senior career group. This represents a 102 percent increase in gains from FY08 to FY09 for the future career group, a 41 percent increase in the mid-career group, and a 12 percent increase for the senior career group. FY09 gains include external hires (into DOD), internal DOD gains (from within DOD), and other administrative gains (e.g., through position coding updates). Figure A12-5 depicts the external hires and internal gains by lifecycle career group.

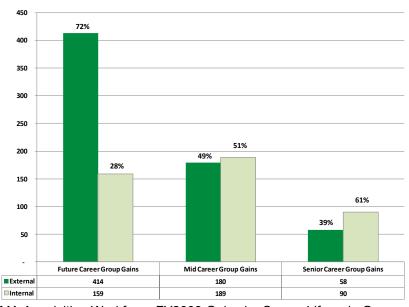


Figure A12-5. DCMA Acquisition Workforce FY2009 Gains by Career Lifecycle Group and Source - External and Internal (Civilians)<sup>10</sup>

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 $<sup>^9</sup>$  Gains involving members under CSRS or FERS retirement plans; less than 1% are under other plans  $^{10}$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data)

FY09 data indicates that 56 of 563 losses<sup>11</sup> (10 percent) (less administrative losses) to the civilian acquisition workforce were to the future career group, 101 (18 percent) were to the mid-career group, and 406 (72 percent) were to the senior career group. This represents a 37 percent decrease in losses from FY08 to FY09 for the future career group, a 1 percent increase in the mid-career group, and a 23 percent decrease for the senior career group. FY09 losses include external losses (left DOD), internal losses in which acquisition workforce members stayed in DOD, and other administrative gains (e.g., through position coding updates). Figure A12-6 depicts, by lifecycle career group, the external losses (left DOD) and internal losses.

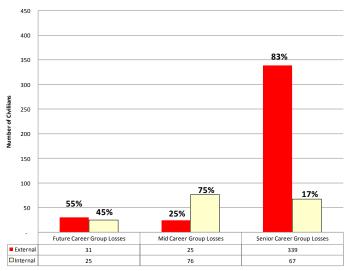


Figure A12-6. DCMA Acquisition Workforce FY2009 Losses by Career Lifecycle Group and Source
- External and Internal (Civilians)<sup>12</sup>

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<sup>&</sup>lt;sup>11</sup> Losses involving members under CSRS or FERS retirement systems; less than 1% are under other systems

 $<sup>^{12}</sup>$  AT&L HCI generated from RAND analysis using DMDC data (end of FY2008 and end of FY2009 data)

Workforce turnover is a common workforce assessment measure.<sup>13</sup> Figure A12-7 provides a comparison of defense acquisition workforce turnover rates for the total acquisition workforce within DCMA and then by Future, Mid-career, and Senior-career groups. Overall and across the career group categories, turnover rates decreased in FY2009, likely due in part to economic conditions.

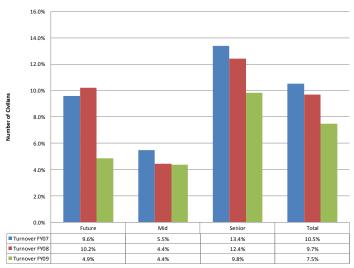


Figure 12-7. DCMA Acquisition Workforce Turnover for FY2007, FY2008, FY2009 (Civilians)<sup>14</sup>

Retirement Eligibility. Significant concern exists by all stakeholders on the departure of the Baby Boomer workforce and it is often described as a retirement bow wave. The retirement profile in Figure A12-8 indicates at the end of FY08, 31 percent (2,480) of the DCMA civilian acquisition workforce is eligible for full retirement benefits and an additional 22 percent (1,735) will become eligible within the next five years. An average of 318 members (approximately 4 percent) of the acquisition workforce within DCMA will become fully retirement eligible each year through FY2019. Approximately 32 percent of the DCMA workforce is under the Civil Service Retirement System (CSRS) and 67 percent is under the Federal Employee Retirement System (FERS), the two major retirement systems used in the federal government. The rate of separation for DCMA spikes from 2.6 percent at one year before retirement eligibility to 18.4 percent during the first year of eligibility. Based on past retirement patterns, approximately 46 percent of the DCMA workforce members that become fully retirement eligible will likely separate within the first four years of eligibility.

<sup>&</sup>lt;sup>13</sup> For this analysis, turnover was calculated using total losses (less administrative losses) divided by the average of the end of fiscal year counts for 2008 and 2009.

<sup>&</sup>lt;sup>14</sup> AT&L HCI generated from HCI/ RAND analysis using DMDC data (end of FY2008 and end of FY2009 data).

Asch B., Haider S., and Zizzimopoulos, J. (2003) *The Effects of Workforce-Shaping Incentives on Civil Service Retirements: Evidence from the Department of Defense.* p. 25.

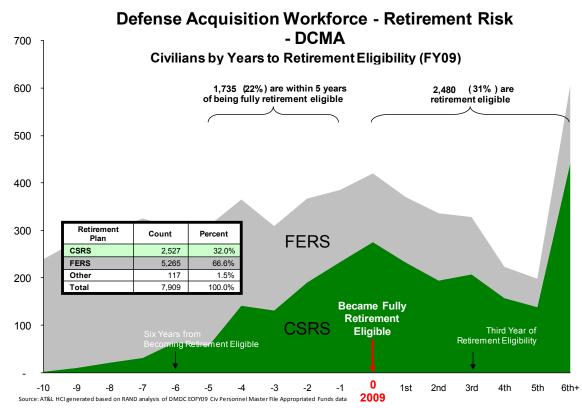


Figure A12-8. DCMA Acquisition Workforce FY2009 Distribution by Retirement System and Years of Retirement Eligibility (Civilians)<sup>1</sup>

## AT&L Competency Model and Assessment

Senior AT&L leaders are partnering with the Components and Defense Agencies to ensure updating of enterprise-wide acquisition workforce competencies for all functional communities. Updated acquisition functional competency models are enabling workforce assessments and improved, data-driven human capital planning. Results of the assessments provide important organization and enterprise information for improving workforce analysis, hiring and retention decisions relative to size, training improvements and other workforce applications. The Components also have related internal initiatives to improve competency management of their acquisition workforce.

## Certification/Standards

The DOD Acquisition Functional Leaders establish workforce certification standards (Levels I, II and III) which are comprised of education, training, and experience requirements. DCMA assigns certification level requirements to positions designated as acquisition. DOD acquisition career fields are organized

<sup>&</sup>lt;sup>16</sup> RAND analysis using DMDC data (end of FY08 and end of FY09 data).

around a "Core Plus" learning architecture that links acquisition, functional certification standards with a variety of assignment-specific short courses. Incumbents are required to meet position certification requirements within 24 months. To promote career long development and currency, Defense acquisition workforce members are required to complete 80 continuous learning points every two years. A career development guide (the Core Plus guide) has been developed to assist individuals in identifying appropriate certification, career path, and jobspecific training. The online guide is available at http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx.

Table A12-2 shows the DCMA certification level requirements for designated acquisition positions.

Certification Level Requirements for Positions Designated Acquisition DCMA (FY09)									
	DAWIA Level I	DAWIA Level II	DAWIA Level III	Total	DAWIA Level I (%)	DAWIA Level II (%)	DAWIA Level III (%)		
BCEFM	2	42	68	112	1.8%	37.5%	60.7%		
CON	207	1,370	682	2,259	9.2%	60.6%	30.2%		
IT	11	80	32	123	8.9%	65.0%	26.0%		
LCL	1	27	7	35	2.9%	77.1%	20.0%		
PQM	170	3,337	467	3,974	4.3%	84.0%	11.8%		
PM	1	156	177	334	0.3%	46.7%	53.0%		
SPRDE (ST)	1	7	3	11	9.1%	63.6%	27.3%		
SPRDE (SE)	80	355	198	633	12.6%	56.1%	31.3%		
T&E	0	16	7	23	0.0%	69.6%	30.4%		

Table A12-2. DCMA Acquisition Positions - Certification Level Requirements (FY2009)<sup>17</sup>

For DCMA, 73 percent of its acquisition workforce have met or exceeded certification requirements for acquisition positions. This is one of the highest certification met/exceeded rates among Components. Significant replenishment and growth hiring as well as career broadening by switching career fields, results in a continuous large group of workforce members working towards position certification requirements within the 24 months allowed by policy. For DCMA, assessment indicates 25 percent of its acquisition workforce may be within the 24 month period allowed to achieve certification. Also noted is that while the number of members meeting or exceeding requirements may increase, the percentage meeting or exceeding certification requirements may actually decrease due to the increase in workforce size. Figure A12-9 summarizes certification rates for the DCMA career fields.

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<sup>&</sup>lt;sup>17</sup> AT&L Workforce Data Mart (End of FY09 data)

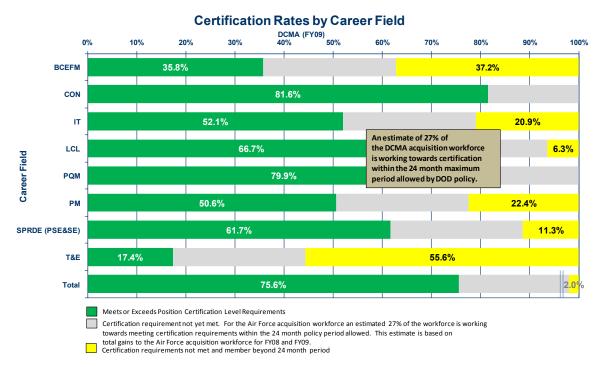


Figure A12-9. DCMA Acquisition Workforce FY2009 Certification "Meet/Exceed" Rates (Civilians)<sup>25</sup>

## **SUMMARY**

The President, the Congress and the Secretary of Defense have strongly emphasized the need for a strong DOD contract management and oversight capability. DCMA leadership and the DCMA team are proactively managing recruiting, hiring, development, recognition, and retention strategies, to include a major Base Realignment and Closure (BRAC) move. In support of its mission and workforce planning needs, DCMA is continuing to improve its workforce data and analysis capability, to include partnering to leverage enterprise tools. The horizontal enterprise analysis presented in this appendix on the DCMA acquisition workforce helps build the foundation for data-driven decision making to improve the Business workforce. It is understood that this analysis compliments more extensive and necessary vertical analysis ongoing within DCMA. This appendix and additional information on the Defense acquisition workforce is available at https://acc.dau.mil/acquisitionworkforce.

<sup>&</sup>lt;sup>25</sup> Certification meet/exceeds percentages based on periodic Component-provided reporting data which is loaded into AT&L Workforce Data Mart. AT&L HCI-generated percent meet/exceeds based on comparison of position certification level requirements established by Components and Component-reported certification level achieved by member. End of FY2009 data used. AT&L HCI estimate of in-progress certifications within 24 month policy period based on number of all gains (including administrative/recoding) for FY2008 and FY2009. Gains and loss data generated from DMDC-provided master file data to RAND and then analyzed by AT&L HCI. DoN and Air Force percentages directly provided by DoN and Air Force.

## Appendix 13 Statutory Reporting Requirement Government Performance of Critical Acquisition Functions

#### INTRODUCTION

The FY2007 National Defense Authorization Act (NDAA), Public Law 109-364, enacted October 17, 2006, includes Section 820, Government Performance of Critical Acquisition Functions (hereafter referred to as Section 820). It establishes the goal for the Department of Defense (DOD) and each military department that within five years after enactment (by October 17, 2011), for each major defense acquisition program (MDAP) and each major automated information system (MAIS) program, the following positions are performed by a properly qualified member of the Armed Forces or full-time employee of the DOD:

- (1) Program manager
- (2) Deputy program manager
- (3) Chief engineer
- (4) Systems engineer
- (5) Cost estimator
- (6) Product Support Manager (added<sup>1</sup>)
- (7) Lead program contracting officer (added<sup>2</sup>)

The Department strategy to implement Section 820 is based on five key initiatives as follows:

- 1) SECRETARY OF DEFENSE GROWTH STRATEGY TO INCLUDE IN-SOURCING TO REBALANCE THE ACQUISITION WORKFORCE
- 2) PROGRAM OFFICE STAFFING PLANS NOW REQUIRED
- 3) KEY LEADERSHIP POSITIONS DEFINED INCREASED ATTENTION TO QUALIFICATIONS AND SUCCESSION PLANNING
- 4) RESHAPING THE CERTIFICATION CONSTRUCT TO PLACE GREATER EMPHASIS ON A FULLY QUALIFIED WORKFORCE
- 5) IMPROVING LEADERSHIP DEVELOPMENT TO ENHANCE MDAP OUTCOMES

<sup>&</sup>lt;sup>1</sup> Added by section 805 of the National Defense Authorization Act for Fiscal Year 2010

<sup>&</sup>lt;sup>2</sup> The Department also added the position of Lead Program Contracting Officer for MDAP/MAIS programs.

## 1) SECRETARY OF DEFENSE GROWTH STRATEGY – TO INCLUDE IN-SOURCING TO REBALANCE THE ACQUISITION WORKFORCE

The acquisition workforce growth strategy is the foundation and directly supports the goals of Section 820. The initiative to increase the size of the organic acquisition workforce by 20,000 through 2015 enables DOD to ensure that each major defense acquisition program and each major automated information system are performed by properly qualified members of the acquisition workforce. To achieve this goal, DOD plans to hire approximately 10,000 new workforce members and in-source approximately 10,000 positions that were previously performed by contractor personnel. These actions will create a better balance between the government workforce and contractor support while strengthening DOD's capability to perform inherently governmental functions and provide appropriate oversight of all acquisition activities.

Table A13-1 depicts actual growth between 2008 and 2009 and planned growth by September 30, 2011 for acquisition career fields directly related to meeting the Section 820 goals. The FY2010 and FY2011 growth is composed of hires associated with insourcing and other hires ("new hires"). The FY2011 projected size is the total "civilian" growth added to the FY09 count (civilians *and* military). The growth supports the five year goal to have properly qualified members of the Armed Forces and DOD employees in place by October 17, 2011.

Defense Acquisition Workforce Count			Planned FY10 Growth		Planned FY11 Growth		TOTAL FY10+FY11	Projected Size FY11	% Increase from FY08	
820 Categories	FY08 Count	FY09 Count	Increase	<b>New Hires</b>	In-Sourcing	New Hires In-Sourcing		Growth	FY11 Count	Increase
Program Mgt	12,781	13,422	5.0%	60	980	73	209	1,322	14,744	15.4%
Engineering	34,537	36,704	6.3%	75	868	166	566	1,675	38,379	11.1%
Business	7,085	7,262	2.5%	11	301	441	104	857	8,119	14.6%
Life Cycle Logistics	13,361	14,852	11.2%	92	224	62	232	610	15,462	15.7%
Contracting	25,680	27,655	7.7%	1043	191	852	55	2,141	29,796	16.0%
TOTAL	93,444	99,895	6.9%	1,281	2,564	1,594	1,166	6,605	106,500	14.0%

Table A13-1. Section 820-related Acquisition Workforce Growth from FY2008 through FY2011

The strategy to rebalance the acquisition workforce by in-sourcing and adding additional new hires is vital for meeting the Section 820 goal. Public Law 110-181, Defense Authorization Act Fiscal Year 2008, Section 324, Guidelines on In-sourcing New and Contracted Out Functions, added a new section 2463 to Title 10, United States Code. On April 4, 2008, the Deputy Secretary of Defense prescribed implementing guidelines and procedures to ensure consideration is given to using Federal Government employees for work that is currently performed or would otherwise be performed under Department of Defense contracts.

On May 29, 2009 the Deputy Secretary provided additional guidance in a memo "Insourcing Contracted Services – Implementation Guidance." The memo states,

"On April 6, Secretary Gates announced that the Department would scale back the role of contractors in support services. On April 8, the Comptroller signed Resource Management Decision (RMD) 802, which included the realigning of resources for FY2010-2014 to decrease funding for contract support and increase funding for approximately 33.4K new civilian manpower authorizations, 10,000 of which are for the Defense acquisition workforce."

This guidance calls for a review of all contracted services for possible in-sourcing as part of a Total Force management strategy. The components are actively engaged in reviewing and deploying the initiative. The increase in size contributes to the goal of having an adequate number of properly qualified lead program managers, deputy program managers, chief engineers, systems engineers, cost estimators, and program contracting officers for MDAP and MAIS programs.

### 2) PROGRAM OFFICE STAFFING PLANS

On December 8, 2008, DOD re-issued DOD Instruction 5000.02, Operation of the Defense Acquisition System. The Instruction now requires that each Technology Development and Acquisition Strategy plan include: "A time-phased workload assessment identifying the manpower and functional competency requirements for successful program execution and the associated staffing plan, including the roles of government and non-government personnel." The requirement for this staffing plan provides program managers a tool for program office specific planning for a right-sized and highly qualified staff.

## 3) KEY LEADERSHIP POSITIONS – INCREASED ATTENTION TO WORKFORCE QUALIFICATIONS AND SUCCESSION PLANNING

The Department is leveraging the Defense Acquisition Workforce Key Leadership Position (KLP) policy to facilitate succession planning and to ensure availability of a highly qualified pool of acquisition workforce members to fill KLPs on MDAPs and MAIS programs. The KLP construct is another tool for achieving the Section 820 goals. The intent of the KLP policy is to increase attention to qualifications, tenure and succession planning for KLPs across the Department. In May 2007, DOD expanded the definition of required KLPs to include positions identified in Section 820 and added Lead Contracting Officer. Additionally, Section 805 of FY2010 NDAAA modified Section 820 to add the Product Support Manager.

All components have been tasked to: 1) provide their approach to implementing the required KLP structure; 2) identify each KLP (position) and the incumbent; and 3) identify incumbent qualifications. As of December 2009, the components have identified 1,052 KLPs. Of the 1,052, 76 percent (798) represent career fields directly related to meeting the Section 820 goals (see Table A13-2). In FY2010, the

Department will further assess the organic and contractor support mix in these mission critical functions to ensure the Department is on track to comply with the objectives of Section 820.

DOD Acquisition Career Field	Army	DoN	Air Force	Other	Total	% of All KLPs	Cum %
Program Management	299	191	105	13	608	58%	58%
Engineering	73	41	28	0	142	13%	71%
Business - Cost Estimating	2	25	0	0	27	3%	74%
Life Cycle Logistics	17	0	4	0	21	2%	76%
Contracting (Added by DOD)	87	31	20	20	158	15%	91%
TOTAL	478	288	157	33	956	91%	

Table A13-2. Defense Acquisition Workforce Key Leadership Positions (FY2010 1<sup>st</sup> Quarter)

Additionally, the Department is driving better integration of the requirement for program office staffing plans and the KLP policy to support attainment of Section 820 goals.

## 4) RESHAPING THE CERTIFICATION CONSTRUCT WITH GREATER EMPHASIS ON A FULLY QUALIFIED WORKFORCE

The Department initiative for improving the certification process is another key enabler for meeting the Section 820 goals. Placing greater emphasis on experience as an element of full qualification will improve the overall quality of both the current workforce and new hires. Experience is a function of time and a key element for developing high quality employees. To ensure the acquisition workforce is fully qualified, all functional leaders have been asked to review their current functional experience and training requirements. For example, the functional leader for engineering is deploying an expanded certification program that will increase the time required for certification from 4 to 8 years. Another example is the restructure of the Business career field into two distinct career paths, one for Cost Estimating and one for Financial Management. This initiative will improve training and experience requirements for the cost estimating community. It directly addresses the requirements of Section 820 to ensure that critical acquisition functions are performed by properly qualified DOD personnel. A function by function review will be completed with a deliberate focus on improving certification standards and the overall quality of the acquisition workforce. These new career path initiatives reflect strong leadership emphasis on critical acquisition competencies and skill sets and include increased training and experience standards. The Department is also evolving a strategy called Acquisition Qualification Standards (AQS) to enhance the current certification program. AQS will increase the supervisor and employee mentoring process to validate and improve individual qualifications.

## 5) INVESTING IN LEADERSHIP DEVELOPMENT

Improving leadership performance and development of future acquisition leaders is a major component of this strategy. The military services have lead responsibility for leadership training and workforce development and have created world-class training such as their exemplary professional military education programs. During the last four years the Department has significantly expanded its portfolio of Defense Acquisition University (DAU) executive and leadership courses available at the mid and senior

grade levels for both civilian and military. These leadership courses provide an opportunity for the acquisition workforce to supplement component leadership programs and develop their leadership abilities and qualifications to perform critical acquisition functions while responding effectively within the challenging acquisition environment. The following are examples of leadership and executive development training:

- Army/DAU Senior Service College Fellowship (SSCF). This ten month program
  provides high potential acquisition civilians with the intellectual framework to
  effectively address leadership, acquisition and other challenges that require
  creative solutions. The program is designed primarily for leadership
  development of Army civilians that leads to higher levels of leadership
  responsibility. The SSCF program has graduated 43 fellows who have moved to
  higher levels of responsibility within the Army.
- Coaching and Mentoring. An executive coaching capability has been established
  to support program managers and program executive officers. A cadre of very
  experienced and successful acquisition practitioners serving at the Defense
  Acquisition University have been trained and certified to be performance
  executive coaches. This is an action learning approach which focuses on
  broadening the acquisition and leadership experience of acquisition leaders. A
  new leadership course, "Leaders as Coaches," is in development that will teach
  coaching skills to increase supervisors' capacity and commitment to mission
  success and workforce development.
- "Leading in the Acquisition Environment" (ACQ 450). Students bring actual leadership challenge they are facing, and they work with classroom facilitators and other student leaders to formulate courses of action and individual learning plans. Also, included is completion and interpretation of a "360 degree" leadership assessment.
- The "Integrated Acquisition for Decision-makers" (ACQ 451). Through simulations and case studies students practice using decision-making tools and collaboration to make trade-offs and multidisciplinary, integrated management decisions. Participants gain a wider view of the acquisition environment and their respective roles.
- Forging Stakeholder Relationships" (ACQ 453): Students identify and assess the
  interests of stakeholders who direct and influence acquisition planning, execution
  and outcomes. They address strategies to communicate and influence
  stakeholders to better plan and manage for program success.
- The Senior Acquisition Course at National Defense University. The Senior Acquisition Course (SAC) prepares officers and civilian members of the defense acquisition workforce for advancement to positions of leadership in the acquisition community. Provided by the Industrial College of the Armed Forces of the National Defense University and in partnership with the Defense Acquisition University, the SAC is part of a master's degree program and part of DOD's professional military education framework. Students may elect to study program management in depth and in doing so earn equivalency credit for the mandatory program management course at DAU. Approximately 90 students complete the SAC each year of which half are military and half are civilian.

#### **SUMMARY**

These five Department initiatives represent a comprehensive approach to strengthening and ensuring a capable Defense acquisition team. The initiatives reflect strong leadership commitment to attain the goals of Section 820 which also directly support and facilitate the Department's efforts to restore and rebalance the defense acquisition workforce. Component progress reviews will be incorporated as part of the 2010 Strategic Workforce Plan for the defense acquisition workforce.

# Appendix 14 Statutory Reporting Requirement Career Path and Other Requirements for Military Personnel in the Acquisition Field

### INTRODUCTION

Public Law 110-417, enacted October 14, 2008, includes Section 834 of the FY2009 National Defense Authorization Act (NDAA) (hereafter called Section 834). Section 834 addresses career path and other requirements for military personnel in acquisition and requires the Secretary of Defense (SecDef) to submit a report on:

- 1) the number of acquisition and contracting billets in each of the Services and joint activities that are reserved for general officers and flag officers; and
- 2) the extent to which these billets have been filled by general officers and flag officers with significant acquisition experience and significant contracting experience.

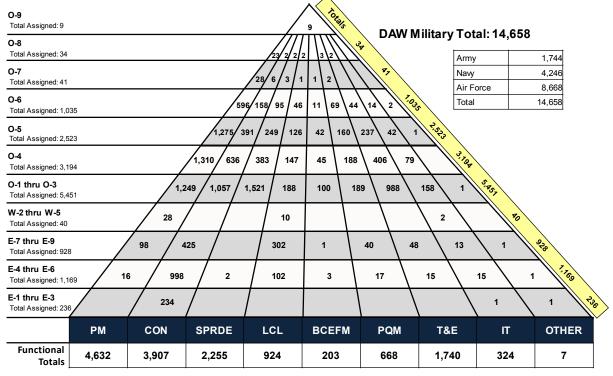
Section 834 requires that the military departments establish specific career path and acquisition career fields that attract the highest quality officers and enlisted personnel, including general and flag officers. This includes ensuring that there are appropriate opportunities for promotion. There are broad variations between the military departments with respect to their acquisition workforce construct: workforce size, career field mix, and military composition, including general and flag officers. As of September 30, 2009, there were 133,103 members in the Defense acquisition workforce; 14,658 (11 percent) were military (see Figure A14-1). The military composition of the acquisition workforce for the Army, Navy and Air Force are as follows: Army - 4 percent (1,744); Navy - 9 percent (4,246); and Air Force - 32 percent (8,668). Eighty-six (86) percent of military members in the defense acquisition workforce are assigned to the following acquisition career areas:

-	Program Management -	32 %
-	Contracting -	27 %
-	SPRDE-Systems Engineering -	15 %
-	Test & Evaluation -	<u>12 %</u>
		86 %

Approximately, 47 percent of military acquisition personnel meet or exceed their position certification requirement.



## Defense Acquisition Workforce Military Career Profile



Source: AT&L Workforce Data Mart (End of FY09) and Service inputs for O-7, O-8, and O-9

Figure A14-1. Defense Acquisition Workforce Military Career Pyramid Profile by Acquisition Career Field

In addition to addressing the two Section 834 requirements above, this appendix will provide a top level overview of the career development structure within the military departments.

## 1. The Number of Acquisition and Contracting Billets in each of the Services and joint activities for General Officers and Flag Officers

There are 84 acquisition and contracting general and flag officer billets and the components' allocated baseline f are shown in Figure A14-2. The Army has 20 general officer billets; the Navy has 39 general and flag officer billets; the Air Force has 25 general officer billets. This represents 24 percent, 46 percent and 30 percent, respectively. Of the 84 billets, 10 are contracting (12 percent). Five contracting billets are in the Army and 5 are in the Navy. The Air Force reported no general officer billets for contracting.

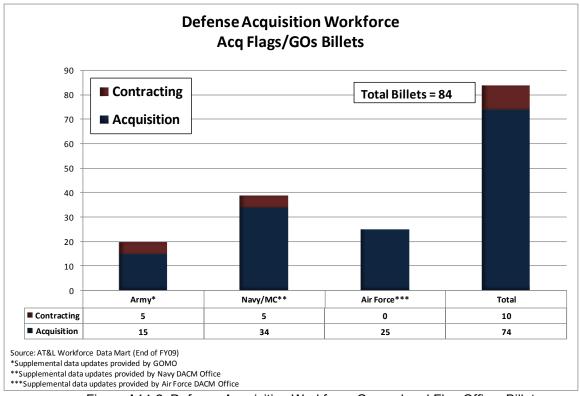


Figure A14-2. Defense Acquisition Workforce General and Flag Officer Billets

## 2. The extent to which these billets have been filled by general and flag officers with significant acquisition experience and significant contracting experience

Figure A14-3 depicts the number of general and flag officer positions, by component, that are filled by general and flag officers. There are 84 general and flag officer billets and 84 general officers are assigned (100 percent). The Army reported 20 general officer billets and there are 20 general officers assigned (100 percent). The Navy and Marine Corps has 39 flag officer billets and 39 are filled, 37 flags and 2 general officers (100 percent). The Air Force's 25 general officer billets are filled (100 percent).

There are 10 contracting general and flag officer billets. There are 5 contracting billets in the Army and 3 are filled (60 percent)(17 are assigned to the 15 acquisition billets). The Navy's 5 billets are all filled (100 percent) and includes 3 warranted engineers assigned to the civil engineering corp. The Air Force has no general officer billets for contracting.

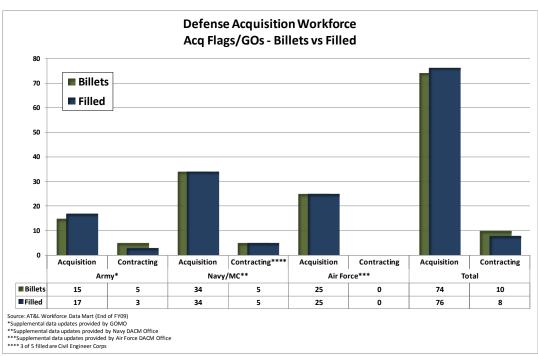


Figure A14-3. Billets and Positions Filled by General/Flag Officers for Contracting and Other Acquisition Positions

The military rank structure for assigned acquisition general and flag officers is documented in Figure 14-4. There are 84 general and flag officers assigned, and 41 are one-star positions (49 percent); 34 are two-star positions (40 percent); and 9 are three-star positions (11 percent).

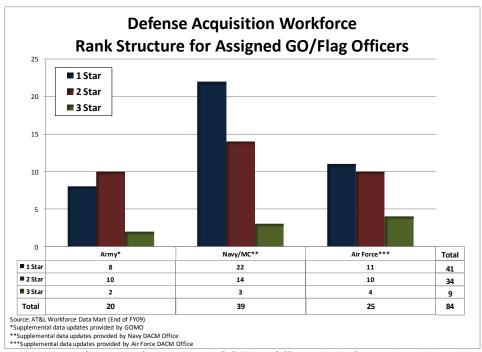


Figure A14-4. Rank Structure for Assigned GO/Flag Officers in Defense Acquisition Workforce

Table A14-1 provides a summary of acquisition general and flag officers by service and assignment type as follows: command assignment – 27 (32 percent); joint assignment – 7 (8 percent); PEO/PM assignment – 25 (30 percent); contracting assignment – 8 (10 percent); and other/staff – 17 (20 percent). It is noted that many general and flag officers fill dual roles such as commander and PEO; however, with this assessment we counted them in only one role – for example, command.

Acquisition General/Flag Officer Assignment by Type									
<b>Assignment Type</b>	Total								
Command*	4	11	12	27					
Joint	2	1	4	7					
PEO/PM	9	11	5	25					
Contracting	3	5	0	8					
Other/Staff	2	11	4	17					
Total	20	39	25	84					
*Of the 12 AF general office									

Table A14-1. Acquisition General/Flag Officer Assignments by Type of Assignment

The assessment of significant experience was based on component reviews of each assigned general and flag officer to determine if they met the DAWIA requirement for 10 years of acquisition experience or had substantial acquisition-related operational experience (see Figure A14-5). Considerations included:

- 1. Significant acquisition "program" experience. Experience in major programs such as PM, DPM, PEO, DPEO, acquisition Director, or similar title, and how many positions of responsibility they held prior to their current job.
- 2. Significant acquisition responsibility
- 3. Acquisition related responsibility/experience.
  - USAF officers with significant flight test experience
  - Navy supply corps officers that do not have program office experience, but do have logistics experience valid for the job they are filling
  - Navy civil engineering corps officers that do not have program office experience but do have experience valid for the job they are filling (managing facilities and associated contracts)
- 4. Met the Level III position certification requirement (see Figure A14-6 below)

There are 84 general and flag officers assigned and overall, 77 of the 84 have significant acquisition experience (92 percent), or had substantial acquisition-related operational experience as noted above. The Army has 20 general officers assigned and all had significant acquisition experience. The Navy and Marine Corps (DON) have 39 assigned general and flag officers and 35 had significant acquisition experience (90 percent). The Air Force has 25 general officers assigned and 22 had significant acquisition experience (88 percent).

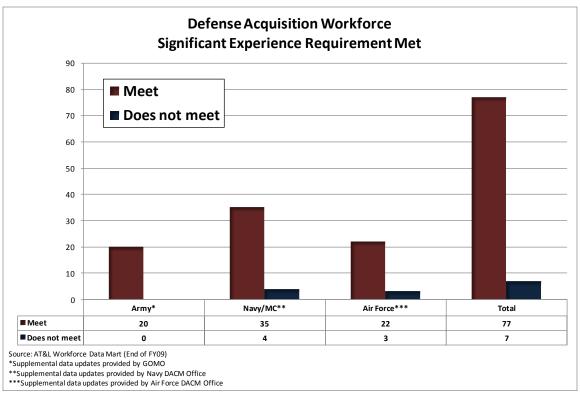


Figure A14-5. Significant Experience Requirement Met by General/Flag Officers in the Defense Acquisition Workforce

All 84 general and flag officer billets have a Level III certification requirement. Level III certification establishes position standards for education, experience, and training requirements. Overall, 76 of the 84 general and flag officers assigned meet the Level III certification requirement for their position (90 percent). The Army has 20 general officers assigned and all are Level III certified. The Navy and Marine Corps have 39 assigned general and flag officers and 34 are Level III certified (87 percent). The Air Force has 25 general officers assigned and 22 are Level III certified (88 percent).

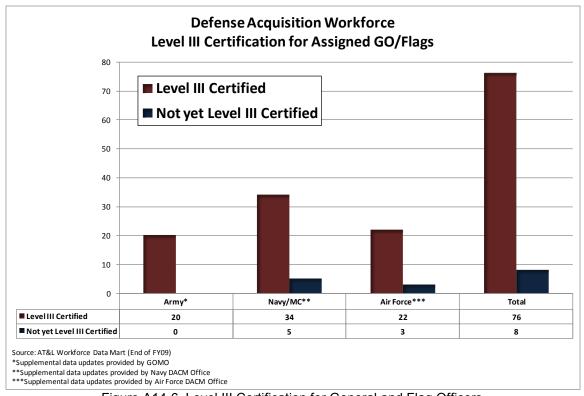


Figure A14-6. Level III Certification for General and Flag Officers in the Defense Acquisition Workforce

FY2009 NDAA, Section 834, "Career Path and Other Requirements for Military Personnel in the Acquisition Field," requires DOD to address the career paths for military acquisition professionals. The acquisition workforce growth strategy and component force planning process directly supports the goal of Section 834. Force planning and workforce development is different in each component. Each military service has developed career path models that are appropriate and aligned with their force planning process. As part of the DOD acquisition workforce growth strategy, deliberate attention will focus on acquisition billets for general and flag officers.

Secretary Gates' objective to reform how and what we buy includes initiatives to significantly improve the quality and readiness of the defense acquisition workforce. This requires having adequate numbers of capable personnel, both civilian and military, including general and flag officers. The Department will ensure there are adequate numbers of qualified general and flag officers in the right places at the right time to provide appropriate leadership to optimize management of all acquisition functions. This drive to improve leadership quality will help optimize acquisition outcomes and get best value for the taxpayer. Component initiatives for ensuring appropriate military career paths are documented below.

## 3. Military Service Initiatives and Discussions to Support Career Path Development

Figure A14-7 below provides an overview of the key acquisition training initiatives currently being implemented by the Military Departments.

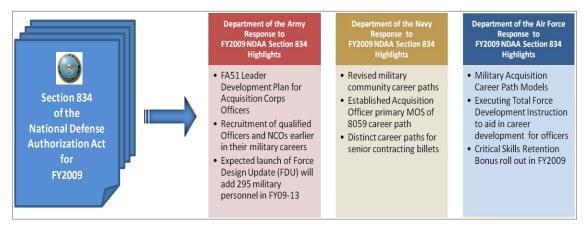


Figure A14-7. Highlights from Military Departments' Responses to Section 834 Requirements

The initial acquisition workforce development and career path reports by the Army, Navy, and Air Force are provided.

## **United States Army**

## Report to Office of the Secretary of Defense Acquisition, Technology & Logistics December 2009



## **Executive Summary**

As required by Sections 813 and 834 of the National Defense Authorization Act Fiscal Year 2009, this report addresses the US Army's designated career paths for military acquisition professionals to ensure the highest caliber Officers and Non-Commissioned Officers (NCOs) enter and remain in the acquisition workforce. This report will further address the command opportunities for acquisition and contracting officers (to include General Officer opportunities); and the development of qualified contingency contracting personnel. In this report, we will focus on the five Acquisition Career Fields (ACFs) in which Army Officers and NCOs currently receive training, experience, and acquisition certification: Program Management; Contracting; Systems Planning, Research, Development and Engineering-Systems Engineering; Information Technology; and Test & Evaluation. As mission and career development needs dictate, Officers are assigned to the five career fields at the Field Grade ranks. Currently, NCOs are assigned only to the Contracting (Military Occupational Specialty (MOS) 51C) ACF.

The Army Acquisition, Logistics and Technology community continues to transform and takes steps forward to make the Army Acquisition Corps (AAC) more relevant and ready for the 21th century. We are confident with our planned actions to grow and develop our military personnel in the Acquisition Career Fields, to include Contracting Officers. The Army Contracting Command (ACC) was initially activated in March 2008. We have completed the Army Contracting Task Force, and we are executing the Army Contracting Campaign Plan Implementation Policy guidance. With the creation and activation of the ACC, we have increased command opportunities (specifically in the area of contingency contracting) for military acquisition corps members.

The Army is aggressively recruiting qualified Officers and NCOs earlier in their military careers. The majority of both Officers and NCOs accessed are being prepared to conduct their first assignment in support of the Army's expeditionary contracting mission. The growth in military contingency contracting capability will allow us to better support the warfighter and provide a more predictable deployment cycle. We understand that increased operations tempo of the contracting workforce requires proactive measures to ensure adequate retention of our highly-trained and battle-tested contracting workforce. These measures include efforts to recruit, train, and retain the highest quality military workforce.

In aggregate, Army acquisition leadership has a deliberate and well defined strategy for addressing the objectives outlined in Sections 813 and 834; and for paving the way forward for the acquisition workforce of today and the foreseeable future.

#### REPORT

## Objective 1: A career path in the acquisition field that attracts the highest quality officers and enlisted personnel.

Within the Army, the Principal Military Deputy to the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) also serves as the Army Director for Acquisition Career Management (DACM). The DACM is responsible for integrating functions across all career fields to ensure appropriate policy, direction and oversight of acquisition professionals covered under the Defense Acquisition Workforce Improvement Act (DAWIA). The DACM provides strategic direction and oversight of the AAC's implementation of all the acquisition career fields.

The Army deliberately develops acquisition professionals according to well defined career development models. *Figures 1-1, 1-2 and 1-3* represent the career development models for military acquisition professionals and serve as a guide for developing military professionals within the acquisition workforce through experience, education, and training. These career models provide ample opportunity and experience for acquisition professionals at all ranks; and provide a path for promotion and greater responsibility within the acquisition workforce.

As defined by Department of the Army (DA) Pamphlet 600-3, Commissioned Officer Development and Career Management, the AAC is executing the FA51 Leader Development Plan. It is an end-to-end plan designed to prepare newly accessed Acquisition Corps Officers for assignment to any acquisition organization and to develop them at the ranks of Captain and Major for critical acquisition positions at the strategic leader level. The FA51 Leader Development Plan consists of the following: the Army Acquisition Basic Qualification Course; the Army Intermediate Program Manager's Course; the Army Acquisition Intermediate Contracting Course; the Army Intermediate Contracting Lab; the Army's Intermediate Level Education; and the FA51 Intermediate Qualification Course (51A IQC). Additionally, the development of military acquisition workforce members is enhanced by the use of regionalized rotational assignments executed by Senior Regional Acquisition Officers (SRAOs). Appointed by the DACM, SRAOs coordinate with other senior acquisition leaders to ensure all Officers assigned to their region have a professional development plan that includes rotation through acquisition positions in several acquisition career fields and developmental opportunities to support acquisition excellence and agile and adaptive acquisition leaders.

The AAC continues to implement initiatives to attract, train and retain the highest quality enlisted personnel. Details are annotated in several United States Army Acquisition Support Center (USAASC) instructions or policies to include: the Noncommissioned Officer MOS 51C: Reclassification Process; the Department of the Army Noncommissioned Officer Career Field Certification Policy; and the Acquisition Corps Membership Policy and Procedures for NCOs. Using the acquisition career model as a guide, leadership may provide each Officer or NCO individual developmental guidance placing them on an individual path to greater responsibility and opportunity in the

acquisition workforce. The acquisition leadership remains watchful to address the major challenges within the workforce and ensures acquisition workforce personnel are appropriately developed in accordance with DoD and Army requirements.

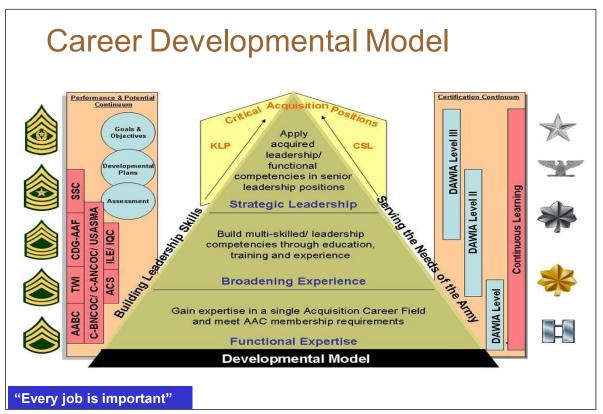


Figure 1-1. Army Acquisition Career Developmental Model

#### Professional Developmental Guide (Officer) MAJ CSL – CONTRACTING COMMAND CONTRACTING OFF SCCT LDR CONTRACTING BRIGADE STF OFFICER CONTRACTING OFF CCT CONTRACTING BN STAFF OFFICER CONTRACTING BDE STAFF OFFICER CSL - CONTRACTING CMD/ PARC OPERATING FORCE ASSIGNMENT ASA(ALT)/ DA STAFF OFFICER/ ASSIGN OFF CONTRACTING OFFICER (USACE/DOD) DEPUTY PROJECT MANAGER ASSISTANT PRODUCT MANAGER OPERATIONAL TEST OFFICER CSL- PRODUCT MANAGER CONTRACTING TM LD (USACE/ DOD) CSL- PROJECT MANAGER DEPUTY PEO GENERATING FORCE ASSIGNMENT (S) (Not All Inclusive) ASA(ALT) / DA STAFF OFFICER ECC / ACC STF OFFICER OMBAT DEVELOPER ASA(ALT)/ DA STAFF OFFICER DIRECTOR OF CONTRACTING OPERATIONAL TEST OFFICER COMBAT DEVELOPER DEPUTY PROJECT OFFCIER AABC/ AAICC/ LAB INTERMEDIATE LEVEL EDUCATION (MEL4) INTERMEDIATE QUALIFICATION COURSE (MEL 4 CPT CAREER COURSE AABC/ AAICC/ LAB PRE-COMMAND COURSE SENIOR SERVICE COLLEGE (MEL 1) PRE-COMMAND COURSE PROFESSIONAL EDUCATION STRATEGIC EXPERIENCE CAREER BROADENING EXPERIENCE FUNCTIONAL EXPERIENCE DEVELOPMENT ASI: IX (GRN LEAN SIX SIGMA) ASI: IY (BLK LEAN SIX SIGMA) ASI: 5P (PARACHUTIST) ASI: 3B (AIR ASSUALT) FUNCTIONAL CON 243/ CON 244 CON 243/ 244/ CON 353/ IND 100/ PMT 352 MISSION SUPPORT TRAINING CONTINUOUS LEARNING POINTS SELF DEVELOPMENT CONTINUOUS LEARING POINTS CONTINUOUS LEARNING POINTS ADVANCED CIVIL SCHOOLING TRAINING WITH INDUSTRY SELF DEVELOPMENT CIVILIAN EDUCATION BA/BS 24 Hours (Business) MA/MS (Business Discipline) MA/ MS MA/MS CERTIFICATION DAWIA LEVELI/II DAWIA LEVEL II/III DAWIA LEVEL III DAWIA LEVEL III READING LIST REIMER LIBRARY/ACCP/SMARTBOOK REIMER LIBRARY/ACCP/SMARTBOOK REIMER LIBRARY/ACCP **Keys To Success:** Access Qualified Personnel Trained and Ready leaders Agile & Meet DAWIA/Regulatory and Statutory Experience & Development ≥ Training Adaptive Requirements

Figure 1-2. Officer Professional Development

#### Professional Developmental Guide (NCO) RANK SKILL LEVEL SL3-SSG SL4-SFC SL5-MSG SL5-SGM/CSM CONTRACTING NCO TEAM LDR CCT CONTRACTING NCO BN OPS & REQ CONTRACTING NCO BDE OPS & REQ CONTRACTING NCO BDE PLANS & POLIC CONTRACTING NCO BN PLANS & POLICY ONTRACTING NCO CCT CONTRACTING NCO PLANS & OPS SCC CONTRACTING NCO PLANS & OPS BDE CSM ACC OPERATING CSM MICC FORCE INSTRUCTOR CAREER MANAGEMENT NCO CONTRACTING NCO (USACE) AAC REGIMENTAL SGM CHIEF NCO PROPONENT CONTRACTING CBT DEVNCO CONTRACTING NCO (USACE) GENERATING FORCE ASSIGNMENT BCTP NCOIC FIRST SERGEANT PROFESSIONAL INTERMEDIATE QUALIFICATION CRS MISSION READY AIRMAN COURSE (OR) ARMY ACQ BASIC COURSE ARMY INTER CONTRACTING CRS CONTRACTING LAB MILITARY EDUCATION ARMY WAR SL3 ARMY WARRIO STP 51C; SMCT 2-4 SL5 ARMY WARRIOR STP 51C SL4 ARMYWARRIOR STP 51C; SMCT 2-4 ASI: 8P (PARACHUTIST) ASI: 2B (AIR ASSUALT) SGI: X (DRILL) ASI: 2S (BATTLE STAFF) CON 243/CON 244/CON 234 ASI: 8 (INSTRUCTOR) ASI: 2B (AIR ASSUALT) ASI: 2S (BATTLE STAFF) SQI: M (FIRST SERGEANT) ASI: IX (GRN LEAN SIX SIGMA) ASI: 2S (BATTLE STAFF) SI: IX (GRN LEAN SIX SIGMA) ASI: IY (BLK LEAN SIX SIGMA) ASI: A3 (FORCE DEVLOPMENT) **FUNCTIONAL** TRAINING CON 243/CON 244/CON 234 CON 353/IND 100 CONTINUOUS LEARING POINTS (DL) ACQUISITION TRAINING SELF DEVELOPMENT CLEP DANTE SOCAD AARTS ACES 1SG CRS ARMY E-LEARNING SELF DEVELOPMENT (Guided) DEGREE COMPLETION PROGRAM/ADVANCE CIVIL SCHOOLING LEADER DEVELOPMENT PROFILE COUNSELING CIVILAIN EDUCATION AA/BS/BA BAMS MAMS 24 HOURS BUSINESS DAWIALEVELIJI ACCREDITION LEVELIJI DAWIALEVELIII CREDENTIALING DAWIA LEVELI ACCREDITION LEVELIJI DAWIALEVELIII READING LIST REIMER LIBRARY/ACCP/SMARTBOO REIMER LIBRARY/ACCP/SMARTBOOK REIMER LIBRARY/ACCP/SMARTBOOK REIMER LIBRARY/ACCP **Keys To Success:** Access Qualified Personnel Trained and Ready leaders Meet DAWIA/Regulatory and Statutory Experience & Development ≥ Training Requirements

Figure 1-3. NCO Professional Developmental Model

Objective 2: A number of command positions and senior noncommissioned officer positions, including acquisition billets reserved for general officers and flag officers under subsection (c), sufficient to ensure that members of the armed forces have opportunities for promotion and advancement in the acquisition field.

As we work to build a stronger and more vibrant acquisition community, we are assisted in our efforts by recommendations contained in the report, "*Urgent Reform Required: Army Expeditionary Contracting,*" dated October 31, 2007, by Dr. Jacques Gansler and Members of the Commission on Army Acquisition and Program Management in Expeditionary Operations. Also, there are other initiatives that have been implemented that support the objective and will be briefly addressed. We are guided by the report's overarching recommendation to *implement the Commission's recommendations rapidly and measure success* and the following four supporting recommendations for the success of future expeditionary operations:

- (1) Increase the stature, quantity, and career development of military and civilian contracting personnel, particularly for expeditionary operations;
- (2) Restructure organization and restore responsibility to facilitate contracting and contract management;

- (3) Provide training and tools for overall contracting activities in expeditionary operations; and
- (4) Obtain legislative, regulatory, and policy assistance to enable contracting effectiveness in expeditionary operations.

The Gansler Commission's supporting recommendations listed above included 40 actions to correct the discrepancies identified – 22 of these are Army-specific while the remaining 18 are within the purview of the Office of the Secretary of Defense (OSD), or are legislative actions being addressed jointly among the Services with OSD as the lead agent. The Army has taken action or is implementing 21 of the 22 Army-specific recommendations. The remaining one, to increase the contracting workforce by 400 military and 1,000 civilians, requires additional time to hire and train new personnel, but we are making progress, in large part due to FY 2008 NDAA Section 852 funding which is discussed further in objective 3.

Army acquisition leaders have been fully engaged addressing the command opportunities for Contracting Officers (to include General Officer (GO) opportunities) and the development of qualified contracting personnel. Figure 2-1 depicts the distribution of the Military AL&T Workforce. Figures 2-2 and 2-3 identify the General Officer and Senior NCO opportunities that currently reside within the AAC. These visual representations highlight the important opportunity for upward progression in the AAC.

Currently, there are 20 acquisition GO billets within the AAC. The Army will select the best qualified individual depending on the needs of the service and the competencies of the senior leadership serving at any given point in time (In accordance with DAWIA)). For example, the Program Executive Officer (PEO) may be a GO billet while the Deputy PEO is filled by a Senior Executive Service civilian or vice versa depending on the mission of the organization and the competencies of the two senior leaders. The billets for GOs are as follows: 2 Lieutenant General; 10 Major General; and 8 Brigadier General to support promotion and advancement in the acquisition field.

Section 503(a) of the National Defense Authorization Act (NDAA) for Fiscal Year 2009 (FY09) authorized five additional GO billets in the Active Component designated for acquisition. As of September 2009, the Army has filled GO positions for the Mission and Installation Contracting Command and the Expeditionary Contracting Command. The Army Contracting Command billet was filled by a Senior Executive Service civilian. The two remaining billets to be filled are the Chief of Contracting for the U.S. Army Corps of Engineers (USACE) and an acquisition (contracting) GO in ASA (ALT) in the Office of the Deputy Assistant Secretary for Procurement (DASA (P)).

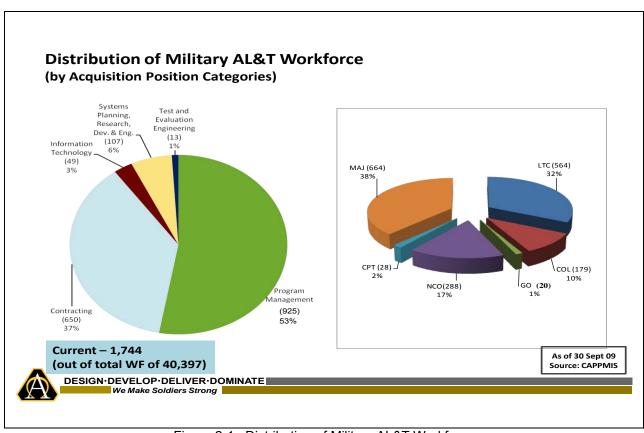


Figure 2-1. Distribution of Military AL&T Workforce

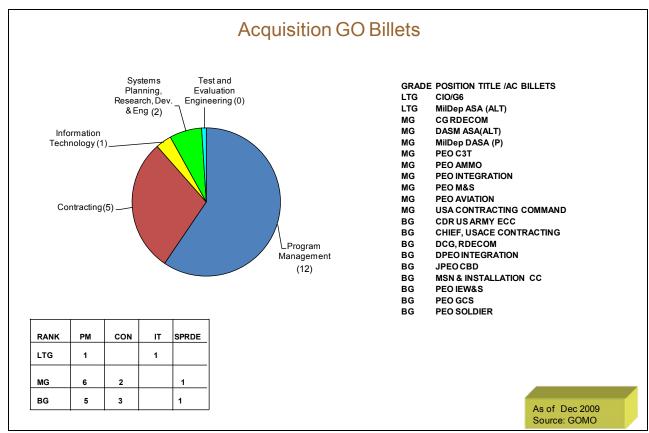


Figure 2-2 Acquisition GO

#### Senior Noncommissioned Officer Billets (by Acquisition Position Title) **GRADE ORGANIZATION POSITION TITLE** SGM ASA (ALT) Senior Enlisted Advisor SGM **USA Acquisition Support Center** Senior Enlisted Advisor SGM Army Contracting Command Senior Enlisted Advisor SGM **Expeditionary Contracting Command** Senior Enlisted Advisor SGM Mission Installation Contracting Command Senior Enlisted Advisor SGM 408th Contracting Support Brigade Senior Enlisted Advisor SGM 409th Contracting Support Brigade Senior Enlisted Advisor SGM 410th Contracting Support Brigade Senior Enlisted Advisor SGM 411th Contracting Support Brigade Senior Enlisted Advisor 412th Contracting Support Brigade SGM Senior Enlisted Advisor 408th Contracting Support Brigade SGM Senior Enlisted Advisor 413th Contracting Support Brigade SGM Senior Enlisted Advisor SGM 900th Contracting Contingency Office Battalion Senior Enlisted Advisor SGM 901th Contracting Contingency Office Battalion Senior Enlisted Advisor SGM 902th Contracting Contingency Office Battalion Senior Enlisted Advisor SGM 903th Contracting Contingency Office Battalion Senior Enlisted Advisor SGM 904th Contracting Contingency Office Battalion Senior Enlisted Advisor SGM 905th Contracting Contingency Office Battalion Senior Enlisted Advisor Currently - 167 NCOs serve in As of Apr 2009 Source: TOPMIS/ EDAS

Figure 2-3. Senior NCO Billets

# Objective 3: A number of qualified, trained members of the armed forces eligible for and active in the acquisition field sufficient to ensure the appropriate use of military personnel in contingency contracting.

51C ACF (out of 1616 military)

The Ganlser Commission recommended increasing the number of military (by 400) and civilian (by 1,000) personnel in the Army contracting workforce. This growth is roughly a 25 percent increase of our military acquisition workforce. The Army has been working to ensure contracting or contracting-related needs are identified and codified through the Army's concept plan process, which serves to document organizational force structure. The Army has increased the military acquisition contingency contracting by 424. An additional 158 is being worked to support the contract administration support function.

The Army acquisition workforce also is growing a contingent of NCOs within the contracting career field. These NCOs serve in key positions throughout the Assistant Secretary of the Army (Acquisition, Logistics and Technology), Army Corps of Engineers, U.S. Army Acquisition Support Center, Army Contracting Command, and Special Operation Command in the generating and operating force structure. Their primary mission is to deploy and perform the duties of Warranted Contracting Officer. The USAASC 51C Proponent met the recruiting goals for Fiscal Year 2009 and

continues to support, train, and promote the professional and career development of our NCOs.

In other actions, the Army is establishing an earlier accession point for military officers and NCOs to enable them to begin their acquisition careers two to three years earlier, providing for increased availability of Army contracting personnel and more time to develop and apply their expertise. We have also issued career guidance to limit the number of military contracting professionals serving in theater without a minimum of one year of contracting experience in a non-deployed environment.

### **Department of the Navy**





### Report

### Objective 1: A career path in the acquisition field that attracts the highest quality officers and enlisted personnel.

The Department of the Navy (DoN) military acquisition community includes members of a variety of Navy and United States Marine Corps communities, all drawn to the field due to the ample opportunities for leadership, growth and responsibility. Each community manages its officers and their career paths to ensure the right combination of fleet experience and technical acquisition experience. In the Navy, commissioned officers are either Line officers (unrestricted or restricted) or Staff Corps officers:

- Unrestricted Line (URL) Officers are Navy officers who are qualified to command ships and aviation squadrons. Unrestricted Line Officers primarily include officers from the Surface Warfare, Submarine Warfare, and Aviation communities.
- Restricted Line (RL) Officers in the Navy are not eligible for Command at Sea.
  There are many different types and communities, including Engineering Duty
  Officers (EDO), Aerospace Engineering Duty Officers (AEDO) and Aerospace
  Maintenance Duty Officers (AMDO).
- Staff Corps Officers are specialists in career fields which are professions unto themselves, such as Supply Corps and Civil Engineer Corps (CEC) officers.

Unrestricted Line and Restricted Line officers typically transition into program management; systems engineering; and production, quality, and management career fields. The Major Acquisition Shore Command and Major Program Manager positions are reviewed by Flag-level slating panels and MPM billets are filled by the "Best Qualified' candidate regardless of designator. The Supply Corps officers and Civil Engineer Corps officers comprise about 41% of the Navy's military acquisition community. These officers serve in contracting, financial management and logistics.

The Department of the Navy has revised military community career paths to meet anticipated shortfalls in the pipeline of experienced acquisition professionals to fill our most senior acquisition roles of program managers, program executive officers, and contracting leadership. Due to the demands on operational forces staffing levels, we face the challenge of providing our officers with needed acquisition experience early in their career pipelines. As a result, the Naval Aviation community has recently formalized a career path for their acquisition professionals. The path allows a select group of aviators to become eligible for selection as a Major Program Manager by combining pre-command acquisition related tours with command experience and

assigning them to post-command acquisition tours with training necessary to complete Defense Acquisition Workforce Improvement Act (DAWIA) experience requirements. The Surface Warfare Officer (SWO) community initiated similar changes to their career path structure to ensure earlier acquisition experience and an increased breadth of experience in progressively more challenging program leadership positions leading up to major program manager assignments. The Submarine Community, smaller than the Aviation and Surface Warfare Communities, has a more manageable challenge in identifying and assigning the most qualified Officers. The smaller community facilitates proper training and experience tours for those assigned Acquisition related billets. The Restricted Line, Supply Corps, and Civil Engineer Corps communities have been effective in ensuring a robust acquisition career path that yields highly experienced and qualified acquisition professionals. Figure 1 provides a summary of Navy Military Acquisition Career Paths. The Surface Warfare Officer (SWO) community initiated similar changes to their career path structure to ensure earlier acquisition experience and an increased breadth of experience in progressively more challenging program leadership positions leading up to major program manager assignments. The Restricted Line, Supply Corps, and Civil Engineer Corps communities have been effective in ensuring a robust acquisition career path that yields highly experienced and qualified acquisition professionals. Figure 1 provides a summary of Navy Military Acquisition Career Paths.

Years	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3 24	25	26
CEC 5100	Co C Opera		Train/ Dev	l	E & A			taff Vgmt		s/XO ational	l	E & A	cq ndep)	Ops Opera			XO Fac Acq (R			MD FE q & Des		CMD & Acq
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AEDO 1510	1 <sup>st</sup> Sea		nore TF JPME /	PS-VX/ NPS	2r	d Sea				C/DCMA M Class				OPM or I							Lead, Fl Γest Wi	
AMDO 1520		Sea (CVN or L-boat AIMD) rotated with Shore (FRC, NATEC, TYCOM Class Desk, OPNAV, NAVAIR Staff or APML)  CVN AIMD/FRC O-5 CMD Equiv O-5 Acq Shore Cmd, NAVAIR Staff DCMA CO, Major Staff																				
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Figure 1: Navy Military Acquisition Career Paths

The United States Marine Corps initially established secondary Military Occupational Specialties (MOS) for the identification and assignment of officers with acquisition experience and expertise. Over time, however, career path and promotion flow points made it increasingly difficult for officers to maintain primary MOS credibility while gaining requisite acquisition proficiency. In August 2004, the Commandant of the Marine Corps established an Acquisition Officer primary MOS of 8059 (Acquisition Management Professional). Figure 2 illustrates the MOS 8059 career path.

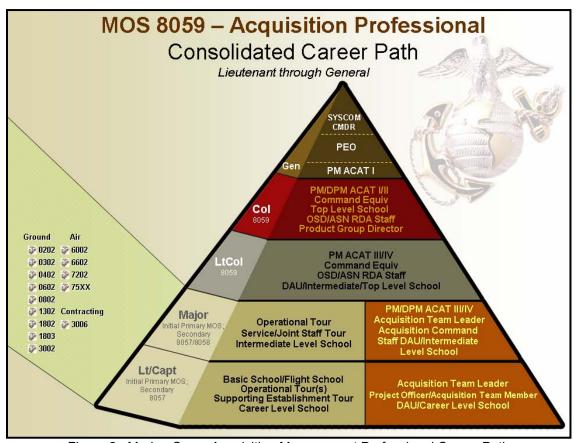


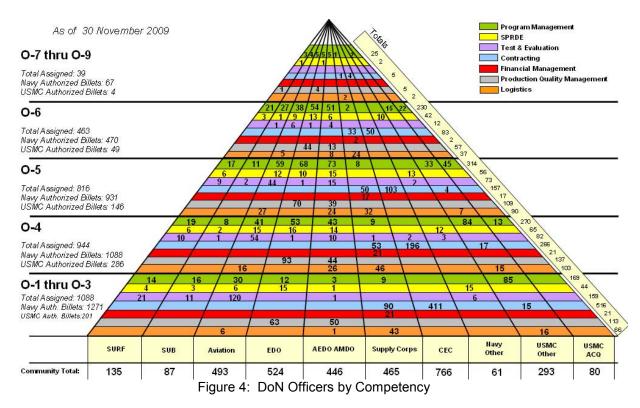
Figure 2: Marine Corps Acquisition Management Professional Career Path

Marine Corps Officers in the Acquisition Professional specialty are typically assigned critical acquisition positions that provide senior leadership over ground equipment and/or weapons systems programs. This readies them for future program management and program executive officer assignments. The Commandant designated the Commander, Marine Corps Systems Command as Executive Agent for the acquisition career field and the acquisition MOS to effect management oversight and appropriate coordination.

Objective 2: A number of command positions and senior noncommissioned officer positions, including acquisition billets reserved for general officers and flag officers under subsection (c), sufficient to ensure that members of the armed forces have opportunities for promotion and advancement in the acquisition field.

There are a sufficient number of positions, opportunities for leadership and growth available within the acquisition community.

A breakout of the 30 November 2009 DoN assigned Acquisition Officers by military community and acquisition competency is provided below in Figure 4. The number of Flag/General Officer billets assigned (39 billets total), along with authorized billets for both Navy and USMC are shown on the left hand-side of the pyramid. These 39 total assigned Flag/General Officer billets are further broken down and color-coded within the pyramid by the following acquisition competencies: Program Management; Contracting; Systems Planning, Research Development, and Engineering (SPRDE); Production/Quality Manufacturing and Logistics. The total number of Flag/General Officer billets for each competency can be found on the right hand-side of the pyramid.



Out of these billets, the DoN has 71 Flag/General Officer authorized billets, 96 Major Acquisition Shore Command billets, and 74 Major Program Manager (MPM) (ACAT I/II/MAIS programs) billets allowing for ascension through the ranks to positions of greater responsibility throughout the Acquisitions Corps.

The DoN Acquisition Community maintains 96 Major Shore Command billets and 85 Program Manager billets (74 billets are MPMs filled with military and civilian personnel). These command opportunities for both Activity Commanders and Program Managers reside at Acquisition Shore Commands across the country:

### Naval Air Systems Command

- 5 Field Activity Commanders (MASC)
- 28 Program Managers (PM)

### Naval Facilities Engineering Command

14 Field Activity Commanders (MASC)

### Naval Sea Systems Command

- 18 Field Activity Commands (MASC)
- 48 Program Managers (PM)

### Naval Supply Systems Command

3 Field Activity Commands (MASC)

#### Naval Space and Warfare Systems Command

- 2 Field Activity Commands (MASC)
- 12 Program Managers (PM)

### Special Project Office

- 1 Field Activity Command (MASC)
- 4 Program Managers (PM)

#### Other Miscellaneous Commands

- 42 Field Activity Commands (MASC)
- 4 Program Managers (PM)

### **Naval Officer Command Positions**

As of 30 Sep 09, the Department of the Navy has 2,160 officers in the DoN Acquisition Corps pipeline. The breakout by community is provided below in Figure 3.

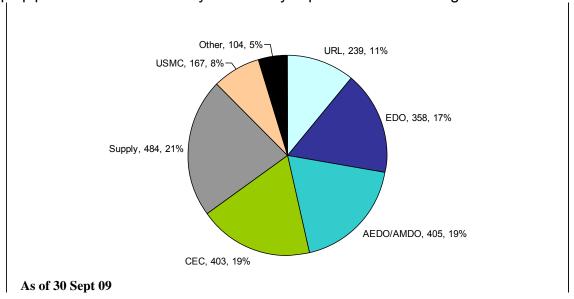


Figure 3: DoN Officers in Acquisition Corps by Community

### **Naval Senior Non-Commissioned Officers**

The DoN has 368 enlisted personnel working in the acquisition workforce. These enlisted leaders range in rank from E-5 to E-9, with a total of 247 senior non-commissioned officers (E-7 and above).

The enlisted acquisition workforce is assigned across the Program Management, Product Quality Manufacturing, Contracting, IT, and Logistics career fields. Figure 5 provides a breakdown of positions of authority available to non-commissioned officers (E-7 and above) within the Acquisition Community.

Rank	Navy	<b>US Marine Corps</b>
E-9	12	28
E-8	30	37
E-7	43	97
TOTAL: 247	85	162

Figure 5: Acquisition Positions Filled by E-7 and Above

Figure 6 provides a breakdown of DoN enlisted personnel (E-5 and above) by DAWIA Category.

POM. 28. 8%

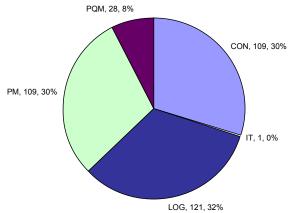


Figure 6: DoN Senior Enlisted Acquisition Personnel by DAWIA Category

Objective 3: A number of qualified, trained members of the armed forces eligible for and active in the acquisition field sufficient to ensure the optimum management of the acquisition functions of the Department of Defense and the appropriate use of military personnel in contingency contracting.

Approximately 39% of the Department of the Navy's military officer acquisition billets are Contracting billets. Navy contracting officers perform duties associated with major weapons system acquisition, field contracting at Fleet and Industrial Supply Centers (FISCs) and to a lesser extent, contingency contracting. To ensure a qualified pool of candidates for senior contracting billets, the Navy has two distinct career paths: Supply Corps and the CEC. Naval logistics material and major weapons systems acquisition contingency contracting capability primarily resides within the Supply Corps while the naval construction contracting capability primarily resides within CEC. Supply Corps Officers acquire most of their contracting experience through: Field contracting, Fleet Husbanding and Major Systems Acquisition. Civil Engineer Corps Officers acquire most of their contracting experience through: Facilities Management, Acquisition, Construction and Contingency Operations.

There are two new initiatives being explored to enhance Navy Contracting military capabilities. First is consideration of expanding the training of all new Supply Corps officers at the school house to included basic DAWIA level I contracting education. Regardless of the core competency a Supply Corps professional pursues, having a fundamental understanding of the role contracting plays in every aspect of their career will better prepare them for the future. Second, a pilot is underway to explore the feasibility of expanding contracting capability within our Logistics Specialist rating at the senior enlisted levels. This study will specifically examine the roles of serving as contracting officer representatives (COR) and buyers using the Simplified Acquisition Procedures (SAP).

In the United States Marine Corps (USMC), contracting is a separate specialty that evaluates contract requirements, specifications, bids, proposals, and subsequent contractor performance. Contracting officers provide planning, programming, budgeting, and acquisition planning support to various Marine Corps appropriation sponsors, as well as, perform contingency contracting functions in support of the conduct of war, operations other than war exercises, and deployments. There are currently 31 Marine Corps Officers contracting billets aligned to operational forces supporting USMC contingency operations. To ensure that the USMC continually produces a qualified pool of candidates for acquisition billets, a primary MOS of 8059 (Acquisition Management Professional) was established in 2004. Marine Corps Officers earn contracting as a secondary specialty (MOS 3006); with a primary specialty in a related field such as logistics, supply or financial management and become contracting officers after completing acquisition training. Contracting Officers acquire most of their contracting experience through: Supply, Logistics, Financial Management, Contingency Contracting and Contingency Operations.

The Marine Corps has significantly reduced the time in the training pipeline by collaborating with Defense Acquisition University to develop a targeted 16-week program of instruction that fields contracting Marines 78 percent faster than in the past. The program also tailors training to Marines in a Marine Corps environment at Marine Corps Combat Service Support Schools, Camp Johnson, N.C.

### **United States Air Force**

### CY09 Report to Office of the Secretary of Defense Acquisition, Technology & Logistics February 2010



### **Executive Summary**

This report addresses the US Air Force's CY09 efforts to fulfill the objectives contained in Sections 813 and 834 of the National Defense Authorization Act Fiscal Year 2009. It highlights the Air Force's designated career paths for military acquisition professionals to ensure the highest caliber officers and enlisted Airmen enter and remain in the acquisition workforce. This report will further address command and senior leadership opportunities for acquisition and contracting officers (to include General officer opportunities); and the development of qualified contingency contracting personnel. For the purpose of this report, the Acquisition career field is made up of five acquisition specialties: Scientists, Engineers, Program Managers, Contracting, and Financial Management professionals. As development dictates, officers are often interchangeable across the five specialties at the senior ranks.

The Air Force has made significant progress in the deliberate development of military personnel in the Acquisition career fields, to include contracting officers. The use of Developmental Teams to guide this deliberate development process continues to pay great dividends in the development and upward progression of military personnel in the acquisition workforce.

Beginning in 2010, the Air Force Acquisition community will stand down their traditional Wing-Group-Squadron structure in favor of a Directorate-Division-Branch (D-D-B) structure. This decision is one of many recommendations being implemented as part of the Chief of Staff and Secretary of the Air Force approved Acquisition Improvement Plan (AIP) to help provide clear lines of authority and minimize opportunities for undue influence in the acquisition process. As a result, the traditional command opportunities for O-5 and O-6 Program Managers have been replaced with newly established O-5 "Materiel Leader" and O-6 "Senior Materiel Leader" positions. Contracting officers continue to have manifold command opportunities.

The Air Force maintains the largest and most versatile contingency contracting corps in the Department of Defense. Air Force contracting professionals have filled; and will continue to fill, about 80% of the contracting positions in Iraq and Afghanistan. Increased operations tempo of the contracting workforce requires proactive measures to ensure adequate retention of our highly-trained and battle-tested contracting workforce. Programs such as the Critical Skills Retention Bonus (CSRB) initiated in September 2009, the Warrior First program and Selective Reenlistment Bonuses have been successful in combating stresses caused by manning shortfalls and ever-increasing

operational requirements. Air Force contracting faces significant challenges in maintaining the CSRB in 2010 through the out years due to budgetary pressures despite its initial success in retaining its core officer workforce.

In aggregate, Air Force acquisition leadership has a deliberate and well defined strategy for addressing the objectives outlined in Sections 813 and 834; and for paving the way forward for the acquisition workforce of today and the foreseeable future.

### Report

### Objective 1: A career path in the acquisition field that attracts the highest quality officers and enlisted personnel.

The Air Force deliberately develops acquisition and contracting professionals according to well defined career path models. *Figures 1-1 and 1-2* present the career path models for military acquisition professionals and serve as a guide for developing military professionals within the acquisition workforce through assignments, education, and training. These career models provide ample opportunity and experience for acquisition professionals at all ranks; and provides a defined path to greater rank and responsibility within the acquisition workforce.

As defined by Air Force Instruction 36-2640; *Executing Total Force Development*, the development of acquisition workforce members is enhanced by the use of Career Field Development Teams. Development Teams, consisting of senior leadership from within a Career Field, meet throughout the year at the Air Force Personnel Center to aid in the development of both civilian and officer personnel for that career field. The Acquisition Development Teams (DT) meet to provide officers career path vectors, select officers and civilians for service schools (developmental education), and identify military and civilian candidates for command and materiel leader positions within the acquisition workforce. Using the published acquisition career path models as a guide, the DTs also provide each officer individual developmental guidance placing them on a specific path or vector to greater progression and opportunity in the acquisition workforce. The Acquisition DTs also address the major challenges within the workforce, and ensure that officers that comprise the workforce are appropriately developed in accordance with Air Force requirements.

The Air Force has also established career field management and force development teams at the HQ Air Staff level that provide strategic direction and daily oversight of the career fields, as well as manage the Developmental Team process. Under this Air Force construct, all acquisition career fields except Financial Management are under the functional management and oversight of the Military Deputy to the Assistant Secretary of the Air Force for Acquisition. Financial Managers are managed by the Assistant Secretary of the Air Force for Financial Management. The Air Force Director of Acquisition Career Management (DACM) serves as the integrating function across all of the career fields as to ensure appropriate policy, direction and oversight of acquisition professionals covered under the Defense Acquisition Workforce Improvement Act (DAWIA). The Air Force DACM also serves as the Career Field Manager for the Acquisition, Scientist and Engineering career fields.

### **Acquisition Career Development Model**

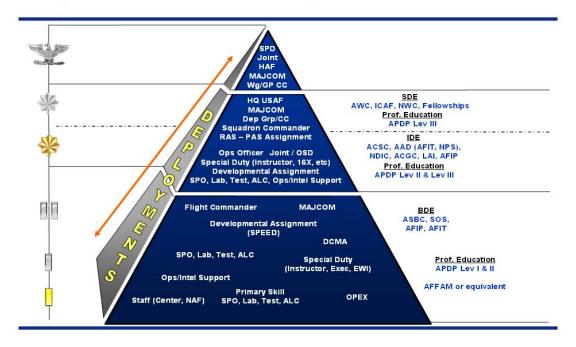
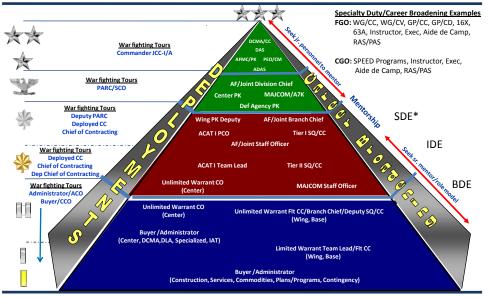


Figure 1-1

### **Contracting Career Development Model**



\*Advocating for development of Senior EWI/Senior Congressional Fellow SDE program to deliberately develop contracting senior leaders

Figure 1-2

Objective 2: A number of command positions and senior noncommissioned officer positions, including acquisition billets reserved for general officers and flag officers under subsection (c), sufficient to ensure that members of the armed forces have opportunities for promotion and advancement in the acquisition field.

Air Force acquisition leaders recognize the need for leadership and command opportunities for the acquisition workforce.

After an in-depth internal Air Force review and an independent assessment of Air Force Acquisition by the Center for Naval Analysis, the Air Force established the aforementioned Acquisition Improvement Plan (AIP) to "recapture Acquisition excellence". Within the AIP, "Establish Clear Lines of Authority and Accountability within Acquisition Organizations" is one of five major initiatives being implemented. This manpower neutral initiative migrates the Acquisition community from a W-G-S construct to a D-D-B construct beginning in Summer 2010. It also creates new PEO positions to properly size a PEO's span of control and re-establishes functional matrix management to provide independent program assessment and support for the contracting, engineering and financial management functions. While this decreases the number of traditional command opportunities for acquisition officers gained from the 2002-2003 W-G-S standup, the officers chosen to lead the D-D-B organizations will still be competitively selected by a central selection board. The CSAF and SECAF both recognize the importance of adjusting promotion board information to reflect these changes and the competitive nature of these "Materiel Leader" (O-5) and "Senior Materiel Leader" (O-6) selections. We believe this approach still affords Air Force officers "opportunities for promotion and advancement in the acquisition field" as this objective requires. All other AFMC and AFSPC organizations (e.g. Test, Maintenance, etc) will retain the W-G-S construct with their traditional command opportunities. Likewise, contracting officers will retain a significant number of command opportunities for the operational contracting mission.

The Air Force acquisition workforce also has a contingent of enlisted personnel within the contracting career field. These Airmen serve in key positions throughout the Air Force in the operational and contingency contracting communities and are also developed in concert with the needs of the Air Force. These Airmen have career opportunities at the HQ USAF, MAJCOM, Wing, Group, and Squadron level. The development of this invaluable resource is addressed both within the enlisted force and within the contracting community to ensure the right quality and number of contracting NCOs are retained for the Air Force contracting mission.

The Air Force codes and tracks all GO and SES billets in the acquisition workforce for use in development and succession planning, and to ensure the best qualified leaders are identified to fill these key leadership positions. The DACM Office (SAF/AQX) and the Air Force General Officer Management Office (HQ AF/DPG) continue to work closely to ensure acquisition leaders meet position requirements as defined by DAWIA statutes. Figures 2-1 and 2-2 identify the General Officer opportunities that reside

within the acquisition program management specialty. Figures 2-3 and 2-4 identify the General Officer and SES opportunities that reside within the acquisition contracting specialty. These visual representations outline the significant opportunity for upward progression in the acquisition program management and contracting specialties. One should also note that while these positions are labeled as SES or General Officer billets, the Air Force has converted the billets between military and civilian depending on the needs of the service at a given point in time (and in accordance with DAWIA shared leadership provisions). Air Force Contracting General Officer positions need to be firmly established in order to align ready talent with the strategic direction of the acquisition community. The contracting environment has become increasingly complex and requires building a bench of core contracting officers to provide senior strategic leadership that is able to turn critical requirements and scarce dollars into air and space power.

### **Acquisition GO Requirements & Inventory**

Air Force DAWIA Requirements

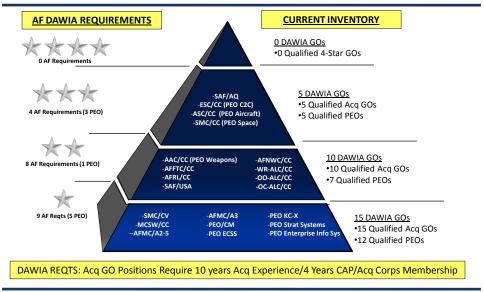


Figure 2-1

### **Acquisition GO Requirements/Opportunities**

Other DAWIA Requirements/Opportunities

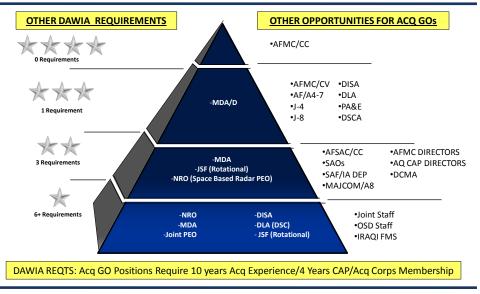


Figure 2-2

### **Contracting GO/SES Requirements & Inventory** Air Force DAWIA Requirements

AF DAWIA REQUIREMENTS **CURRENT INVENTORY** O Contracting GO / SES 2 Contracting: GO (0) / SES (2) -SAF/AQC (DAS) -AFMC/PK 6 AF Requirements (+1 Pending Approval) SAF/AQC (ADAS) -ESC/PK -SMC/PK 7 Contracting: GO (2)\*\*\* / SES (5) Installation DoC\* -WR-ALC/PK 55 Contracting O-6s - ALC/PK 31 Mil. AF Requirements ~140 Contracting Sr. Civs ~153 Civ. AF Requirements - MAJCOM A7Ks \*Potential Conversion to Contracting Billet with PM Experience/Background

Note: Positions in Yellow are requested future

Air Force GO specific billets

Figure 2-3

### **Contracting GO/SES Requirements**

\*\*Future GO Contracting Requirement Pending approval
\*\*\*Both Contracting GO's not occupying Contracting Billets (A1 and PEO/CM)

Other DAWIA Requirements/Opportunities

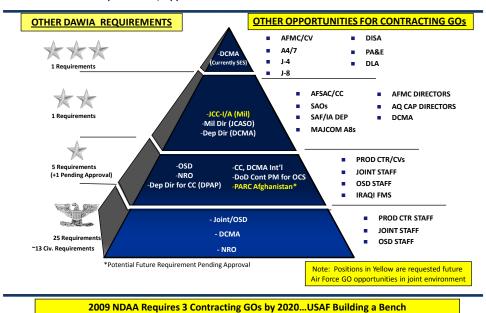


Figure 2-4

# Objective 3: A number of qualified, trained members of the armed forces eligible for and active in the acquisition field sufficient to ensure the appropriate use of military personnel in contingency contracting

Although Air Force contracting provides about 80% of the contingency contracting support to deployed operations, the US Army retains the majority of senior leadership positions in the contingency contracting theater. These Army General Officers lack the breadth of contracting experience to effectively and strategically manage this AF workforce and the unconventional methods that contracting brings to the fight. This environment makes the case for the deliberate development of Air Force contracting General Officers capable of executing the CSAF objective, "to provide joint warfighters with as much capability as possible." Currently, Air Force contracting has significant opportunities for promotion to Colonel and CMSgt, but currently lacks the advancement opportunities beyond these levels. These shortfalls require the most highly qualified core contracting officers to seek positions outside of contracting, thereby draining the already scarce talent pool. The demands on the contingency contracting workforce continue to grow and make it imperative to develop contracting General Officers up to the 3-star level capable of leading DCMA and the Joint Theater Support Contracting Command in the future.

The Air Force has retained a large pool of military contracting officers in order to meet Air Force and, a fair share of joint, contingency contracting deployments. Today the Air Force maintains the Department of Defense's largest deployable contracting force and is filling the bulk of the contingency contracting and contract administration deployment requirements in Iraq and Afghanistan. We continue to work with the other Services and OSD AT&L in the evaluation of future resource and training requirements and on doctrine related to contingency contracting.

At a given time, approximately 95% of the contracting workforce is world-wide deployable. However, the current operations tempo generated by the wars in Iraq and Afghanistan has put great strain on the contingency contracting corps in the Air Force. This strain has made the contracting career field one of the most deployed career fields in the Air Force. Air Force leadership recognizes the threat the current ops tempo poses to the retention of the contracting force and has initiated numerous efforts to ensure the workforce remains the backbone of the contingency contracting mission.

In September 2009, Air Force Contracting initiated a Critical Skills Retention Bonus (CSRB), targeting retention of officers with 6-14 years commissioned years of service to promote career field sustainment. The take rate for this bonus was 82% (254 of the 311 officers eligible), thereby increasing the average career length for contracting officers from 12.12 years to 14.77 years. Air Force contracting also implemented the Warrior First program providing follow on assignment incentives to Airman willing to commit to a long tour of arduous duty. This program provides increased stability for officers and their families as they continue to serve their country. The Air Force has succeeded over

the last 2 years with 17 of 19 officers receiving their 1<sup>st</sup> choice for a follow-on assignment and 2 officers getting their 2<sup>nd</sup> choice.

The Air Force contingent of contracting Airmen and Non-Commisioned Officers has a critical skillset to the success of Air Force contracting. With operational demand at critical levels and enlisted retention rates declining, the Air Force increased selective reenlistment bonuses for contracting airman with 17 months to 20 years time in service. In addition, over the last year, the Air Force enlisted force has doubled the new entrants into contracting through increased accession and retraining opportunities seeking to build a workforce capable of meeting the increased demands of the 21<sup>st</sup> Century.

To help relieve the deployment burden on the Air Force contracting officer career field, non-contracting acquisition personnel continue to fill contingency positions in theater that do not require a warranted contracting officer. These contingency positions, largely contractor oversight and administrative positions, increase the pool of eligible officers available to serve in contingency contracting positions and relieve some of the strain on the contracting workforce. While initiated as a pilot program with the Defense Contract Management Agency (DCMA), the Air Force continues to see great returns on this effort.

# Appendix 15 Defense Acquisition Workforce Awards

This appendix defines the multi-tiered and multi-dimensional recognition structure for the defense acquisition workforce. It engages all organizations at all levels and complies with the requirements of the 2009 Weapons Systems Acquisition Reform Act for workforce recognition. The objective is straight-forward – to improve the DOD's organizational climate. Each employee should feel valued for their contributions and have an enhanced sense of ownership of the acquisition mission. A positive workforce environment based on employee engagement, mutual respect, strong leadership, and employee recognition is critical for the Department's strategy to attract, motivate, and retain high performing agile employees. A great tribute to the dedication, commitment, and contributions of the defense acquisition workforce is that our military is the best equipped in the world. Recognizing the unique and significant contributions of DAW teams and individuals is a key element of the Department's employee value program (EVP). Leaders at all levels are responsible for people development and must play an active role. Employee recognition is an integral element of the Department's strategy to improve overall quality of the acquisition workforce.

### **DOD-Level Acquisition Workforce Awards** (Table A15-1)

## The Defense Acquisition Workforce Achievement Awards

The Workforce Achievement Awards were established as a result of the Weapon Systems Acquisition Reform Act of 2009 to encourage and recognize individuals who demonstrate excellent performance in the acquisition of products and services for the Department of Defense. Awards are given in the following categories:

- 1. Program Management
- 2. Contracting and Procurement
- 3. Contract Audit
- 4. Business Cost Estimating and Financial Management
- 5. Management, Contracting Oversight and Quality Assurance
- 6. Life Cycle Logistics
- 7. Systems Planning, Research, Development and Engineering (including Test and Evaluation, Production and Manufacturing)
- 8. Acquisition in the Expeditionary Environment

The David Packard Excellence in Acquisition Award	Established in 1997 to recognize organizations, groups, and teams who have demonstrated exemplary innovation using best acquisition practices to achieve excellence in DOD acquisition. It is the Department's highest acquisition team award.
The Under Secretary for Acquisition, Technology and Logistics Workforce Development Award	Established in 2004 to recognize organizations that have achieved excellence in learning and development for their employees. Winners, in small and large organization categories, are selected based on their workforce development program's objectives, best practices, and the benefits realized. Nominated organizations are also ranked on workforce development climate, training offered, academic affiliations and partnerships, and alignment of workforce initiatives with the organization's mission.

Army Acquisition Workforce Awards (Table A15-2)					
Army Acquisition Excellence (AAE) Award	Recognizes an Army acquisition workforce individual or team whose performance and contributions set them apart from their peers. Nominees can be from all levels, from senior management to newly hired interns. The award directly reflects the outstanding achievements in support of the Soldier and the Army's Business Transformation efforts. Team award selections are considered in three categories: 1) Equipping and Sustaining Our Soldiers; 2) Systems Information Enabled Army; and 3) Transforming the Way We Do Business. An individual award selection is considered in the "Individual Sustained Achievement" category				
Secretary of the Army Project and Product Manager and Acquisition Director of the Year	Honors the Project Manager and Acquisition Director whose outstanding contributions and achievements merit special recognition and provides a forum to showcase exceptional leadership within the U.S. Army Acquisition Corps.				

ASA(ALT) Contracting Noncommissioned Officer (NCO) Award for Contracting Excellence	Honors the ASA(ALT) Contracting NCO whose outstanding contributions and achievements merit special recognition and provides a forum to showcase exceptional leadership within the U.S. Army Acquisition Corps.
Army Life Cycle Logistician of the Year	Recognizes significant contribution to excellence in the field of Life Cycle Logistics (LCL) and achievements in improving the Total Life Cycle Systems Management process.
The Secretary of the Army Annual Award for Excellence in Contracting	Recognizes the outstanding achievements of Army contracting officers and units/teams and provides special awards for other contracting professionals, including contract specialists and procurement analysts.
The Army Acquisition Career Management Advocate of the Year Award	Recognizes senior acquisition leaders who have made significant Contributions to the acquisition field.

Navy/Marine Corps Acquisition Workforce Awards (Table A15-3)					
Dr. Delores M. Etter Top Scientists and Engineers Award	Established to honor those who reached superior technical achievements and to promote continued scientific and engineering excellence. (Multiple awardees)				
Department of the Na	avy Acquisition Excellence Awards (effective in 2010)				
Competition Excellence Acquisition Team of the Year	Recognizes an acquisition team whose outstanding achievement brings increased competition in contracting with superior accomplishment to include enhanced competition among large or small businesses resulting in the best product or service to the customer. Nominations in this category include both large and SBA-supported businesses.				
Innovation Excellence Acquisition Team of the Year	Recognizes an acquisition team whose outstanding achievement brings added efficiency to the organization and increased effectiveness to the customer or those activities or commands that have strengthened the capabilities of the Naval industrial base and employ strategies that promote domestic availability of components critical to the Department of the Navy and the customer.				

Acquisition Professional	Recognizes a military or civilian individual whose outstanding
of the Year	leadership and achievement in acquisition best demonstrates the highest levels of professionalism in the Acquisition field and provides improved effectiveness to the Department of the Navy.
Expeditionary Contracting Award	Recognizes Department of the Navy contracting officers and acquisition support personnel deployed in direct support of Naval or Joint contingency or expeditionary operations. This award is presented to a Department of the Navy active or reserve military individual or civilian employee who best exemplifies the Department of the Navy values of Honor, Courage and Commitment while serving in an expeditionary environment.
Major Acquisition Activity Award	Recognizes a Major command or program for achievements that demonstrate outstanding execution of acquisition programs in the accomplishment of its mission. All major commands, Program Executive Offices, and Program Management teams are eligible.
Field Acquisition Activity Award	Recognizes a field level command for outstanding acquisition achievements that bring supplies and services to the customer. All Department of the Navy Echelon III and below activities are eligible.
Department of the Navy Small Business Award	Recognizes outstanding achievement by a Small Business Director or team which brings added efficiency and increased effectiveness to the customer to include: promoting and achieving participation by or award to SBA-supported entities such as Service-Disabled Veteran-Owned Small Businesses, Woman-Owned small businesses, section 8(a) small business concerns, and small business concerns.
Secretary of the Navy Special Achievement Award	Recognizes a Department of the Navy military or civilian individual who exemplifies the highest example of acquisition excellence and achievement and brings significant credit to the Department of the Navy acquisition community. Also, this award is to be made when merited, not necessarily annually

Air Force Ac	quisition Workforce Awards (Table A15-4)
The John J. Welch, Jr., Award for Excellence in Acquisition Leadership	This highly prestigious Air Force award focuses on team accomplishments and recognizes excellence in acquisition leadership during a calendar year. Examples of achievement criteria areas: developing improved acquisition leadership practices; significantly increasing present/future operational effectiveness of a weapon system; and improving weapon system support and readiness for Air Force.
Agile Acquisition Transformation Leadership Award	Recognizes acquisition civilian and military individuals and teams for superior accomplishments that demonstrate exemplary leadership, innovation, and acquisition practices related to reform initiatives in the main areas of speed and credibility.
Air Force Acquisition Leadership Awards (Individual)	Recognizes leadership of specific defense acquisition programs, projects, products or subsets by exercising cost, schedule, and performance responsibility throughout the system life cycle.
	The individual acquisition leadership awards signify noteworthy and/or significant achievements by members of the program management career field to promote agile acquisition through collaboration and leadership resulting in short- and long-term impact on warfighter capabilities. Key areas include:
	Resourcefulness: innovative techniques, program strategies, training programs, process improvements, initiative, risk management that were developed and used to meet mission objectives.
	Leadership: empowering individuals and holding them accountable for results.
	A civilian and military award is given in each category:
	Outstanding Air Force System Program Director
	Outstanding Air Force Program Manager
	Outstanding Air Force Project Manager
	Outstanding Air Force Acquisition Staff Officer

Outstanding Air Force System Program Office	Unit award recognizing leadership of a specific defense acquisition program by exercising cost, schedule, and performance responsibility throughout the system life cycle.  Denotes mission accomplishment - satisfying customer needs / delivering capability to the warfighter. Examples of achievement include: acquisition leadership innovation and process improvement results; collaboration with user; and
	effective, innovative resource management.
Air Force Special Recognition Award In Acquisition Leadership	Recognizes specific achievement based on contribution to development of innovative, collaborative and/or streamlined acquisition processes.
Secretary of the Air Force Professionalism in Contracting Award	Recognizes specific duty achievements, self-improvement efforts, professional qualities, contribution to advancing professionalism of others in the career field, and demonstrated ability to convey contracting professionalism to others outside the field, over the course of individual's career.
Air Force Javits-Wagner- O'Day Act of 1971	Recognizes outstanding unit and outstanding individual for exceptional implementation of Javits-Wagner-O'Day Act of 1971. This Act established a committee for the purpose directing selected commodities acquisition and federal government services to qualified workshops employing the blind and other severely handicapped persons. The President's Committee Award is presented to the outstanding unit and the Chairman's Award is presented to the outstanding individual.
Air Force Outstanding Contracting Unit (Team)	Recognizes mission accomplishment, contracting innovation and process improvement results; and effective, innovative resource management.
Air Force Outstanding Pricing Award	Recognizes exceptional pricing efforts in completing acquisition actions including: price, cost, financial analysis or negotiation, defective pricing settlements, progress payments, change orders, forward pricing rate agreements, claims, and contracting officer decisions.
Air Force Outstanding Contingency Contracting Award	Recognizes achievements in contingency support mission; management of available resources and or initiatives developed; professional qualities, specific duty achievements, and self-improvement efforts over individual's career.

Air Force Outstanding Contracting Enlisted Member	Recognizes achievements in contracting with emphasis in specific duty achievements, self-improvement efforts, and professional qualities over the course of individual's career.
Air Force Outstanding Contracting Support	Recognizes achievements in contracting with emphasis in specific duty achievements, self-improvement efforts, and professional qualities over the course of individual's career.
Air Force Outstanding Base- Level Quality Assurance Evaluator	Recognizes military or civilian demonstrating major achievements in quality assurance with relation to monitoring contractor performance.
Air Force Outstanding Reservist in Contracting	Recognizes achievement of Reservist who is not on extended active recognizing specific duty achievements, self-improvement efforts, and professional qualities over the course of individual's career.
Air Force Outstanding Contingency Contracting (SSgt Ronald L. King Award)	Recognizes outstanding contingency contracting in honor of Ronald L. King who lost his life in a terrorist truck bomb attack of the Khobar Towers in Saudi Arabia on 25 June 1996 while on a contingency contracting assignment.
Air Force Special Recognition Award (Individual or team)	Denotes achievement for military or civilian in any rank or grade for outstanding innovation and/or process improvements, including borrowed ideas, towards outstanding mission accomplishment and satisfying customer needs.
Air Force Value Engineering Achievement Awards	Denotes special recognition in Air Force Value Engineering (VE). Awards are given to:
	<ul> <li>Outstanding Air Force VE Award for Program/Project Management</li> </ul>
	<ul> <li>Outstanding Air Force VE Award for Individual/Team Achievement</li> </ul>
	<ul> <li>Outstanding Air Force VE Award for Organizational Achievement</li> </ul>
	◆ Outstanding Air Force VE Award for Contractor
Outstanding Air Force Value Engineering Award for Special Achievement	Recognizes all military and civilian personnel who demonstrate innovative uses of VE.

Air Force Outstanding Scientist Awards (Individual)	Recognizes the efforts and achievements of the top USAF Engineer(s) who make noteworthy and/or significant contributions to solving technical or engineering problems in sustainment, testing, training, or advancement of Air Force systems. Awards are given to:
	◆ Air Force Outstanding Scientist Award, Junior Military
	◆ Air Force Outstanding Scientist Award, Mid-Career Military
	◆ Air Force Outstanding Scientist Award, Senior Military
	♦ Air Force Outstanding Scientist Award, Junior Civilian
	♦ Air Force Outstanding Scientist Award, Mid-Career Civilian
	♦ Air Force Outstanding Scientist Award, Senior Civilian
Air Force Outstanding Scientist Award (Team)	Recognizes teams comprised of all levels of experience; and teams comprised of all levels of employment: Air Force Commissioned Officer (Active Duty, Reserve, individual mobilization augmentees), Air Force Government Civilians, and support contractors.
Air Force Outstanding Science and Engineering Educator Award	Recognizes the efforts and achievements of the top Air Force instructor in the science and engineering fields, whose contributions and performance best characterize the principles of excellence in science and engineering education.

Defense Contract Management Agency (DCMA) (Table A15-5)				
Outstanding DCMA Personnel of the Year Award	Recognizes deserving superior performers in every segment of the DCMA workforce. A recipient's performance is highly exemplary and inspirational to others and has contributed significantly toward accomplishing the overall DCMA mission while improving the quality of operations.			
Herb W. Homer Team Performance Award	Recognizes teams who have best exemplified the principles and attributes of Herb Homer – advancing teamwork and improving the level of team performance to achieve organizational goals.			
Leadership Award	Recognizes deserving leaders in every segment of the DCMA workforce for visionary leadership, outstanding professional skill, and untiring efforts.			

Director's Cup	Recognizes a DCMA organization that has improved organizational performance by using structured improvement methods to advance the principles of Performance-Based Management (PBM).
Mentoring Award	Recognizes DCMA employees who are mentors and contribute significantly toward developing DCMA's future workforce.
Acquisition Newcomer Award	Recognizes the newest employees whose outstanding acquisition skills and untiring efforts have significantly contributed to the success of DCMA and its customers.
Defense Log	gistics Agency (DLA) (Table A15-6)
Excellence in Pre-Award Contracting	Recognizes the efforts of a pre-award military or civilian contracting officer or contract specialist whose efforts made a significant impact on the Agency's ability to support the Military Services.
Excellence in Contract Administration	Recognizes the efforts of a post-award military or civilian contracting officer or contract specialist who exemplifies success in contract administration.
Excellence in Pricing	Recognizes efforts of a military or civilian contracting officer, contract specialist, contract cost/price analyst or procurement analyst who demonstrates success in contract pricing.
Excellence in Procurement Analysis	Recognizes the efforts of a military or civilian procurement analyst, industrial specialist or Agency employees in any other acquisition-related position who makes a direct contribution to mission success through staff work (to include automated system support).
Excellence in Acquisition Management	Recognizes the efforts of a military or civilian team leader/supervisor/manager within the acquisition community who exemplifies excellence in acquisition management.

Defense Contract Audit Agency (DCAA) (Table A15-7)		
Publications Award	Recognizes DCAA employees who publish technical papers on accounting and auditing, personnel, law, management or administration, in professional journals, publications, or the DCAA Bulletin.	
Outstanding Auditor Trainee of the Year Award	Denotes superior ability and significant career-oriented achievements during the initial 12 months of service with DCAA. Each region will annually identify an Outstanding Regional Auditor Trainee of the Year, as warranted. HQ reviews and Director selects award.	
Outstanding Clerical Employee of the Year Award	Recognizes a clerical employee, selected from regional and Headquarters nominations, who has exhibited continued superior performance and outstanding individual achievements for a minimum of 12 months of service.	
Outstanding Administrative/Technical Employee of the Year Award	Recognizes an administrative or technical employee, selected from regional and Headquarters nominations, who has exhibited continued superior performance and career-oriented achievements for a minimum of 12 months of service in DCAA.	
William B. Petty Special Achievement Award for Management Excellence	Recognizes a DCAA supervisor, manager, or management official in grades GS/GM-13 and above who has especially distinguished himself or herself by demonstrating unusual management or leadership capabilities which resulted in more efficient, effective, or economical accomplishment of the Agency's mission.	
Defense Threat I	Reduction Agency (DTRA) (Table A15-8)	
Director's Award for Leadership Excellence	Recognizes exceptional efforts and results from embracing the Agency's core values: integrity, people, excellence, and innovation.	
Director's Award for Human Capital Management Excellence	Recognizes exceptional performance and results in human capital management.	
Director's Award for Financial Management Excellence	Recognizes leadership, advocacy, interest and initiative in improving government financial management matters.	

Director's Award for Administrative Excellence	Recognizes noteworthy administrative excellence.
Director's Award for Visionary Excellence	Recognizes visionary approach and achievement of significant results by the application of imagination and innovation.
Director's Award for Science and Technology Excellence	Recognizes outstanding contributions in the field of science and technology.
Director's Award for Acquisition Management Excellence	Recognizes individuals for outstanding contributions to DTRA's acquisition processes and programs demonstrating exemplary innovation and best acquisition practices.
Director's Annual Team Award	Recognizes the contribution of a team towards performing a significant accomplishment that contributed to the Agency's mission.

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