



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

JOINT APPLIED PROJECT

**Acquisition Workforce Strategy: The Challenge Department of Defense
(DoD) Faces to Improve its Acquisition Workforce**

**By: Christopher W. Chapple and
Michael J. Faire
December 2011**

**Advisors: Janie L. Maddox
Drexie Jennings**

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE December 2011	3. REPORT TYPE AND DATES COVERED Joint Applied Project	
4. TITLE AND SUBTITLE Acquisition Workforce Strategy: The Challenge Department of Defense (DoD) Faces to Improve its Acquisition Workforce			5. FUNDING NUMBERS	
6. AUTHOR(S) Christopher W. Chapple and Michael J. Faire				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number _____N.A._____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) The objective of this project is to examine the Department of Defense's (DoD's) FY 2010 Acquisition Workforce Improvement Strategy. The project will outline developments that generated the need for DoD's Acquisition Workforce Improvement Strategy and DoD's efforts to address its acquisition workforce's ability to manage and oversee its services contracts. This project will also examine the implementation and effectiveness of DoD's Acquisition Workforce improvement initiatives to see if plans will meet intended higher-level directives. The result of this project will enhance acquisition personnel's understanding of the DoD's Acquisition Workforce Improvement Strategy and the initiatives that impact acquisition workforce.				
14. SUBJECT TERMS Acquisition Workforce, Workforce Improvement Strategy			15. NUMBER OF PAGES 105	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

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**ACQUISITION WORKFORCE STRATEGY: THE CHALLENGE
DEPARTMENT OF DEFENSE (DOD) FACES TO IMPROVE ITS
ACQUISITION WORKFORCE**

Christopher W. Chapple, Civilian, Department of the Army
Michael J. Faire, Civilian, Department of the Army

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN CONTRACT MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
December 2011**

Authors:

Christopher W. Chapple

Michel J. Faire

Approved by:

Janie L. Maddox, Academic Advisor

Drexie Jennings, Local Advisor

William R. Gates, Dean
Graduate School of Business and Public Policy

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ABSTRACT

The objective of this project is to examine the Department of Defense's (DoD's) FY 2010 Acquisition Workforce Improvement Strategy. The project will outline developments that generated the need for DoD's Acquisition Workforce Improvement Strategy and DoD's efforts to address its acquisition workforce's ability to manage and oversee its services contracts. This project will also examine the implementation and effectiveness of DoD's acquisition workforce improvement initiatives to see if plans will meet intended higher-level directives. The result of this project will enhance acquisition personnel's understanding of the DoD's Acquisition Workforce Improvement Strategy and the initiatives that impact acquisition workforce.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACAT	Acquisition Category
ACM	Acquisition Career Managers
ACMIS	Acquisition Career Management Information System
ACQ	Acquisition
AL&T	Acquisition Logistic & Technology
BRAC	Base Realignment and Closure
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CAC	Chief Acquisition Officer
CACO	Chief Acquisition Officers Council
CON	Contracting
COR	Contracting Officer Representatives
COTR	Contracting Officer Technical Representatives
CPDF	Central Personnel Data File
CWC	Commission on Wartime Contracting
DACM	Director for Acquisition Career Management
DAS	Defense Acquisition System
DAU	Defense Acquisition University
DAWDF	Defense Acquisition Workforce Development Fund
DAWIA	Defense Acquisition Workforce Improvement Act
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DCMC	Defense Contract Management Command
DMDC	Defense Manpower Data Center
DoD	Department of Defense
EHA	Expedited Hiring Authority
FAI	Federal Acquisition Institute
FoS	Family of Systems
FY	Fiscal Year
GAO	Government Accountability Office

HCI	Human Capital Initiative
HCWG	Human Capital Working Group
HNSC	House National Security Committee
HQE	Highly Qualified Expert
IACMC	Interagency Acquisition Career Management Committee
JCIDS	Joint Capabilities Integration and Development System
KLP	Key Leadership Position
MAIS	Major Automated Information System
MDAP	Major Defense Acquisition Program
NDAA	National Defense Authorization Acts
NPR	National Performance Review
NSPS	National Security Personnel System
OFPP	Office of Federal Procurement Policy
OMB	Office of Management and Budget
OPM	Office of Personnel Management
OSD	Office of Secretary of Defense
OUSD	Office of Under Secretary of Defense
PATs	Process Action Teams
PEO	Program Executive Office
PMO	Program Management Office
PPBE	Planning, Programming, Budgeting, and Execution
PQM	Production, Quality and Manufacturing
QDR	Quadrennial Defense Review
SAC	Senior Acquisition Course
SCEP	Student Career Experience Program
SEEP	Student Educational Employment Program
SE/PSE	Systems Engineering/Program Systems Engineering
SES	Senior Executive Service
SME	Subject Matter Experts
SoS	System of Systems
SPRDE	Systems Planning, Research, Development and Engineering
SSCF	Senior Service College Fellowship

S&T	Science and Technology
TDY	Temporary Duty
T&E	Test and Evaluation
USC	United States Code
USD(A)	Under Secretary of Defense for Acquisition
WLM	Workforce Lifecycle Model

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ACKNOWLEDGMENTS

We would like to acknowledge:

Elliott Cory Yoder Academic Curriculum Advisor/ NPS GSBPP

Janie J. Maddox Academic Advisor/NPS GSBPP

Drexie Jennings Local Advisor/G-4 Operation Test Command

The spouses and families of both Chris and Mike for their understanding and endurance during the past two years and especially during the final quarter of this academic year. Without your love and support, the completion of this important milestone in our lives would not have been possible.

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I. INTRODUCTION

“Everybody has accepted by now that change is unavoidable. But that still implies that change is like death and taxes it should be postponed as long as possible and no change would be vastly preferable. But in a period of upheaval, such as the one we are living in, change is the norm.”

—Peter F. Drucker

As Peter Drucker stated in 1999, “change is the norm.” Change has been the norm for the acquisition workforce for quite a while. Starting in the early 90s, and continuing to the present, personnel in the acquisition workforce have endured many forms of change. Changes to defense acquisition rules and regulations are commonplace as laws are updated and market conditions change. The increased acquisition of services has also caused DoD to adjust its business practices as the overall defense mission evolves. Such changes are necessary for organizational effectiveness in changing environments. For the most part, regulatory changes are digested by the acquisition community as a normal part of doing business. However, the changes that truly influence organizational effectiveness are those that affect job satisfaction. Changes such as Base Realignment and Closure (BRAC), workforce reductions, position changes, pay systems revocation (e.g., NSPS), and new training and certification requirements can all impact organizational effectiveness. The acquisition workforce, like most government workers, has faced all of these challenges at one point in time. However, no one acquisition-related change in itself, whether regulatory or personnel related, has achieved the ultimate goal to improve acquisition effectiveness. A lot of work is still yet to be done, which is evident considering recent Government Accountability Office (GAO) and Commission on Wartime Contracting (CWC) reports to Congress. The Department of Defense is hopeful that its latest plan to improve the acquisition workforce will address acquisition issues and achieve acquisition process improvement goals.

Perhaps the most notable change within DoD came on the heels of the Report of the Commission on Army Acquisition and Program Management in Expeditionary

Operation, better known as the “Gansler Commission Report,” released October 31, 2007. The commission, chaired by Dr. Jacques Gansler, former Under Secretary of Defense (Production and Logistics) and Acquisition, Technology and Logistics (AT&L), was chartered to review lessons learned in recent operations and to make recommendations to assist the Department of the Army in ensuring greater future effectiveness, efficiency and transparency (Gansler Commission Report, 2007). The finding of the commission was less than favorable, and sparked an urgent call for reform within the Army. The Army has undergone rapid sweeping changes since the release of this report, the greatest of which is the consolidation of the Army’s contracting assets under one two-star command. The command is currently headed by a Senior Executive Service (SES) two-star equivalent until the Army can grow one of its newest one-stars, also recommended by the commission, to fill the billet. The Army’s new Contracting Command now shoulders the responsibility of implementing Department of Defense’s (DoD) Acquisition Workforce Improvement Strategy.

The Acquisition Workforce Improvement Strategy has its roots in the Defense Acquisition Workforce Improvement Act (DAWIA), Public Law 101-510, Title 10 United States Code (USC),¹ enacted as part of the 1991 Defense Authorization Act. DAWIA was the catalyst for change meant to improve the effectiveness of the military and civilian acquisition workforce through enhanced education, training and career development. In theory, an improved workforce would in turn improve the acquisition process. DAWIA also required DoD to professionalize the acquisition workforce by establishing formal career paths. The formal career tracks allowed individuals to pursue careers in various acquisition disciplines. To meet the DAWIA requirement, DoD divided acquisition jobs into position categories and established formal certification processes. The Acquisition Workforce Improvement Strategy further refines the position classification and certification process form under DAWIA. The strategy also implements other laws geared toward improving DoD’s overall acquisition processes.

¹ Public Law 101-510, “National Defense Authorization Act for Fiscal Year 1991,” Title XII, *Defense Acquisition Workforce Improvement Act*. November 5, 1990. (Sections 1701- 1764 of Title 10, United States Code).

Uniformity was principal tenet of DAWIA as enacted in 1990.² While DoD agencies complied with the broad tenets of DAWIA, as first enacted, there have been considerable policy implementation and practice differences across DoD components. The inconsistent application and practice of policy across DoD, coupled with two wars and an aging acquisition workforce, has resulted in many necessary changes over the past five years. All National Defense Authorization Acts (NDAA) of the past five years have addressed various issues concerning acquisition workforce. Acquisition workforce size, Job categories, capabilities gaps, retention/hiring incentives and promotion/hiring flexibilities are all considerations for strategic workforce improvement. The Acquisition Workforce Improvement Strategy takes an enterprise look at all the policy in hopes of finally achieving the workforce improvement that will result in improving the acquisition process.

DoD's acquisition workforce is charged with executing and managing billions of dollars in contract actions annually. In FY 2010, DoD obligated over \$367 billion in support of defense operations worldwide. The need to maintain a well-trained and experienced workforce has never been more important. DoD's contracting workforce executed more than 3.6 million contracting actions in FY 2010, which equates to nearly 230 actions per Contract Specialist on the books at the end of FY 2009. The need to properly manage a workforce that executes on this level is without a question necessary. Managing such a workforce will require a strategic plan that is nimble and flexible. The plan should also be viewed as a system within a system. In other words, any change that impacts the workforce will impact the acquisition process.

This Joint Applied Project examines the DoD's FY 2010 Acquisition Workforce Improvement Strategy. The project outlines developments that generated the need for DoD's Acquisition Workforce Improvement Strategy. This project also outlines DoD's efforts to address its acquisition workforce's ability to manage and oversee its contracted services. Researchers will examine the implementation and effectiveness of DoD's

² "Section 1701(b) Uniform Implementation. The Secretary (of Defense) shall ensure that, to the *maximum extent practicable*, acquisition workforce policies and procedures established in accordance with this chapter are *uniform* in their implementation throughout the Department of Defense."

acquisition workforce improvement initiatives to see if plans will meet intended higher-level directives. The result of this project will enhance acquisition personnel's understanding of DoD's Acquisition Workforce Improvement Strategy and the initiatives that impact acquisition workforce. By analyzing the plan, this project seeks to answer the following four research questions:

- 1) What development generated the need for DoD's workforce improvement Strategy?
- 2) What are the goals of DoD workforce improvement strategy?
- 3) How does the Acquisition Workforce Improvement Strategy address key requirements of National Defense Authorization Act(s) (NDAA)?
- 4) What workforce issues do DoD's Acquisition Workforce Improvement Strategies address?

II. THE NEED FOR WORKFORCE IMPROVEMENT

A. RESEARCH QUESTION

What development generated the need for DoD's Workforce Improvement Strategy?

B. BACKGROUND

Spending and workforce trends have sparked a need for workforce improvement. In President Obama's March 4, 2009, memorandum, he communicated his intent to ensure that the federal acquisition workforce has the capacity and ability to develop, manage, and oversee acquisitions appropriately. On April 6, 2009, the Secretary of Defense announced three objectives that are keys for improving the Department of Defense (DoD). The three objectives are:

1. Take care of the all-volunteer force that represents America's greatest strategic asset;
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 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 third objective of reforming how and what we buy includes Secretary Gates' initiative to significantly improve the quality and readiness of the defense acquisition workforce. Having adequate numbers of capable personnel on the job, in the right place at the right time, are principal tenets of Gates' defense acquisition workforce improvement objective. The February 2010 Quadrennial Defense Review (QDR) Report also 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. The following is an excerpt from 2010 QDR:

To operate effectively, an appropriately sized cadre of acquisition professionals with the right skills and training to successfully perform their jobs must support the acquisition system processes. 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. (DoD, 2010)

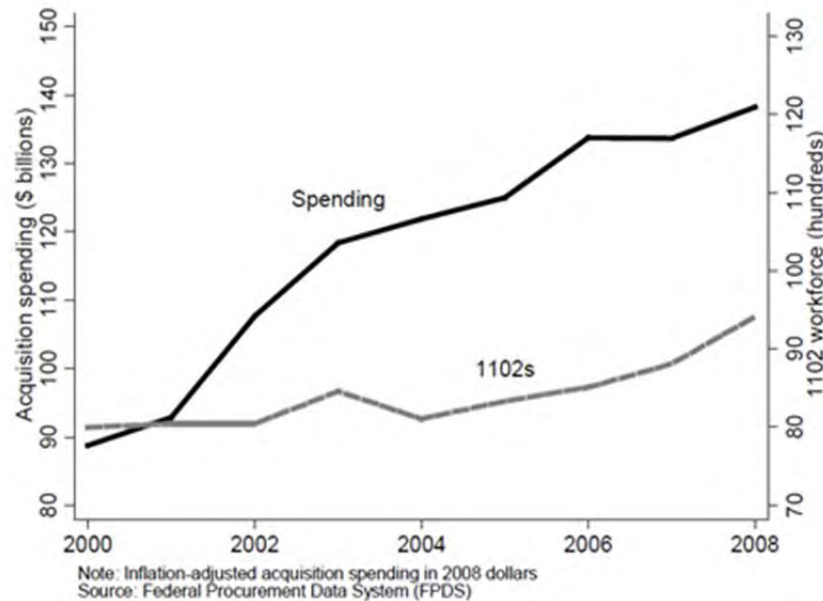
Improving the acquisition workforce has garnered support from the president, Congress, Secretary of Defense and DoD senior leadership. The department's strategy to restore and reshape the acquisition workforce is supported by workforce initiatives that will grow, enhance, and sustain a high-quality workforce. The initiatives include a mix of: 1) recruiting and hiring, 2) retention and recognition incentives, and 3) training and workforce development initiatives.

C. SPENDING AND WORKFORCE TRENDS

The need for restoring the defense acquisition workforce is undeniable. The fact that DoD's acquisition mission represents the largest buying enterprise in the world, make the need for improvement more pressing. DoD improvement strategy notes that there are 102 major defense acquisition programs with an investment of more than \$1.6 trillion. DoD recognizes in its strategy that their acquisition workforce has experienced a significant increase in workload demand and complexity. The growth of services contracts, counter-insurgency operations, and other critical missions support services have outpaced DoD's ability to effectively manage acquisitions. Responding to the overall increase in acquisition workload has pushed an understaffed unbalanced workforce to its breaking point. DoD reported in 2001, the defense department spent over \$138 billion on contracts, and in 2009 spending reached \$384 billion. Two-hundred-eight billion was for service contracts that have proven to be management intensive. During this period, the use of contractor support dramatically increased, while the organic³ acquisition workforce (civilian and military) varied but decreased 2.6 percent by 2008 (DoD, 2010).

³ For the purpose 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.

DoD's spending between FY2000 and FY2008 by acquisition civilian agencies expanded by 56 percent, from \$80 billion to \$138 billion (in inflation-adjusted dollars) (DoD, 2009). DoD reported that during this same time, the number of contract specialists ⁴ grew by only 24 percent from 7,995 to 9,921 (Figure 1). In contrast, both acquisition spending and the number of contract specialists in civilian agencies were little changed during the previous decade (DoD, 2009).



Source: Acquisition Workforce Development Strategic Plan Fiscal Years 2010-2014, October 2009 Pg. 2

Figure 1. Civilian Agency Acquisition Spending vs. Workforce Growth.
From (DoD, 2009)

As indicated by Figure 1, the acquisition workforce has failed to keep pace with growing requirements by a ratio of more than 2:1. From FY2000 to FY2008, spending by civilian agencies has increased by 56 percent from \$80 billion to \$138 billion.⁵ During the same period, contract specialist grew by only 24 percent from 7,995 to 9,921. This increased workload leaves less time for effective planning and contract administration

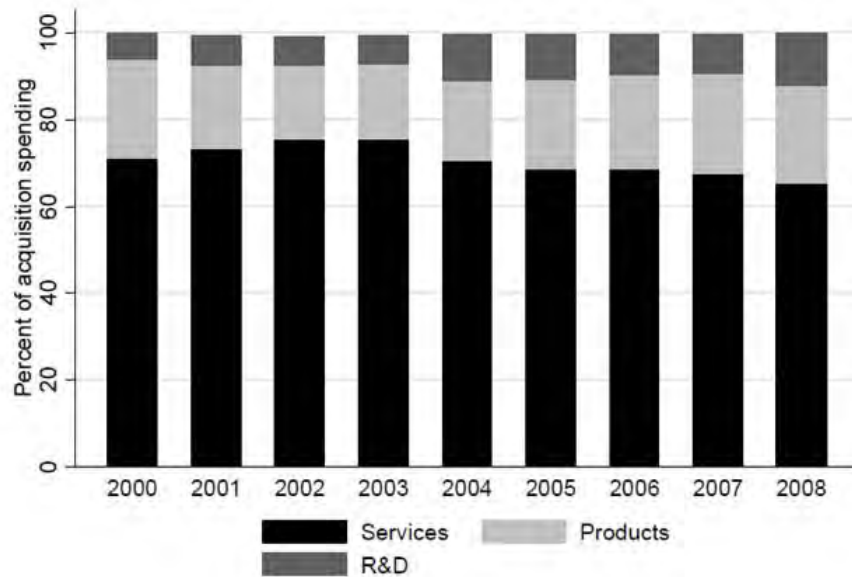
⁴ GS-1102s, the only segment of the acquisition workforce for which historically consistent data is available.

⁵ Dollars adjusted for inflation.

which can lead to diminished acquisition outcomes (DoD, 2009). While requirements are being executed, the level of advanced planning to develop clear requirements and performance measures in pre-award are not achieving the post-award goals. Proper pre-award and post-award development and management are key to overall contract success. DoD acknowledges that current acquisition environment does not afford the workforce adequate time for these and other functions due to lack of capacity. DoD defines its lack of capacity in terms of knowledge, experience, size and leadership needed to properly manage the department's acquisitions. The Acquisition Workforce Improvement Strategy was fashioned to correct the capacity problem by growing DoD's organic acquisition capability.

D. CHANGES IN PROFILE OF ACQUISITION ACTIVITY

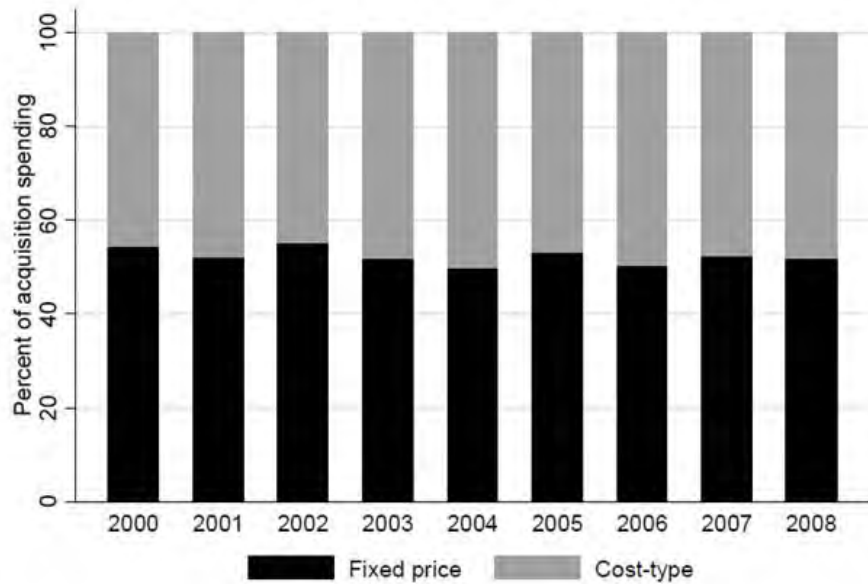
Federal agencies depend on a wide variety of goods and services to support their operational efforts. As the spending and actions have increased over time, there has been an evolution in the types of contracts used to acquire the variety of goods and services needed by the agencies (DoD, 2009). DoD believes that the "what and how" tenets of an acquisition drives the capacity and capability of an acquisition agency's workforce. DoD strategy realizes acquisition of research and development (R&D) and other services necessitates a different mix of skills and workforce focus than the acquisition of products. Figure 2 depicts spending on R&D has grown relatively more rapidly than spending in general services. DoD reports that between FY2000 and FY2008, R&D's contract spending increased from 6 percent to 12 percent, other services fell from 72 percent to 65 percent while acquisition of products has remained relatively stable at 23 percent. It is interesting to note that while R&D experience the most growth, general services contracts still dominate the spending category. It would be easy at this point to assume that services would also dominate the skill sets of the acquisition workforce, however, there are other factors to consider.



Source: Acquisition Workforce Development Strategic Plan Fiscal Years 2010-2014, October 2009 Pg. 3

Figure 2. Civilian Agency Share of Spending by Contract Category.
From (DoD, 2009)

The key to DoD's Acquisition Workforce Improvement Strategy is to have the right skill sets performing across the spectrum of its contract actions. Tracking the changes in acquisition activity as it relates to "what" is acquired and "how" it is acquired is essential to DoD's human capital planning. DoD understands that some types of R&D spending are best managed using cost-type contracts. The need in these cases outweighs the increased risk to the government. The acquisition workforce needed to manage these may require, in addition to core acquisition skills, advanced expertise in competencies such as cost analysis and market awareness to mitigate risk while achieving results (DoD, 2009). On the other hand, DoD's strategy notes that agencies using fixed-price arrangements to acquire services, such as call centers or security services, may require a workforce with greater focus on building clear requirements and performance measures. Figure 3 indicates that the split between cost-type and fixed-price spending. The split has remained roughly constant over the past decade and indicate a near equal focus on skills required to manage both complex and non-complex contract types.



Source: Acquisition Workforce Development Strategic Plan Fiscal Years 2010-2014, October 2009 Pg.4

Figure 3. Civilian Agency Share of Spending by Contract Type.
From (DoD, 2009)

E. NEED FOR BETTER HUMAN CAPITAL PLANNING

GAO reported in 2002 and 2007 that the inherent challenges in identifying the size and skills of a workforce to meet changing program needs results in agencies taking an incremental, budget-driven approach to acquisition workforce planning rather than a strategic approach based on agency performance goals and desired outcomes (DoD, 2009). DoD's human capital planning to support acquisitions extends beyond the traditional contracting workforce to personnel who provide critical support throughout the acquisition process. The need for holistically human capital planning across the larger functional community of logistics is pivotal to improving DoD's acquisition workforce improvement. While many reports and headlines focus on the acquisition community, DoD understands the problems extend beyond acquisition.

Cost overruns, schedule slippages, and performance shortfalls, such as the latest body armor issue, makes for shocking headlines. However, less dramatic than the failures in managing major weapon systems or programs, significant problems exist in procuring routine and less complex items (Layton, 2007). While DoD is years beyond the \$400.00

hammer issue, performance-based services contracts have become the latest topic of overpricing and poor contract management headlines. The government's under-involvement in surveillance, over-involvement in the "how to" business and improper use of contract types⁶ have become the latest costly topics of discussions.

There is no doubt that the lack of capacity or ability to develop, manage, and oversee acquisitions appropriately has resulted in excessive and unnecessary cost. Rapid advances in technology without a corresponding adjustment in human capital (numbers, training, experience, etc.), has impacted DoD's ability to rapidly obtain state-of-the-art technology. DoD's procurement bureaucracy has not only hindered its own efforts, it has also frustrated commercial vendors with over-restrictive requirements and payment issues. In the years leading up to 9/11, many small businesses found it hard to do business with the government because they just could not afford to wait for their money 30 to 60 days after performance or delivery. The use of Wide Area Workflow (WAWF) and prompt pay policies has improved this problem. However, many approvers who review and accept goods and services in WAWF for payment do so as a secondary or other duty as assigned. DoD strategy extend to these functions by insuring adequate numbers of Contracting Officer Representatives (COR) and Contracting Officer Technical Representatives are appointed to support the functions.

While DoD is working on these issues, its acquisition lapses over the years have caused the public to lose confidence in the government's procurement system. Jacques Gansler⁷ (then Professor and Roger C. Lipitz Chair Director, Center for Public Policy and Private Enterprise School of Public Affairs University of Maryland, 2002) described the public lack of confidence as follows:

People somehow thought it was probably too much to pay a billion dollars each for a new bomber, but they didn't know exactly what one should cost. By contrast, they knew they could buy a hammer at the store for a few dollars and that when the government was paying \$400 for a hammer something was clearly wrong. (Gansler, 2002)

⁶ Cost and Firm Fixed Price.

⁷ Who also served as Under Secretary of Defense for Acquisition, Technology and Logistics (1997–2000).

The American people are very aware of waste when they see it, and they expect the government to do something about it. There is no doubt that this same sentiment has been expressed by the people throughout history as the government's current acquisition problems are not new. Evelyn Layton noted in *The Defense Acquisition University: Training Professionals for the Acquisition Workforce 1992–2003*, that the difficulty faced by DoD's acquisition workforce was certainly not new. She went back to a 1970 address to an industry group⁸ by the Deputy Defense Secretary David Packard to prove her point:

Frankly, gentleman, in defense procurement, we have a real mess on our hands, and the question you and I have to face up to is what we are going to do to clean it up. The most serious deficiencies create damaging newspaper headlines and demands for investigation. (Layton, 2007)

Just as acquisition problems are not new, neither is acquisition reform. The government has been cleaning up its procurement act for a very long time and yet the headlines keep coming. Virtually every aspect of the defense acquisition process has been studied and changed. The most fundamental changes noted by many have been the professional development of acquisition workforce.

F. SUMMARY

Spending, workforce trends, and the need for better human capital management sparked the current need for workforce improvement. However, DoD recognition of the root cause of its acquisition problems, poor human capital management, set the stage for what could be the missing link in acquisition improvement. With support from the President, the Defense Secretary and Congress, DoD improvement strategy has a chance to meet its goal to significantly improve the quality and readiness of the defense acquisition workforce. DoD's holistic approach to improving the greater logistics community, virtually accounted for every aspect of the defense acquisition process. Workforce vs. spending trends, procurement profile analysis and human capital planning are likely to pay big workforce improvement dividends.

⁸ At the Defense System Management College.

III. DOD WORKFORCE IMPROVEMENT GOALS

A. RESEARCH QUESTION

What are the Goals of DoD Workforce Improvement Strategy?

B. BACKGROUND

“Workforce size is important, but quality is paramount.”⁹

—Ashton B. Carter
Under Secretary for AL&T

In an interview for *Defense AT&L* magazine in April 2010, Mr Carter told the DAU President, Mr. Frank J. Anderson, Jr., “of all our programs in AT&L, the most important is to increase the competence, quality, and performance of the acquisition workforce. That matters more than any organizational reform.” The Secretary of Defense Acquisition Workforce Improvement Strategy announced 6 April 2009 that the overarching goal is the revitalization of the acquisition workforce. This revitalization includes the right-sizing, re-shaping, and rebalancing of the defense acquisition workforce’s capacity and capability.

C. STRATEGIC HUMAN CAPITAL

In May 1990, the House Armed Services Committee stated in a report that a properly functioning acquisition system requires an appropriate balance of three distinct but interrelated elements: (1) the policy, procedures, and processes that govern the system; (2) the organization that executes the policies and procedures; and (3) the personnel that make the system work.¹⁰

DoD noted in their plan¹¹ that successful acquisition outcomes are a direct result of having people with the right skills supporting the acquisition function. The

⁹ Defense AT&L magazine interview with Mr. Frank J. Anderson, Jr., April 5, 2010.

¹⁰ House Armed Services Committee’s Print No. 10, *The Quality and Professionalism of the Acquisition Workforce* (May 8, 1990), p. 61.

¹¹ DoD. (2009). *Acquisition Workforce Development Strategic Plan Fiscal Years 2010-2014*.

government depends on skilled acquisition and program personnel during the critical planning phase for the following activities:

1. Conduct thorough market research so that competition is maximized, independent cost estimates are accurate, and small business opportunities are promoted;
2. Describe clear requirements so that vendors' prices and technical approaches accurately reflect the work to be done—no more, no less; and
3. Establish discrete performance metrics so that contractors understand how they will be evaluated and paid, such as in performance-based acquisitions or incentive-type contracts.

DoD's plan also recognizes that different skills are needed for the development of various acquisition approaches. For example, DoD's plan notes the following:

1. Fixed-price contracts require more planning up front while the contract administration phase of such contracts is generally less complex.
2. In contrast, cost-type contracts require a broad range of skills throughout the acquisition lifecycle including, but not limited to:
 - a. Finance
 - b. Accounting
 - c. Cost and price analysis
 - d. Industrial engineering
 - e. Program management
3. Skilled and experienced pricing specialists are especially needed to project costs and help contracting officers determine if offered prices are fair and reasonable. After award, functional experts with training and experience in earned value management and other performance management techniques are needed to:
 - a. Evaluate if the contractor is meeting its cost, schedule, and performance goals,
 - b. Identify early corrective measures, or

- c. Recommend termination if contracts are not meeting the government's needs.

There is a significant variance across DoD agencies for strategic human capital planning for the acquisition workforce. In 2009, the only common planning effort was the annual reporting requirement for the contract specialist occupation submitted to Office of Personnel Management (OPM) for their Human Capital Management Report. The April 2010 DoD Strategic Human Capital Plan update for the defense acquisition workforce is the first effort to coordinate strategic human capital planning across the department.

D. TALENT MANAGEMENT

The DoD initiative to improve the acquisition workforce has already started. Many have seen the influx of interns, in-sourcing reversing losses of the 1990s and re-hired annuitants return to their former positions. DoD has selected the best and brightest to fill their intern positions. Many of the skills out-sourced during the 90s drawdown are being reclaimed. The re-hired annuitants program was used to incentivize recently retired subject-matter-experts to return to the workforce to help with the workforce improvement efforts. Table 1 depicts the growth of the acquisition workforce from 2008 to 2009.

Defense Acquisition Workforce Count		
DoD Component	FY 2008	FY 2009
Army	40,269	40,356
Navy/MC	43,066	46,972
Air Force	24,827	27,174
Dfense Agencies	17,717	18,601
Total	125,879	133,103

Source: Section 1, DOD Strategic Human Capital Plan Update,
The Defense Actuisition Workforce, April 2010 Pg 1-4

Table 1. Defense Acquisition Workforce Count (Military and Civilian).
From (DoD, 2010)

The risk of not successfully achieving desired acquisition outcomes is associated with the size and skill of acquisition management personnel. Increasing the size of the acquisition workforce is one element of improving overall quality and will help mitigate

the imbalance that results from downsizing of the acquisition workforce, and the dramatic increase in acquisition workload since 2001 (DoD, 2010). DoD improvement strategy seeks to undo damage done by downsizing of the 90s and workload increases over the past two decades. Reducing the strain on the organic acquisition workforce is a key part of DoD's strategic plan. In addition to size and skill issues, DoD is also facing the issue of an aging workforce. Strategic sizing and rebalancing the multi-sector acquisition workforce are critical elements of the DoD acquisition improvement strategy (DoD, 2010). The multi-sector acquisition rebalancing efforts concerns the management of the proper number of federal civilian employees, uniformed personnel and contractors.

DoD plan to meet their strategic reshaping of defense acquisition career fields through deliberate and targeted growth of selected career fields. Two major areas targeted for reshaping are the Contracting and Systems Planning, Research, Development and Engineering (SPRDE)—Systems Engineering/Program Systems Engineering (SE/PSE) career fields (DoD, 2010). DoD's plan indicates that 26 percent of planed growth is allocated to Contracting. This will result in a 23 percent increase to the contracting career field. DoD's plan also indicates that 22 percent of the total growth is allocated to SPRDE-SE/PSE, increasing that career field by 16 percent. DoD notes that 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 (DoD, 2010). Planned growth through FY15, shown in Table 2, highlights the DoD's determination of where growth will contribute the most too improving acquisition outcomes.

e.g., 26% of total DAW growth in Contracting

e.g., Contracting career field will grow 23% from FY2008 baseline

Defense Acquisition Workforce (DAW) Career Field/Career Path	FY09 - FY15 % of Total DAW Growth	FY09 - FY15 % Career Field Growth
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%	

Source: Section 1, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 1-6

Table 2. FY09–FY15 Defense Acquisition Growth Highlights by Career.
From (DoD, 2010)

The department’s acquisition workforce improvement strategy also implements the Office of Management and Budget (OMB) Memorandum, 29 July 2009, “Improving Government Acquisition,” which calls for planning to strengthen the acquisition workforce. The plan includes:

1. Increasing the size of the acquisition workforce,
2. Making necessary investments in training,
3. Conducting trend analysis, and
4. Emphasizing the criticality of acquisition work to agency mission success.

DoD’s growth strategy also supports implementation of the OMB Memorandum, 29 July 2009, “Managing the Multi-Sector Workforce.” This memorandum requires agencies to begin the process of developing and implementing policies, practices, and tools for managing the multi-sector workforce. The memo also encourages agencies to use human capital planning, recruitment, hiring, and training to ensure a strong internal

capacity as part of a strategically planned workforce mix. The memo directs agencies to immediately take the following steps to manage multi-sector workforces:

1. Adopt a framework for planning and managing the multi-sector workforce that is built on strong strategic human capital planning.
2. Conduct a pilot human capital analysis of at least one program, project, or activity, where the agency has concerns about the extent of reliance on contractors.
3. When considering in-sourcing, use guidelines that facilitate consistent and sound application of statutory requirements.

E. TRAINING AND DEVELOPMENT

Public Law 101-510, Title 10 U.S.C established The Defense Acquisition Workforce Improvement Act (DAWIA) as part of the fiscal year 1991 Defense Authorization Act. The act called for establishing an Acquisition Corps and professionalizing the acquisition workforce through education, training, and work experience. DAWIA applied to civilian and military personnel with emphasis on greater opportunities for professional development and advancement for civilian personnel. Emphasis was placed on civilians in order to create and formalize a professional civilian development and advancement structure. This structure was already inherent in the professional military acquisition workforce.

DAWIA set the training and experience guidelines for DoD's acquisition workforce. These guidelines are used to access individuals into the acquisition workforce and qualifying them for increased levels of responsibility. The key is to select the best from the pool of qualified candidates. DoD acquisitions necessitate talented and trained individuals who can develop, manage, and oversee acquisitions. The acquisition workforce improvement strategy recognizes that increasing the size of the workforce, alone, is not sufficient to improve acquisition outcomes. DoD's strategic plan focuses on building the capabilities of its workforce more so than its size. The Office of Procurement Policy (OFPP) acquisition workforce analysis identified a need to focus on three areas related to improving workforce capability:

1. Expanding the use of intern programs experience has shown that intern programs can be an effective recruitment and retention tool;
2. Improving the Federal Acquisition Certification Programs to provide common standards and approaches to developing acquisition professionals across the civilian agencies; and
3. Targeting Training and Development to Workforce Needs.

DoD has two primary means of satisfying core competencies needed: training and rotational assignments. The two means work together to provide core skills and reinforcement through experience. DoD's analytical study of its acquisition workforce looked across military departments and defense agencies to baseline the state of the workforce in order to have a starting point from which to measure improvements. The latest analytical data shows that a lot of progress have been made to improve the acquisition workforce since DAWIA was enacted however, more remains to be done.

F. WORKFORCE MANAGEMENT INFRASTRUCTURE

Management infrastructure is a key concern for DoD's improvement strategy. In order to build the capacity and capability addressed in the plan, DoD had to take steps to improve the current workforce management infrastructure. Service department's Acquisition Assistant Defense Secretaries support the Under Secretary of Defense for Acquisition Logistic & Technology. This infrastructure also includes DoD acquisition mission critical career field functional leaders for Contracting, Business (Cost Estimating and Financial Management), Information Technology (Acquisition), Life Cycle Logistics, Program Management, Production, Quality and Manufacturing (PQM), and Test and Evaluation (Acquisition). Primary pillars of this infrastructure include:

1. Functional Advisory Boards to keep curricula and development efforts current;
2. Skilled Acquisition Career Managers who have broad insight into an agency's needs;
3. Planning and management tools that are data-driven and timely, and

4. Resource strategies that consider a variety of options but are targeted to meeting the specific needs of the acquisition workforce.

The OFPP has established functional advisory boards for each of the contracting, P/PM, and COTR communities under the direction of the Chief Acquisition Officers Council¹² (CAOC), Human Capital Working Group (HCWG). The CAOC HCWG is still the overarching advisory group for acquisition workforce needs however, now will be supported by functional advisory boards that will be comprised of experienced acquisition professionals in each of the segments of the workforce (DoD, 2009). DoD plan states that, “these groups will be led by senior acquisition professionals in the agencies and will provide advice, recommendations, and solutions focused on workforce improvements associated with their area of expertise.” DoD equates functional advisory boards to functional integrated product teams. The functional advisory boards provide a similar user-based approach to workforce management. The following are some examples that listed the plan boards are likely to produce:

1. Functional group responsible for recommending changes to contract specialist training might suggest changes to the core curriculum to emphasize a particular area, such as cost/price analysis, or an increase in the number of continuous learning hours to improve skills currency.
2. Functional group responsible for program and project management might recommend the use of new tools that can increase awareness of FAR changes to these individuals who may not read the FAR with the same frequency as contract specialists.

OFPP Policy Letter 05-1, dated April 15, 2005, establishes the government-wide framework for creating a federal acquisition workforce with the skills necessary to deliver best value supplies and services, find the best business solutions, and provide

¹² The CAOC consists of a diverse group of acquisition professionals in the Executive Branch established to provide a senior level forum for monitoring and improving the federal acquisition system. The CAOC promotes effective business practices that ensure the timely delivery of best value products and services to the agencies, achieve public policy objectives, and further integrity, fairness, competition, and openness in the federal acquisition system. The CAOC works closely with the Administrator, Office of Federal Procurement Policy, and the Federal Acquisition Regulatory Council to promote these business practices in the acquisition system. <http://www.caoc.gov/>.

strategic business advice to accomplish agency missions.¹³ Part of this policy called for strengthening the Acquisition Career Manager's (ACM) role. In accordance with the policy, each agency is designated by the Chief Acquisition Officer (CAO) and is responsible for managing the identification, development, and planning activities associated with the acquisition workforce. DoD admits that while each agency has identified an ACM, the responsibilities and authorities of this position vary across agencies. DoD's plan states that OFPP will work with the CAOC HCWG and the Interagency Acquisition Career Management Committee (IACMC) to recommend changes to the OFPP Policy letter that will:

1. Expand the duties of the acquisition career manager to improve workforce management at the agencies, and
2. Establish skill and experience guidelines for new acquisition career managers. These changes and other, more tactical guidance will be included in an updated ACM guidebook that will better articulate the ACM role and strengthen the ACM function across agencies.

DoD is also providing more workforce planning and management tools. DoD plan acknowledges that long-term organizational success requires the use of data, analytical tools, and other resources. Existing workforce data reside in multiple systems, and agencies often have difficulty integrating the information to support acquisition workforce planning (DoD, 2010). For example DoD points out that current registration systems may not provide needed information in Acquisition Career Management Information System (ACMIS) and acquisition workforce members often enter multiple systems to register for training, complete competencies surveys, record training data, or apply for certification. In order to leverage resources and avoid redundancy DoD has enlisted the aid of the Federal Acquisition Institute (FAI) to provide agencies with better tools for competency management, workforce data (to include certification information),

¹³ Authority: This Policy Letter is issued pursuant to section 6(a) of the Office of Federal Procurement Policy (OFPP) Act, as amended (41 U.S.C. § 405(a)), and sections 37(b)(3) and (g) of the OFPP Act, as amended (41 U.S.C. § 433(b)(3) and (g)).

and a workforce planning portal through which agencies may access a variety of workforce planning resources and tools. Specifically, FAI will:

1. Conduct biennial surveys of workforce competencies in 2010 and 2012 for contract specialists, program managers, and COTRs;
2. Integrate acquisition workforce data to improve access to training, certification, and other acquisition workforce information;
3. In collaboration with Office of Personnel Management (OPM), develop an identification mechanism through the Central Personnel Data file (CPDF) that will use the OPM CPDF as the source for identifying members of the acquisition workforce; and
4. Collaborate with agencies and OPM to make available projection methodologies that agencies can use, along with detailed analysis of current capacity and needs, to project future agency workforce personnel hiring requirements.

G. SUMMARY

Revitalization of the acquisition workforce is the main Goal of DoD's workforce improvement strategy. The revitalization includes the right-sizing, reshaping, and rebalancing of the workforce responsible for managing the acquisition processes. DoD intends to achieve its goal through strategic human capital planning, talent management, training and development that is supported by an improved workforce management infrastructure.

DoD understands that successful acquisition outcomes are a direct result of having people with the right skills supporting the acquisition functions. Maintaining talented individuals performing critical planning activities for pre and post award contract development is a key part of DoD's strategy, and strategic human capital planning. In addition, targeted training and development supports the critical functions of the acquisition workforce. Finally, DoD's improved management infrastructure provides input and support for the Defense Secretary's workforce improvement initiatives.

IV. ACQUISITION WORKFORCE LEGISLATION

A. RESEARCH QUESTION

How does the Acquisition Workforce Improvement Strategy address key requirements of National Defense Authorization Act(s) (NDAA)?

B. NDAA BACKGROUND

The National Defense Authorization Act(s) (NDAA) authorize appropriations for Fiscal Year(s) (FY) military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy. The NDAA also prescribe personnel strengths for the Armed Forces and for other purposes. All NDAAs since Congress enacted DAWIA on November 1990, almost exclusively, contained the above language as enacted. The exception being the NDAA for FY1996, that included the following additional language: “to reform acquisition laws and information technology management of the Federal Government.”¹⁴ The FY 1996 NDAA could possibly be the most detrimental piece of legislation enacted concerning the strength and condition of the acquisition workforce today.

The NDAA of FY 1996,¹⁵ called for the wholesale reduction of DoD acquisition organizations by 25 percent.¹⁶ While the requirements of this Act were part of a government-wide workforce reduction, DoD’s implementation decisions affected both the size of the acquisition workforce and the size of acquisition workload as well. As written, the act expected the Secretary of Defense to capitalize on process efficiencies. These efficiencies were expected to have been achieved through the implementation of

¹⁴ National Defense Authorization Act for Fiscal Year 1996; An Act To authorize appropriations for fiscal year 1996 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, to reform acquisition laws and information technology management of the Federal Government, and for other purposes.

¹⁵ (Public Law 104–106, 1996).

¹⁶ National Defense Authorization Act for Fiscal Year 1996; Section 906 (A) Reduce the number of military and civilian personnel assigned to, or employed in, acquisition organizations of the Department of Defense (as defined by the Secretary) by 25 percent over a period of five years, beginning on October 1, 1995.

ongoing initiatives to increase the use of commercial practices and reduce contract overhead in the defense procurement system. The Federal Acquisition Streamlining Act of 1994¹⁷ and Federal Acquisition Reform Act of 1995¹⁸ held great promise for reducing the need for a large number of DoD acquisition organizations. They held so much promise that the act called for a reduction of 15,000 acquisitions organization's workforce members a year for five years using the 1 October 1995 numbers as a baseline.

The FY 1996 NDAA required the Secretary of Defense to evaluate specified restructuring options and provide a detail assessment of implementation feasibility. Each of the following options for streamlining and restructuring defense acquisition Organizations in 1996 draw close resemblance to areas now being look at for improvement in current NDAAs and the Acquisition Workforce Improvement Strategy. Options as enacted in FY 96 included:

1. Consolidation of certain functions of the Defense Contract Audit Agency (DCAA) and the Defense Contract Management Command (DCMC or now DCMA);
2. Contracting for performance of a significant portion of the workload of the Defense Contract Audit Agency and other Defense Agencies that perform acquisition functions and;
3. Consolidation or selected elimination of Department of Defense acquisition organizations.

According to Defense Manpower Data Center data, DoD had reduced its acquisition workforce by 50,334 or 20,334 more than required 15,000 a year by

¹⁷ Public Law 103-355.

¹⁸ Division D of this act.

31 March 1997.¹⁹ Table 3 shows that DoD was well on its way to meeting the overall acquisition workforce reduction requirements of 25 percent (94,400 of 377,600) by the end of fiscal year 2000.

Organization	FY 1995	FY 1996	FY 1997 (as of March 31, 1997)	Change FY95-97	Percentage change FY95-97
Undersecretary of Defense (Acquisition)	541	602	577	36	6.7
Army Information Systems Command	16,708	15,993	537	(16,171)	-96.8
Army Material Command	59,324	54,796	54,338	(4,986)	-8.4
Army strategic Defense Command	1,029	1,015	1,005	(24)	-2.3
Army Acquisition Executive	2,611	2,542	2,562	(49)	-1.9
Total Army	79,672	74,346	58,442	(21,230)	-26.6
Assistant Secretary of the Navy (Research, Development,	121	118	116	(5)	-4.1
Naval Sea Systems Command	34,482	32,635	31,568	(2,914)	-8.5
Naval Air Systems Command	25,544	23,910	20,697	(4,847)	-19.0
Naval Supply Systems Command	14,528	14,021	11,942	(2,586)	-17.8
Naval Facilities Engineering Command	22,421	21,823	20,669	(1,752)	-7.8
Office of the Chief of Naval Research	4,274	4,180	4,061	(213)	-5.0
Space and Naval Warfare Systems Command	6,959	6,711	6,534	(425)	-6.1
Navy Strategic Systems Program Office	5	5	4	(1)	-20.0
Navy Program Executive Officer/Direct Reporting	2,777	2,909	2,957	180	6.5
Total Navy	111,111	106,312	98,548	(12,563)	-11.3
Marine Corps Systems Command	752	754	743	(9)	-1.2
Assistant Secretary of the Air Force (Acquisition)	485	434	420	(65)	-13.4
Air Force Materiel Command	71,394	69,889	67,913	(3,481)	-4.9
Air Force Program Executive Organization	52	52	49	(3)	-5.8
Total Air Force	71,931	70,375	68,382	(3,549)	-4.9
Ballistic Missile Defense Organization	232	263	275	43	18.5
Defense Logistics Agency	50,660	47,417	48,237	(2,423)	-4.8
Depots	62,701	53,856	52,062	(10,639)	-17.0
Total DOD	377,600	353,925	327,266	(50,334)	-13.3

Source: GAO Report # B- 277987 pg 4

Table 3. Overall Change from End of FY 1995 to End of 2nd Qtr 1997.
From (GAO, 1997).

In order to understand the impact of the FY 1996 NDAA reductions on the “Acquisition Workforce,” the true size and composition must be defined. The numbers in the above table represent all personnel working in DoD acquisition organizations.

¹⁹ U.S. Congress. General Accounting Office. *Defense Acquisition Organizations: Reductions. in Civilian and Military Workforce*. Washington, 1997. (GAO/NSIAD-98-36R, October 23, 1997) p. 2.

However, the true size of DoD's acquisition workforce has been an issue of concern in the past due to a lack of common definition on who made up the acquisition workforce. There have been many different numbers, depending on the source and mythology used, for who is counted. A historic account of the different personnel numbers range from 22,641 to 582,000.²⁰

Source of Estimate	Date of Estimate	Methodology for estimate -- who is counted	Number of personnel
FY1999 National Defense Authorization Bill (Public Law 105- 261)	Enacted into Law, October 17, 1998	Military and civilian personnel (other than civilian depot personnel) who are assigned to, or employed in, DOD acquisition organizations as specified by DOD 5000.58 *	Undetermined
Defense Acquisition Workforce Improvement Act (DAWIA), Public Law 101-510, FY1991 Defense Authorization Act, Title XII, Defense Acquisition Workforce Improvement Act, November 5, 1990	1998 Annual Report to the President and the Congress, from Secretary of Defense William Cohen	All 14 acquisition-related positions (see Appendix C for a complete listing)	105,544
Acquisition Corps, enacted in Title 10, Section 1732, U.S. Code	1998 Annual Report to the President and the Congress, from Secretary of Defense William Cohen	A subset of the DAWIA workforce; persons who have qualified for membership	22,641
FY 1998 National Defense Authorization Bill (Public Law 105- 85)	Enacted into law, November 18, 1997	Military and civilian personnel (other than civilians who are employed at a maintenance depot) in acquisition organizations	270,000
FY 1997 National Defense Authorization Bill (Public Law 104-201)	Enacted into law, February 10, 1996	Military and civilian personnel in acquisition organizations, with the exception of personnel who possess technical competence in trade-skill maintenance and repair positions involved in performing depot maintenance functions	320,000
GAO Report, NSIAD-96-46, "Defense Acquisition Organizations: Changes in Cost and Size of Civilian Workforce"	Nov. 13, 1995	All personnel in DOD acquisition organizations and the Defense Contract Audit Agency	464,000
DOD Instruction 5000.58	Revised, Jan. 14, 1992	All personnel in DOD acquisition organizations	355,000
Defense Management Report, from the Defense Manpower Data Center	June 1989	All personnel described in the Packard Commission Report and all in DOD acquisition organizations	582,000
The President's Blue Ribbon Commission on Defense Management (Packard Commission Report)	April 1986	Some civilian occupations in all organizations, acquisition organizations and corresponding military organizations	150,000

Source: CRS Report for Congress, *Defense Acquisition Workforce: Issues for Congress* Updated March 11, 1999 pg. 8 & 9

*This definition also includes organizations which the Secretary of Defense may determine to have a predominately acquisition mission.

Table 4. Previous Estimates of the Size of DoD's Acquisition Workforce.
From (Grasso, 1999).

²⁰ CRS Report for Congress, *Defense Acquisition Workforce: Issues for Congress* Updated March 11, 1999, pp. 8, 9.

The composition of DoD's acquisition workforce is a key factor to defining the personnel strength. As illustrated in Table 4, a common definition or mythology for who would be counted was a topic of debate since April 1986. At a 1997 hearing on the DoD acquisition workforce before the military procurement and readiness subcommittee of the House National Security Committee (HNSC), DoD was asked to create a new definition of the acquisition workforce that could be accepted and used by all participants in the debate (CRS, 1999). To meet this request, DoD solicited the aid of Jefferson Solutions Group, a DC management consulting firm, headed by Dr. Allan V. Burman (former administrator of the Office of Federal Procurement Policy) to conduct a study. Jefferson Solutions issued its report in September 1997 with data it gathered from various DoD agencies.²¹ The Jefferson Solutions Group examined two solutions used by DoD to classify acquisition workforce members: (1) identifying personnel serving in acquisition organizations identified in DoD Instruction 5000.58-R, and (2) identifying personnel designated as part of the Defense Acquisition Workforce Improvement Act (DAWIA) (CRS, 1999). The group's examination found the following:

1. Relying exclusively on acquisition organizations resulted in too broad a definition,
2. Excluding organizations that did not qualify as acquisition organizations would overlook personnel within these organizations that perform acquisition-related functions, and
3. Since there are only 105,544 acquisition personnel whose positions fall within statutory requirements for inclusion under DAWIA, using DAWIA as an identifier would exclude many personnel who perform acquisition-related functions.

The Jefferson Solutions Report adopted a revised and expanded definition using the 1986 Packard Commission classification. The new definition includes (1) all

²¹ The report used data gathered from the Defense Manpower Data Center (DMDC) and from interviews with officials from the Office of the Secretary of Defense, Army, Navy, Air Force, Defense Manpower Data Center, Defense Logistics Agency, staff from the Senate Armed Services Committee (SAC) and the House National Security Committee (HNSC), and analysts from the General Accounting Office (GAO) and the Congressional Budget Office (CBO). (CRS, 1999).

personnel employed in certain defense acquisition occupations, regardless of the mission of the particular defense agency in which they work; and, (2) all personnel in acquisition organizations who are employed in certain “acquisition support” occupations (CRS, 1999). The acquisition workforce count using this new definition stood at 177,613. This figure was adjusted by 6.5 percent to account for administrative and clerical support that was believed to be underestimated in the data reviewed by the group. The revised estimate now stood at 189,158 acquisition workforce members. The composition of the acquisition workforce using Jefferson Solutions’ definition is illustrated in Table 5.

Occupational Specialty	Percentage of DOD Acquisition Workforce	Total Personnel
Science/Engineering	42.5%	80,448
Engineering		71,969
Physical Sciences		5,700
Math and Statistics		2,779
Program Management	16.1%	30,486
Computer Systems		13,235
Logistics Management		10,798
Supply Program Management		2,783
Computer Science		2,217
General Program Management		1,453
Procurement/Contracting	14.5%	27,394 *
Contracting		19,963
Purchasing		2,751
Procurement Clerical		4,680
Auditing/Quality Assurance	8.2%	15,596
Quality Assurance		8,453
Auditing		7,143
Business/Industry/Finance	7.4%	13,969
General Business & Industry		4,207
Budget Analysis		3,480
Production Control		3,055
Industrial Specialist		1,582
Property Disposal		1,099
Industrial Property Mgmt.		546
Clerical/Administrative Support	6.1%	11,545
Other	5.1%	9,720 >
Total Acquisition Personnel	100%	189,158

Source: CRS Report for Congress, *Defense Acquisition Workforce: Issues for Congress* Updated March 11, 1999 pg. 13

JAP Calculation Corrections : (*) 3&9 was reversed on source document and (>) 0 was missing from this figure.

Table 5. Acquisition Workforce Personnel Composition. After (Grasso, 1999).

Even with this data available, DoD continued using the overall count for the workforce in acquisition organizations in the base year of 1995 to meet their reduction number. Reductions called for in the FY 1996 NDAA were carried through to FY 2000 NDAA with seemingly no regard to affect to acquisition workforce. However, the negative impact of the acquisition workforce reduction would be acknowledged in a memorandum from the Office of the Secretary of Defense dated 11 October 2000. The following excerpts from that memorandum closely resemble strategic issues outlined in current Acquisition Workforce Strategic Plan:

The Department of Defense (DoD) is facing a crisis that can dramatically affect our Nation's ability to provide warfighters with modern weapon systems needed to defend our national interests. After 11 consecutive years of downsizing, we face serious imbalances in the skills and experience of our highly talented and specialized civilian workforce. Further, 50 percent will be eligible to retire by 2005. In some occupations, half of the current employees will be gone by 2006.

We must begin to recognize our employees as assets and then plan, develop and manage the civilian workforce as carefully as we do our military workforce. This requires we treat recruitment and development as investments rather than costs.

Your leadership commitment and resources are essential to this vital initiative. Some of the key proposals in the report include:

1. Developing and implementing human resource performance plans for the total acquisition workforce.
2. Reinvigorating civilian recruitment programs
3. Developing multi-disciplinary civilian acquisition professionals
4. Preparing civilians to assure key leadership roles
5. Providing more civilian leadership development opportunities
6. Increasing our ability to shape the workforce. (DoD, 2000)

This memorandum was signed by then Under Secretary of defense (Personnel & Readiness), Dr. Bernard Rostker and Under Secretary of defense (Acquisition, Technology & Logistics), DR. Jacques S. Gansler. It was part of the Acquisition 2005 Task Force final report entitled “Shaping The Civilian Acquisition Workforce of The

Future.” As evident by this report, the current efforts to improve the acquisition workforce started well before the famed “Gansler Commission” Report in October 2007. The 2005 Task Force report contained 31 recommendations for improving DoD’s acquisition workforce. The 31 initiatives were broken down into three categories: (1) What we can do immediately, (2) What we should start in the near term and (3) What we need legislative authority to do.

What We Can Do Immediately

1. Develop and Implement Comprehensive, Needs-based Human Resource Performance Plans for the Civilian Acquisition Workforce
2. Maximize Use of Existing Hiring Authorities
3. Maximize Use of Existing Authorities to Make Pay More Competitive
4. Expand Public and Private Sector Recruiting Efforts, and Make It Easier to Apply for DoD Acquisition Positions
5. Maximize Use of the Student Educational Employment Program (SEEP) to Recruit from Colleges and Other Sources
6. Provide Timely Certification Training
7. Provide More Career-Broadening Opportunities
8. Increase Use of Employee Incentive Programs
9. Ensure a Work-Friendly Environment

What We Should Start in the Near Term

10. Promote DoD’s Challenging Work and Rewarding Opportunities
11. Develop Acquisition Workforce Recruiting Programs
12. Establish a Scholarship Program for the Acquisition Community
13. Establish a Central DoD Acquisition Career Management Web Site
14. Develop a Functional Manager’s Recruiting, Hiring, and Retention Handbook
15. Reengineer the Hiring Process
16. Assess Competition on a Location-by-Location Basis
17. Develop a Mechanism for Acquisition Certification of Private Sector Accessions

18. Rehire Federal Annuitants Without Financial Offset
19. Establish Career Paths to Achieve Multifunctional Acquisition Professionals
20. Increase Civilian Leadership Developmental Opportunities
21. Assess the Effect of FERS on the DoD Workforce
22. Component Assessment of High-Grade Requirements
23. Improve Management of Personnel Lapse Rates
24. Conduct Entrance and Exit Surveys
25. Establish a Program to Share Best Practices within the Acquisition Workforce

What We Need Legislative Authority To Do

26. Convert Term Appointments to Permanent Appointments Non-Competitively
27. Establish a DoD/Industry Two-way Exchange Program
28. Encourage Job Mobility, Both Local and Geographic
29. Assess DoD Acquisition Workforce Personnel Management Authorities
30. Allow Employees to Buy Down the Early Retirement Penalty
31. Maximize Use of Return Home Visit Authority for Temporary Duty (TDY) Employees and Permit Spouse Travel As an Alternative. (DoD, 2000)

A legislative response to Acquisition 2005 Task Force final report came in Section 825 on the FY 2002 NDAA. This section required the Secretary of Defense to submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the extent of the implementation of the recommendations set forth in the Acquisition 2005 Task Force final report. The Secretary of Defense's report on implementation of the Acquisition Workforce 2005 Task Force recommendations was submitted in March as directed by Section 825. Fourteen of the recommendations were reported to have been already in implementation stage when the Task Force's report was published. Fourteen others were organized under four broader categories to be merged

into follow-on strategy. Three were not pursued. Table 6 shows status of recommendation as reported sorted by status, follow-on, and Task Force report number.

#	Recommendation	Status	Follow-on Strategy
1	Implement needs-based HR performance plans for acquisition civilians	In Implementation	
3	Maximize the use of existing authorities to make pay more competitive		
5	Maximize the use of the Student Educational Employment Program (SEEP)		
6	Provide timely certification training		
7	Provide more career-broadening opportunities		
8	Increase the use of employee incentive programs		
9	Ensure a work-friendly environment		
14	Develop a functional manager's recruiting, hiring, and retention handbook		
21	Assess the effect of FERS on the DoD workforce		
22	The components need to assess their high-grade requirements		
25	Establish a program to share best practices within the acquisition workforce		
26	Convert term appointments to permanent appointments non-competitively		
28	Encourage job mobility, both locally and geographically		
29	Assess DoD acquisition workforce personnel management authorities		
19	Establish career paths to achieve multifunctional acquisition professionals	Merged	Career Development
20	Increase civilian leadership developmental opportunities		
27	Establish a DoD/Industry two-way exchange program		Certification
17	Develop mechanism for acquisition certification of private-sector accessions		Hiring
2	Maximize the use of existing hiring authorities		
15	Reengineer the hiring process		
18	Rehire federal annuitants without financial offset		
23	Improve the management of personnel lapse rates		Marketing, Recruiting, & Retention
4	Expand public- and private-sector recruiting efforts		
10	Promote DoD's challenging work and rewarding opportunities		
11	Develop acquisition workforce recruiting programs		
13	Establish a central DoD acquisition career management website		
16	Assess competition on a location-by-location basis		
24	Conduct entrance and exit surveys		
12	Establish a scholarship program for the acquisition community	Not Pursued	
30	Allow employees to buy down the early retirement penalty		
31	Maximize return home visit authority for TDYs (spouse travel alternative)		

Source: DOD's Report to the Committees on Armed Services of the Senate and the House of Representatives on the Implementation of the Acquisition Workforce 2005 Task Force Recommendations

Table 6. Acquisition Workforce 2005 Task Force Recommendations Status.
From (DoD, 2000)

C. SECTION 820 OF THE FISCAL YEAR 2007 NDAA

The legislation discussed to this point establishes important underpinnings of legislation shaping the current Acquisition Workforce Improvement Strategy. The next NDAA topics will serve to answer the question posed at the beginning of this section,

“How does the Acquisition Workforce Improvement Strategy address key requirements of National Defense Authorization Act(s) (NDAA)?”

The next significant piece of legislation shaping DoDs Acquisition Workforce Improvement Strategy was part of the FY 2007 NDAA. Section 820 of this act, call for the Government to perform critical acquisition functions. Specifically, the act stated:

It shall be the goal of the Department of Defense and each of the military departments to ensure that, within five years after the date of the enactment of this Act, for each major defense acquisition program and each major automated information system program, each of the following positions is performed by a properly qualified member of the Armed Forces or full-time employee of the Department of Defense:

- a. Program manager
- b. Deputy program manager
- c. Chief engineer
- d. Systems engineer
- e. Cost estimator. (NDAA, 2007)

DoD’s Acquisition Workforce Improvement Strategy addresses the requirements of section 802 of the FY 2007 NDAA by implementing the following five key initiatives and adding two critical acquisition functions, Product Support Manager²² and Lead Program Contracting Officer.²³

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 constructed to place greater emphasis on a fully qualified workforce
5. Improving leadership development to enhance MDAP outcomes

²² Added by section 805 of the National Defense Authorization Act for Fiscal Year 2010.

²³ The Department also added the position of Lead Program Contracting Officer for MDAP/MAIS programs.

The first initiative is a growth strategy whereby DoD plans to grow its acquisition workforce by 20,000 through 2015. This plan seeks to replace some of the capability lost during the downsizing through the 1990s. The plan is comprised of a fifty-fifty mix of new hires and in-sourced personnel. This plan will help DoD ensure it has sufficient numbers of properly qualified acquisition workforce members available to perform critical acquisition functions defined in Section 820 of the 2007 NDAA. The hiring and in-sourcing 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 (DoD, 2010). The balancing of DoD civilian, military and contracted workforce is a major step in regaining skills lost during years of out-sourcing. Table 7 depicts DoD's actual growth between 2008 and 2009 and planned growth in acquisition career fields in order to meet goals set forth in Section 820 by September 30, 2011.

Defense Acquisition Workforce				Planned FY10		Planned FY11		TOTAL	Projected	% Increase
820 Categories	FY08 Count	FY09 Count	Increase	New Hires	In-Sourcing	New Hires	In-Sourcing	Growth	Size FY11	Increase
Program Mgt	12,781	13,422	5.00%	60	980	73	209	1,322	14,744	15.40%
Engineering	34,537	36,704	6.30%	75	868	166	566	1,675	38,379	11.10%
Business	7,085	7,262	2.50%	11	301	441	104	857	8,119	14.60%
Life Cycle Logistics	13,361	14,852	11.20%	92	224	62	232	610	15,462	15.70%
Contracting	25,680	27,655	7.70%	1043	191	852	55	2,141	29,796	16.00%
TOTAL	93,444	99,895	6.90%	1,281	2,564	1,594	1,166	6,605	106,500	14.00%

Source: Appendix 13, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg A13-2

Table 7. Section 820 of 2007 NDAA Related Growth from FY08 through FY11.
After (DoD, 2010)

The second initiative involved the December 8, 2008 re-issuing of DoD Instruction 5000.02, Operation of the Defense Acquisition System. The new instruction includes 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 (DoD, 2010).

The third initiative focuses on 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 (DoD, 2010). DoD's KLP policy intent is to increase attention to qualifications, tenure and succession planning for KLPs across the Department. The policy is a good tool for addressing Section 820 issues but cast a narrow net on leadership positions across DoD. For example, leadership positions in organization other than MDAPs and MAIS programs are not included in KLPs. Considering the fact that 2009 contract spending reached \$384 billion, and \$208 billion was for services, there is a need to include other leadership positions in the KLP policy. If DoD is to truly reform its acquisition workforce, qualifications and succession planning must extend beyond MDAPs and MAIS programs.

The fourth initiative involves reshaping the certification processes. DoD's plan recognizes that experience is a function of time. Time is a key element for developing quality employees and fully qualified workforce. DoD has tasked functional leaders of Business (Cost Estimating And Financial Management), Contracting, Information Technology, Life Cycle Logistics, Program Management, Production, Quality And Manufacturing, Systems Planning, Research, Development And Engineering and Test And Evaluation to review their current functional experience and training requirements. One example DoD list in their plan is the deployment of an expanded certification program that will increase the time required for certification from four (4) to eight (8) years by the functional leader for Engineering. Another example DoD list is the restructuring of the Business career field into two distinct career paths, one for Cost Estimating and one for Financial Management. A review of all functional area experience requirements for civilian and military certification is key to the quality of the future acquisition workforce. As DoD states in its plan, "experience is a function of time" and this time is critical to the seasoning of a skilled professional. Education

and training are the tools used during the seasoning period not the ends to justify certification. Current certifications requirements can be found at <http://icatalog.dau.mil/onlinecatalog/CareerLvl.aspx>.

The fifth initiative is investing in leadership development. Improving leadership performance and development of future acquisition leaders is a major component of this strategy (DoD, 2010). Competent and capable leadership sets the tone for organizations performance especially among the civilian workforce. DoD's military leadership programs are well established across the services and follow a logical progression through the ranks. In order to do the same for its civilian workforce, DoD has 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. This will allow those seeking the leadership tract to enhance their skills and document achievement of leadership training in their records. The following are examples of leadership and executive development training available to leaders and future leaders of DoD's acquisition workforce:

- 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.
- 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 challenges 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.

D. SECTION 851 AND 855 OF THE FISCAL YEAR 2008 NDAA

Section 851 of the FY 2008 NDAA required Secretary of Defense to include a section on defense acquisition workforce in the strategic human capital plan. In general, the update of the strategic human capital plan for 2008, and in each subsequent update, would include a separate section focused on the defense acquisition workforce for both military and civilian personnel. The act required the new section on the acquisition workforce to identify funding issues and any areas of need for the defense acquisition workforce.²⁴ As a whole, this DoD's Acquisition Workforce Improvement Strategy addresses the issues of section 851. However, according to a GAO report in February of 2009, DoD failed to include required acquisition workforce planning efforts in its 2008 human capital update.²⁵

Section 855 of the FY 2008 NDAA entitled "Federal Acquisition Workforce Improvements" required 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. In order to improve the acquisition workforce, DoD had to do an in-depth analysis of its current state. The DoD strategy to improve the quality of the acquisition workforce is supported by a comprehensive and evolving workforce analytic capability (DoD, 2010). To achieve a comprehensive and accurate understanding of the workforce, DoD analyzed the acquisition workforce by performing both horizontal and vertical analyses. Figure 4 depicts that out of the 13 acquisition career fields, eight were targeted for improvement, which represents 90 percent of the defense acquisition workforce.

²⁴Including— (1) gaps in the skills and competencies of the current or projected defense acquisition workforce; (2) changes to the types of skills needed in the current or projected defense acquisition workforce; (3) incentives to retain in the defense acquisition workforce qualified, experienced defense acquisition workforce personnel; and (4) incentives for attracting new, high-quality personnel to the defense acquisition workforce.

²⁵ GAO-09-235 p. 48.

Horizontal & Vertical View of Strategy & Assessment	Army	DoN	AF	DCMA	Other
DOD-Wide Workforce					
DOD-Wide Acquisition Workforce					
1. Program Management					
2. Contracting					
3. SPRDE (Sys Engr & Program Sys Engr)					
4. Test & Evaluation					
5. Life Cycle Logistics					
6. Production, Quality, & Manufacturing					
7. Business (Cost Est & Financial Mgt)					
8. Information Technology					
9. Science & Technology Management					
10. Facilities Engineering					
11. Purchasing					
12. Industrial/Contract Property Mgt					
13. Auditing					

Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-2

Figure 4. DoD's Horizontal and Vertical Workforce Analyses.
From (DoD, 2010).

DoD's strategy recognizes that workforce planning and decision-making requires accurate data and analysis tools. In order to establish a baseline, DoD enlisted the aid of the Rand Corporation, a nonprofit institution that helps improve policy and decision making through research and analysis, which compiled the following human capital fact sheet for FY 2009.²⁶

²⁶ The 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, by Gates, Susan M., Edward G. Keating, Adria D. Jewell, Lindsay Daugherty, Bryan Tysinger, Albert A. Robbert and Ralph Masi.)

Defense Acquisition Workforce (DAW)	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

Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-1

Figure 5. Human Capital Fact Sheet FY2009. From (DoD, 2010).

As discussed earlier, the composition of the acquisition workforce has caused the count to vary substantially over time. The data in the Human Capital Fact Sheet is calculated using FY2009 data generated from Office of Under Secretary of Defense (OUSD) for AT&L Human Capital Initiatives (HCI) AT&L Workforce Data Mart. Analysis of this data was done by the RAND Corporation using Defense Manpower Data Center (DMDC) data. Figure 5 gives the total number of the acquisition workforce in terms of size and composition, educational attainment, certification level in order to assess the overall health of the DoD acquisition workforce. Planning Consideration and other statistics data show workforce trends use to manage DoD's hiring and retention need. The Human Capital Fact Sheet is duplicated by service and functional area to track workforce by Services and Function. There still remains the question of who is counted.

Table 8 addresses this question as DoD breaks its acquisition workforce into 13 functional career fields. The data is taken from the FY2005 through FY2009 AT&L Workforce Data Mart using the DAWIA count methodology for military and civilian personnel. Now that the workforce has been quantified and defined, DoD plans to use its developing analytical capability to address the following issues:

1. Meeting the Growing Demand for Acquisition Training
2. Assessing Workforce Competencies
3. Recruitment and Retention
4. Succession planning

AT&L Workforce by Functional Career Field (Military + Civilian)	FY01 Count	FY05 Count	FY08 Count	FY09 Count	FY08 to FY09 Change (#)	FY08 to FY09 Change (%)
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%

Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-8

Table 8. FY2001-FY2009 Defense Acquisition Workforce Count.
From (DoD, 2010).

E. SECTION 834 OF THE FISCAL YEAR 2009 NDAA

Section 834 of the FY 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. According to

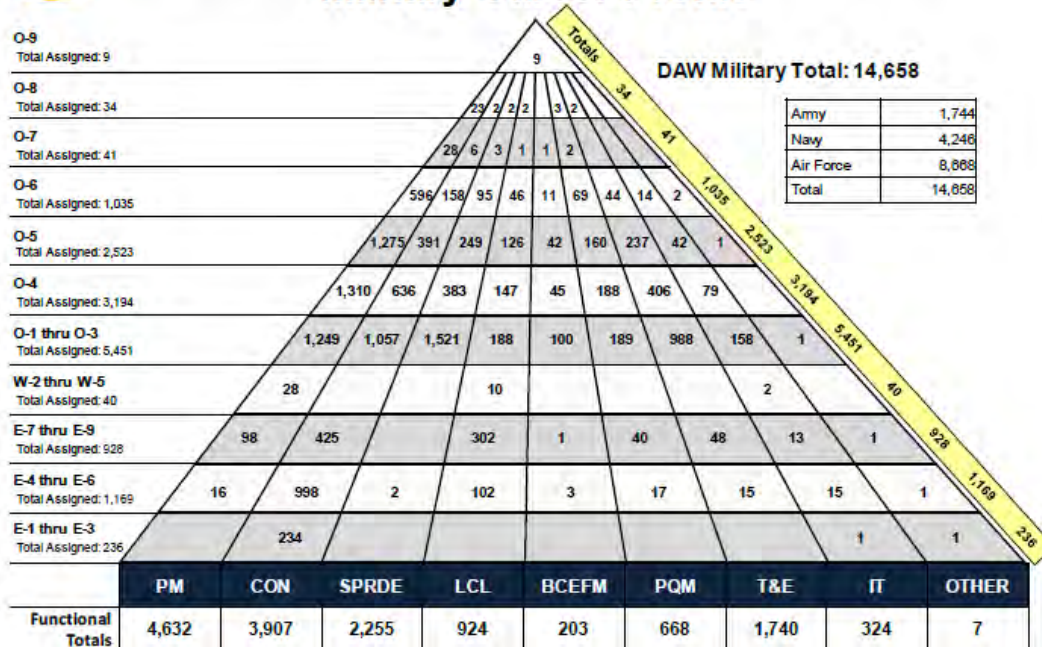
Section 834, the policies established and guidance issued pursuant to subsection (a) of the act shall ensure, at a minimum, the following:

1. A career path in the acquisition field that attracts the highest quality officers and enlisted personnel.
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.
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.

DoD reports in Appendix 14 of its strategy that as of September 30, 2009, there were 133,103 members in the Defense acquisition workforce; 14,658 (11 percent) were military. The military composition of the acquisition workforce for the Army, Navy and Air Force are as follows: 4 percent Army (1,744); 9 percent Navy (4,246); and 32 percent Air Force (8,668). Eighty-six percent of military members in the defense acquisition workforce are assigned to the following acquisition career areas: 32 percent Program Management; 27 percent Contracting; 15 percent SPRDE-Systems Engineering and 12 percent Test & Evaluation. The report suggests that many of the requirements of Section 834 are already being met. Figure 6 demonstrates that a clear line of progression and potential for advancement for military personnel in the defense acquisition workforce. (Each service organization has included in Appendix 14 of the strategic plan, their response for addressing requirements of Section 834.)



Defense Acquisition Workforce Military Career Profile



Source: Appendix 14, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg A14-2

Figure 6. Defense Acquisition Workforce Pyramid. From (DoD, 2010).

F. SECTION 301 OF THE WEAPONS SYSTEMS ACQUISITION REFORM ACT OF 2009

Section 301 of the Weapons Systems Acquisition Reform Act of 2009 entitled “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.” Appendix 15 of the Defense Acquisition Workforce Strategic Plan defines the multi-tiered and multi-dimensional recognition structure for the defense acquisition workforce. In light of all the negative press, DoD has engaged all organizations at all levels to comply with the requirements of the 2009

Weapons Systems Acquisition Reform Act for workforce recognition. The need to recognize superior performance is key to improving DoD's organizational climate. DoD recognizes that each employee should feel valued for their contributions and have an enhanced sense of ownership of the acquisition mission (DoD, 2010). The defense department strategy stresses its commitment to positive workforce environment based on employee engagement, mutual respect and strong leadership. DoD sees employee recognition as a critical component of workforce improvement and its strategy to attract, motivate, and retain high performing responsive employees. See Appendix 15 of the Defense Acquisition Workforce Strategic Plan for details of defense-wide award programs.

G. SUMMARY

While the historic impact of over 20 years of acquisition workforce legislation was not specifically addressed, the Department of Defense's Acquisition Workforce Improvement Strategy seeks to correct the imbalance caused by years of inefficient workforce management. DoD's current improvement strategy addresses most, if not all, of recent legislative concerns and historic legislative implementation miscues. The plan effectively attends to performance of critical acquisition functions concerns of Section 820 of FY 2007 NDAA by implementing the five key initiatives and adding two acquisition functions to critical functions list. While DoD failed to include required acquisition workforce planning efforts in its 2008 human capital update, as required by Section 851 of the FY 2008 NDAA, there is sufficient evidence in the strategic plan that DoD met the intent of the requirement. DoD comprehensive set of analytical tools gives it the necessary capability to address issues of section 855 of the FY 2008 NDAA for overall improvement of its acquisition workforce. The requirements of Section 834 of the FY 2009 NDAA was to establish a career path and other improvements for military personnel in the acquisition field. This requirement has been thoroughly developed and outlined in the plan. Finally, the requirement of Section 301 of the Weapons Systems Acquisition Reform Act of 2009 regarding recognition excellence is well established across DoD acquisition organizations. As with any strategic plan, it will take some time

to determine if DoD's Acquisition Workforce Improvement Strategy actually works. However, DoD's analytical approach to this problem shows a lot of promise.

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V. ACQUISITION WORKFORCE IMPROVEMENT ISSUES

A. RESEARCH QUESTION

What workforce issues does DoD's Acquisition Workforce Improvement Strategies address?

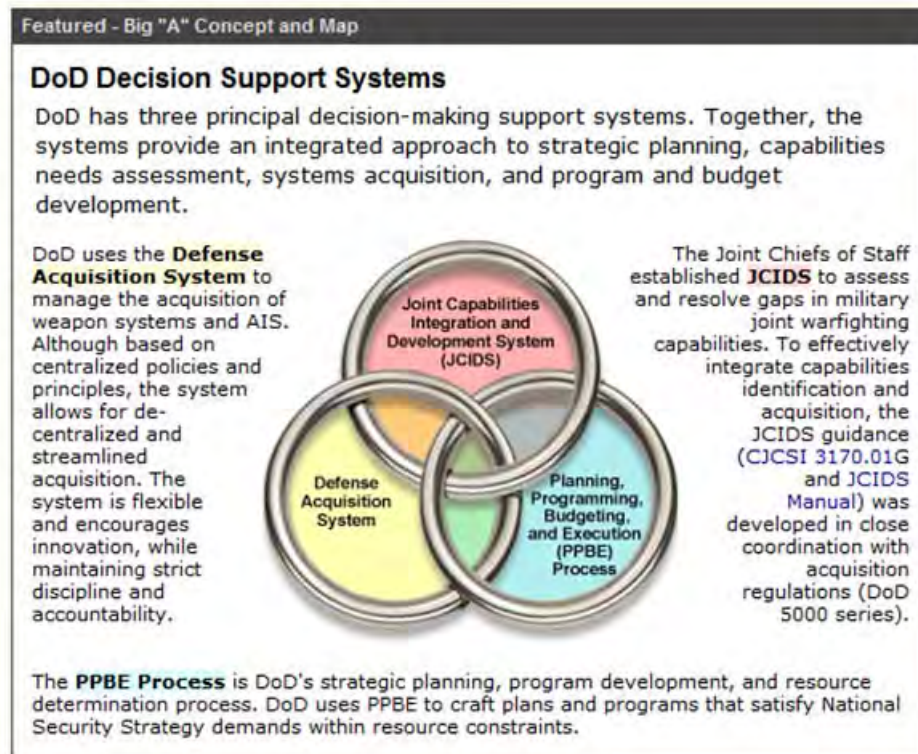
B. BACKGROUND

The quality of the acquisition workforce has been the topic of many reports on DoD acquisition processes. An article in the summer 2010 issue of the *Journal of Contract Management*, pointed to the decision to reduce the acquisition workforce in section 906(a) of the National Defense Authorization Act for Fiscal Year 1996 as the cause of many of DoD's acquisition workforce issues. The unintended consequences of these reductions have found DoD's acquisition workforce struggling to keep pace with the growing procurement budgets and increased mission requirements. In March of 2009, a memorandum from President Obama, communicated that the federal acquisition workforce should have the capacity and ability to develop, manage, and oversee acquisitions appropriately. In opening the 26 October 2009 Defense Acquisition Workforce Senior Steering Board, the Under Secretary of Defense for Acquisition, Technology and Logistics (AL&T) Ashton B. 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. (DoD, 2010)

The Secretary of Defense Acquisition Workforce Improvement Strategy represents the Department of Defense's efforts to improve workforce quality and regain control over its acquisition processes. Control that has shifted to contracted support do to out-sourcing during the 1990s. The importance of having a high quality, high-performing acquisition workforce cannot be overstated (DoD, 2010). The acquisition workforce is a

critical part of the DoD's decision support system. DoD's decision support system has three principal decision-making parts. The Big "A" Concept, as it is called, is depicted in Figure 7.



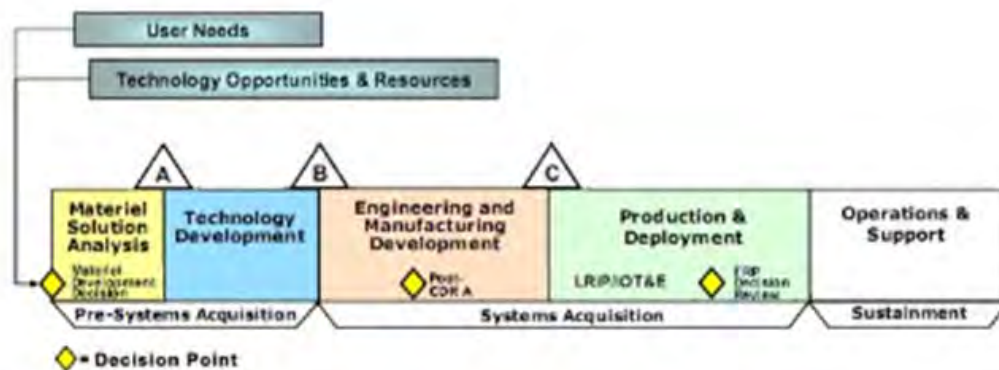
SOURCE: Defense Acquisition Portal, Acquisition Process at <https://dap.dau.mil/aphome/Pages/Default.aspx>

Figure 7. Big "A" Concept. From (The Defense Acquisition Portal, 2011a).

The Big "A" Concept for decision-making is directly impacted by the skills abilities of DoD's acquisition workforce. The Planning, Programming, Budgeting, and Execution (PPBE) process is how DoD "allocates its resources"; the Joint Capabilities Integration and Development System (JCIDS) plays a key role in identifying the capabilities required by the warfighters²⁷ and the defense acquisition system is the management process that guides all DoD acquisition programs. DoD's acquisition workforce plays a critical role in the decision making process. The management and

²⁷ To support the National Defense Strategy, the National Military Strategy, and the National Strategy for Homeland Defense.

balance of such a workforce should ensure that trained, skilled and experienced personnel are continually attracted and retained in sufficient numbers. The acquisition functions targeted for improvement in DoD's strategic plan are essential to the defense acquisition system. The Figure 8 is a graphical depiction of the decision making process for an acquisition program.



SOURCE: Defense Acquisition Portal, Acquisition Process at <https://dap.dau.mil/aphome/das/Pages/Default.aspx>

Figure 8. DoD 5000 Acquisition System. From (The Defense Acquisition Portal, 2011).

DoD Directive 5000.01 provides the policies and principles that govern the defense acquisition system and DoD Instruction 5000.02²⁸ establishes the management framework that implements these policies and principles. The framework provides an event-based process where acquisition programs proceed through a series of milestones associated with significant program phases. The process, by design, involves large contractor presence for technology development, engineering and manufacturing, production and deployment, and operations and support. Properly managing these contractors supporting this process is at the heart of DoD's Acquisition Workforce Improvement Strategy.

²⁸ Operation of the Defense Acquisition System.

C. JOB CATEGORY

Maintaining the proper skill mix across DoD Agencies, Services and Functional areas is an issue that directly impacts DoD's ability to manage its acquisition processes. Proper staffing requires the right size, right skill mix, and appropriate certification and experience levels to affect successful acquisition outcomes. The functional job category necessary to manage DoD acquisition processes encompass a wide range of skills and talent. Each functional area has its own education, experience and training requirement to meet the standard for certification in the Acquisition Logistics, and Logistics (AL&T) career field. The 13 career fields and 15 functional areas are depicted in Figure 9 followed by a concise description of each.²⁹



SOURCE: Defense Acquisition Portal, Acquisition Process at <https://dap.dau.mil/career/Pages/Default.aspx>

Figure 9. Acquisition Logistics, and Logistics (AL&T) career field.
From (The Defense Acquisition Portal, 2011b).

²⁹ Figure and descriptions are taken from the Defense Acquisition Portal.

1. Auditing

The mandatory education, experience, and training requirements for the Auditing career field apply to contract auditors. Persons in this career field perform contract auditing, accounting, and financial advisory services to DoD and other government agencies in negotiation, administration, and settlement of contracts and subcontracts. Duties include evaluating information about contractor economic assertions, comparing those assertions to established criteria, and reporting the results to interested third parties. Some reasons for audits include proposal submissions, incurred cost, compliance with the “Truth in Negotiations Act,” compliance with Cost Accounting Standards, contract terminations, claims for abnormal conditions, contractor financial condition, and contractor systems and operations.

2. Business, Cost Estimating, and Financial Management

This career field encompasses all aspects of business and financial management. It includes cost estimating and analysis, financial planning, formulating financial programs, and budgets, budget analysis and execution, and earned value management. As advisors to commanders, program executive officers, program managers, or other acquisition decision makers, members of this career field are responsible for business financial management of defense acquisition programs in direct support of the defense acquisition process.

3. Contracting

As business advisors, contracting specialists create effective, efficient, and proper business arrangements, have a strategic focus on acquisition, and leverage DoD spending to use taxpayers’ money prudently based upon customers’ needs. The Contracting career field includes the positions of contract negotiator, contract specialist, contract administrator, contract termination specialist, contract price and/or cost analyst, procuring contracting officer, administrative contracting officer, termination contracting officer, and procurement analyst. These individuals develop, manage, supervise, or perform procedures involving the procurement of supplies and services; construction, research, and development; acquisition planning; cost and price analysis; solicitation and selection

of sources; preparation, negotiation, and award of contracts through sealed bidding or negotiation procedures; all phases of contract administration; and termination or closeout of contracts.

4. Facilities Engineering

The Facilities Engineering career field encompasses a variety of professional individuals with diverse skills focused on the design, construction, and life cycle maintenance of military installations, facilities, civil works projects, airfields, roadways, and ocean facilities. It involves all facets of life cycle management from planning through disposal, including design, construction, environmental protection, base operations and support, housing, real estate, and real property maintenance. Additional duties include advising or assisting commanders and acting as, or advising, program managers and other officials as necessary in executing all aspects of their responsibilities for facility management and the mitigation/elimination of environmental impact in direct support of the defense acquisition process.

5. Industrial and Contract Property Management

This career field includes the industrial property management specialist, property administrator, industrial plant clearance specialist, plant clearance officer, and contract and industrial specialists (if assigned contract property management responsibilities). Individuals in this career field perform Government contract property oversight and surveillance of life-cycle processes and their commensurate outcomes for Government-owned property in the possession of contractors and, in some instances, Government-owned contractor-operated plants. This includes developing policies and procedures for contract property; providing guidance, counsel, and direction to Government and contractor managers and technicians relating to regulatory and contractual requirements for managing Government property; participating in pre-award surveys and post-award reviews; reviewing contracts assigned for property administration; evaluating a contractor's property management system; and developing and applying property systems analysis programs to assess the effectiveness of contractors' Government property management systems.

6. Information Technology

This career field includes computer scientists, information technology management specialists, computer engineers, telecommunications managers, etc., who directly support the acquisition of information technology. This may include hardware, software, or firmware products used to create, record, produce, store, retrieve, process, transmit, disseminate, present, or display data or information. The employee identifies requirements; writes and/or reviews specifications; identifies costs; obtains resources (manpower, funding, and training); supports portfolio management, information assurance, and IT-architecture-related activities; and tests, evaluates, plans, obtains, and manages life cycle development and support (operations, maintenance, and replacement).

7. Logistics

The Life Cycle Logistics career field includes professionals responsible for planning, development, implementation, and management of an effective and affordable weapons, materiel, or information systems support strategies. Life cycle logisticians perform a principal joint and/or Component logistics role during the acquisition and operational phases of the system life cycle to: (1) ensure product support strategies meet the program goals for operational effectiveness and readiness; (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 initiatives as the preferred approach to product support. Life cycle logisticians ensure the integration of all support elements to maximize deployability, supportability, and mobility of the system throughout the program life cycle. They can work directly in a program management office, in support of the program manager, or in other supporting logistics activity offices.

8. Production, Quality, and Manufacturing

Acquisition-related manufacturing and production duties vary greatly in managerial, administrative, and technical content; but they usually involve program management or monitoring of the manufacturing and production efforts of contractors.

The quality assurance specialist manages quality assurance activities to establish essential quality standards and controls. This person also develops and executes plans that focus on 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.

9. Program Management

Acquisition professionals in the Program Management career field are concerned with all of the functions of a Program Management Office (PMO) or a Program Executive Office (PEO). Program management professionals serve in a wide range of PMO and PEO positions, including program integrators and analysts, program managers, PEOs, 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 tailor application of the DoD 5000 Series regulations; and to ensure that high-quality, affordable, supportable, and effective defense systems are delivered to the warfighter as quickly as possible

10. Purchasing

Individuals in the Purchasing career field are typically purchasing agents or supervisory purchasing agents. This function requires the individuals to purchase, rent, or lease supplies, services, and equipment through either simplified acquisition procedures or placement of orders against pre-established contractual instruments. The primary objective of their work is the rapid delivery of goods and services in direct support of operational requirements. It requires knowledge of applicable laws, policies, and regulations and of commercial supply sources and common business practices for roles, prices, discounts, deliveries, stocks, and shipments.

11. Requirements Management

A Requirements Manager is a military member or DoD civilian charged with developing, assessing, validating, and prioritizing requirements and associated requirements products. The Requirements Manager is the warfighter's representative to all of defense acquisition—the combination of the Defense Acquisition System (DAS), the Joint Capabilities Integration Development System (JCIDS), and the Planning, Programming, Budgeting, and Execution (PPBE) system. The most effective Requirements Managers are those men and women who have recently had their boots on the ground, or in the salt water, or on the tarmac. The challenge is to communicate warfighter's needs to Program Managers and to Program Offices.

12. Program Systems Engineering

An Acquisition Program Systems Engineer demonstrates how systems engineering technical and technical management processes apply to acquisition programs; interacts with program IPTs regarding the proper application of systems engineering processes; and develops systems models and work breakdown structures; uses top-down design and bottom-up product realization.

13. Science and Technology Management

Science and Technology (S&T) managers are typically scientists and engineers who manage basic research, applied research, and/or advanced technology development activities. They may also be involved with direct support to acquisition program managers. Their primary duties include developing program plans for S&T projects, developing budgets for assigned projects; and acquiring the services of expert scientists, engineers, and technical support personnel to perform S&T work for DoD. Additional primary duties involve overseeing in-house research or design and external research or design efforts performed by universities, industry, or other Federal Government organizations; and providing matrix support to program managers or other DoD activities. These duties also include conducting evaluations of S&T products to determine their effectiveness, including conducting Technology Readiness Assessments; interfacing

with the technology customer to expedite the transition of technology to the user; and developing Technology Transition Agreements.

14. Systems Engineering

Typical duties of personnel in this career path include planning, organizing, monitoring, managing, overseeing, and/or performing research and engineering activities relating to the design, development, fabrication, installation, modification, sustainment, or analysis of systems or systems components. Scientists and engineers supporting science and technology and acquisition programs, projects, or activities usually accomplish these duties.

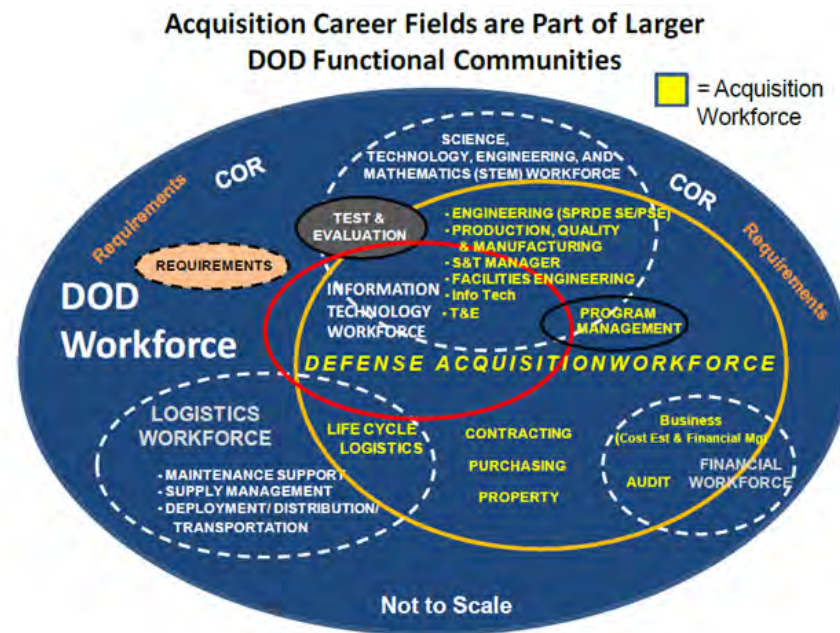
15. Test and Evaluation

Individuals who work in the T&E career field are predominantly T&E team members; T&E leads for programs; Service, Agency, and Facility T&E managers, engineers, scientists, operations research analysts, system analysts, computer scientists; and other degree-holding technical personnel who plan, perform, and manage T&E tasks in support of acquisition. Individuals in T&E positions are subject matter experts who will plan, monitor, manage, and conduct T&E of prototype, new, fielded, or modified C4ISR systems (C4ISR includes the multitude of IT systems participating in System of Systems (SoS), Family of Systems (FoS), and net-centric services) and weapon or automated information systems; equipment or materiel. They analyze, assess, and evaluate test data and results and prepare assessments of system performance and reports of T&E findings.

DoD has conducted comprehensive analysis on its acquisition workforce. The department-wide horizontal & vertical examination of the acquisition workforce depicted in Figure 2 targeted eight out of 13 jobs in the acquisition career fields for improvement. It is interesting to note that all eight support the management framework for acquisition programs. The career fields targeted for improvement also represent 90 percent of the defense acquisition workforce. (DoD, 2010). Career fields in gray shaded areas in Figure 2 are targeted for improvement in DoD's Acquisition Workforce Improvement Strategy.

D. ACQUISITION WORKFORCE SIZE

The acquisition workforce is part of a much larger logistics community comprised of approximately 615,000 military and civilian members. 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 10) (DoD, 2010).

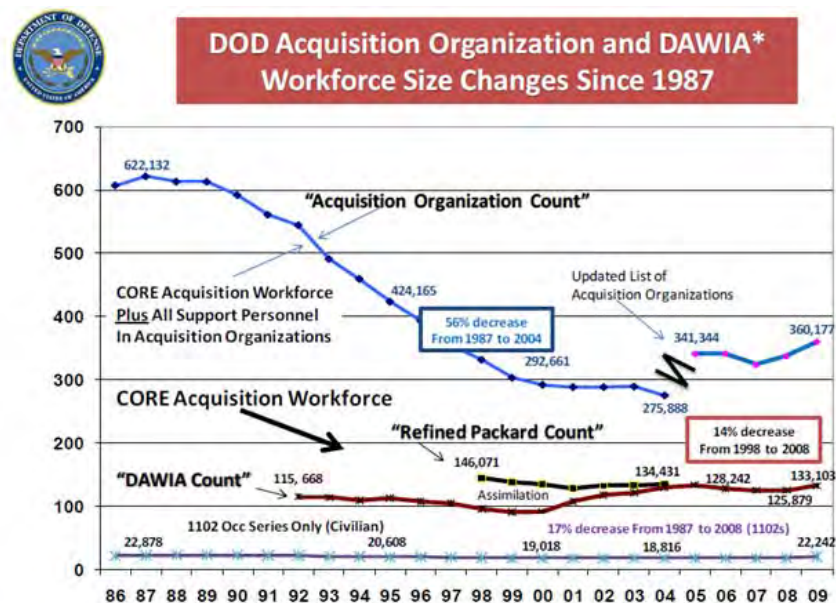


Source: Section II, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-6

Figure 10. DoD Functional Communities. From (DoD, 2010).

The right size of the acquisition workforce is a major concern for DoD and one of its key indicators of capacity and capability. Who is included in the count and how they are tracked, are key components of DoD workforce strategy. At the end of 2009, the acquisition workforce was about 37 percent of DoD's acquisition organizations or 133,103 out of 360,177. The current numbers in the core acquisition workforce were compiled using the "DAWIA Count" which, through a process of assimilation, merged with the "Refined Packard Count" in 1989. Since then, the DAWIA count has been the

only count used. The DAWIA count tracks the number incumbent acquisition positions DoD-wide. The Defense Acquisition Workforce Improvement Strategy intends to increase the workforce by approximately 20,000 in order to rebalance the organic acquisition workforce. This will allow DoD to better address issues with inherently governmental and other critical functions. Figure 11 depicts the change in the workforce size since 1987. It is interesting to note that the 1102 series (Contracting) has been flat throughout this period while in the past ten years alone, DoD's contract spending has nearly doubled.³⁰ The strategic acquisition workforce plan employs a comprehensive analytical capability designed to address this trend and others that affect the acquisition workforce.



Source: Section II, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-7

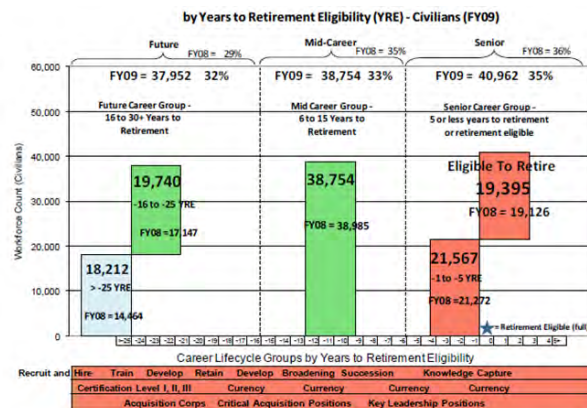
Figure 11. Acquisition Workforce Size Change Since 1987. From (DoD, 2010).

³⁰ 2000 to 2010 DD350 and FPDS analysis by the Center for Strategic & International Studies.

E. CAPABILITY GAP

DoD has recognized the capability gaps created by years of decline in its acquisition workforce, and lack of DoD-wide strategic workforce planning and growth in acquisition spending. DoD now views projected workforce growth and management as a function of the force planning process. This process 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 (DoD, 2010). Growth plans strengthen program management, systems engineering, contracting, cost estimating, logistics, and other acquisition functions. It is hoped that the growth initiatives will directly address and improve DoD's contract development and oversight problems.

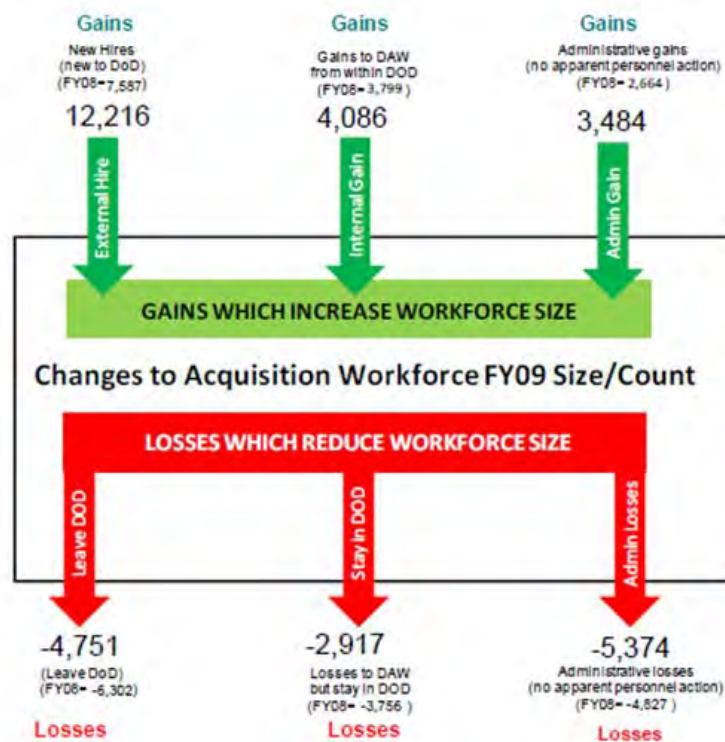
The second indicator of DoD's acquisition workforce's capacity and capability is its composition. With growth already in process, hiring for normal losses and actions to fill recurring vacancies are critical factors in DoD's total hiring and retention plans. The composition element of DoD's analysis includes both vertical and horizontal analysis across career fields, components and defense acquisition workforce lifecycle. Defense acquisition Workforce Lifecycle Model (WLM) for 2009 depicts workforce by "Future," "Mid-Career," and "Senior" groups as it relates to retirement eligibility (see Figure 12.) This gives DoD the ability to track retirement and trends as part of the workforce-hiring forecast.



Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-13

Figure 12. Workforce Lifecycle Model (WLM). From (DoD, 2010).

DoD also tracks Gains and Losses by External to DoD, Internal to DoD, and Administrative adjustments (for example, position changes or functional area re-designations) as part of its hiring projection capability. Acquisition workforce gains and losses are analyzed to assess workforce changes in order to make informed hiring and retention planning and assessment of progress. DoD counts a gain as an individual who is recorded as an incumbent in 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 (loss is the reverse). Figure 13 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.



Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-15

Figure 13. FY2009 Gains and Losses Defense Acquisition Workforce (DAW) (Civilian). From (DoD, 2010).

Based on the current growth strategy, DoD's analysis and modeling suggests that they can achieve targeted success by hiring approximately 15,000 in FY 2010 and 12,500

in FY2011. While DoD's update to Congress shows hiring targets are being met, solely meeting hiring targets does not mean successful acquisition workforce improvement. Competency is also key to DoD's acquisition workforce improvement. DoD's acquisition competency initiative facilitates defining critical skills and competencies that are available in the workforce and will be needed in the future (DoD, 2010). DoD hopes to ensure that updated and validated competency models are available for various workforce applications. Competency assessments, human capital planning and training improvements are key objectives of DoD's competency initiatives. DoD's measurement of competency is done by identifying defense acquisition workforce position(s) DAWIA Level certification requirements for both component and career field. (See Tables 9 and 10.) Next, DoD tracks certifications met by component and career field. (See Figures 14 and 15.)

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

Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-24

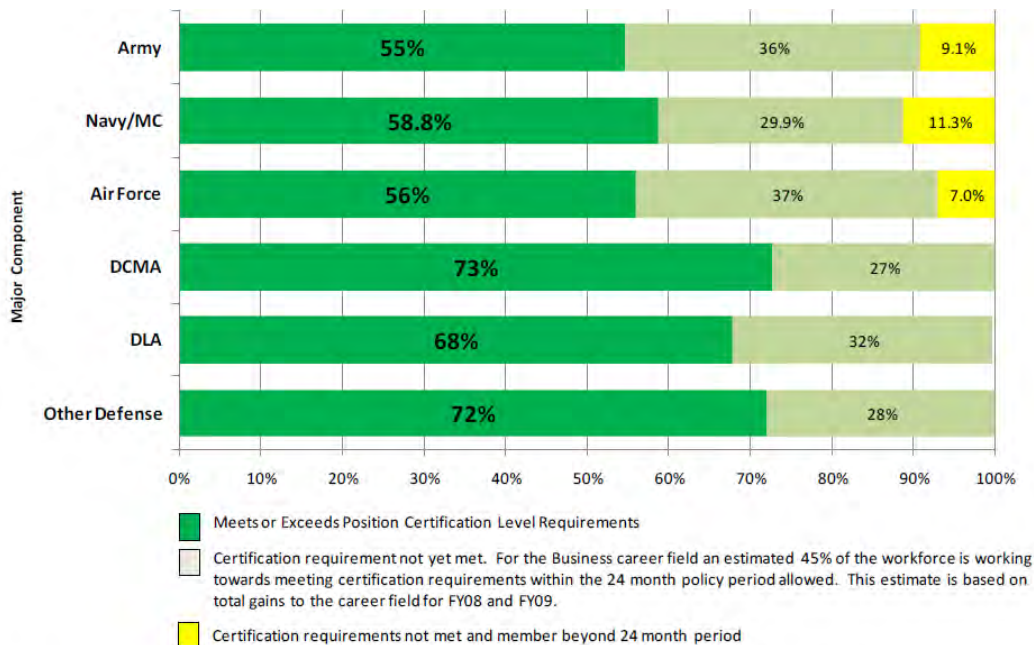
Table 9. FY 2009 DAWIA Position Certification Requirements by Component.
From (DoD, 2010)

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

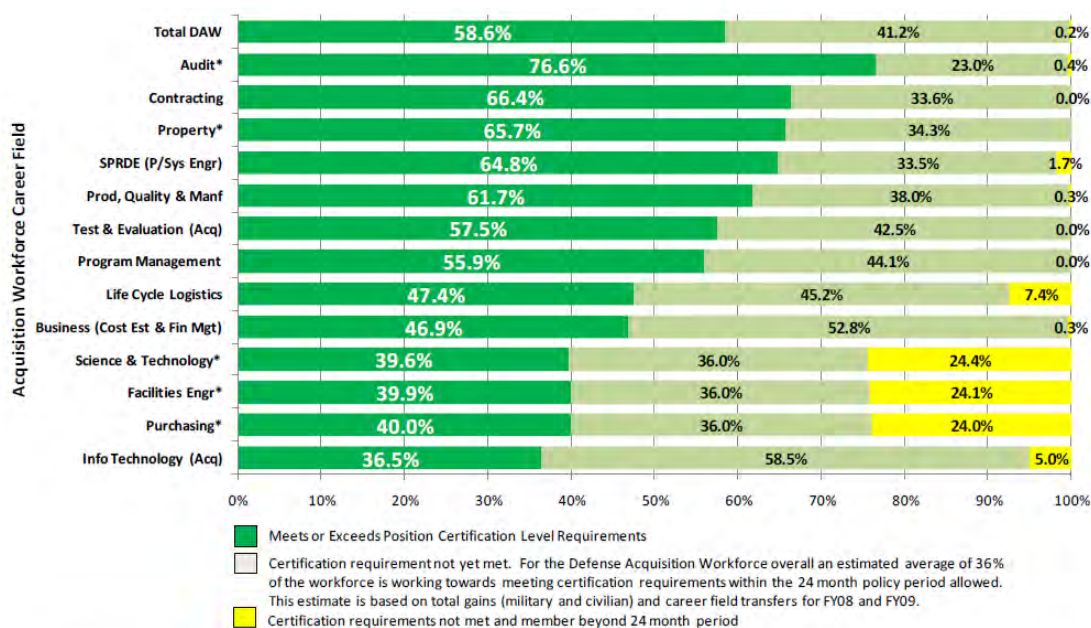
Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-25

Table 10. FY 2009 DAWIA Position Certification Requirements by Career Field.
From (DoD, 2010)



Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-27

Figure 14. FY2009 Certification Level "Meet/Exceed" Rates By Major Component.
From (DoD, 2020)



Source: Section 2, DOD Strategic Human Capital Plan Update, The Defense Acquisition Workforce, April 2010 Pg 2-26

Figure 15. FY2009 Certification Level “Meet/Exceed” Rates by Career Field.
From (DoD, 2010)

Armed with this information DoD can track and make informed hiring and training decisions. The big unknown in DoD capability assessment is how big the acquisition workforce needs to be in order to achieve improvement in its acquisition process. By now, there should be means of allocating full time equivalent (FTE) time to contract actions (e.g., purchase order, delivery order, formal contract). For example, if an FTE productive hours in year were 1920 (2080 hours – 80 vacation and 80 holiday hours), and it takes on the average five work hours to process (award to close out) one purchase order, one may conclude that one FTE can process 384 purchase orders in one year—a ratio of 1:384. The determination of standard grades and certifications for the FTE may be challenging, but we should have the expertise to do so. The same should also apply to dollar amounts and complexity. Adjustment factors could even be applied for overtime, compensatory time and possibly an allowance can be made for sick leave. However, ultimately we would need to be able to plan and reasonably estimate our needs by types of requirement and estimated dollar amounts for any given period, and

successfully correlate that to FTEs. If that is accomplished, we could someday use that as a basis for estimating our acquisition workforce needs for “variant periods of time”. The question of right-sizing the acquisition workforce is unlikely to be answered until the workforce can be stabilized. Effort thus far has established a firm baseline for tracking progress outlined in the current strategy. As with any strategic plan, updates and revisions are ongoing as DoD strives to decrease the acquisition workforce capability gap.

F. HIRING AND GROWTH

In December of 2008, a joint memorandum signed by the Under Secretary of Defense for Acquisition, Technology, and Logistics, John J. Young Jr. and the Under Secretary of Defense for Personnel and Readiness, David S. C. Chu, delegated authority and responsibility for the use of Expedited Hiring Authority (EHA) to the secretary of military departments and directors of DoD agencies. This authority allowed DoD to appoint highly qualified individuals to fill shortage category positions in the acquisition career fields in accordance with Subsection 1705(h) of Title 10, United States Code (U.S.C.). The joint memorandum identified the following 12 career fields for use of the EHA:

1. Auditing
2. Business, cost estimating, and financial management
3. Contracting
4. Facilities engineering
5. Information technology
6. Life cycle logistics
7. Production, quality, and manufacturing
8. Program management
9. Quality control and assurance
10. Science and technology management

11. Systems planning, research, development, engineering, and testing
12. Test and evaluation

In 2009, the new Under Secretary of Defense for Acquisition Logistics and Technology, Ashton B. Carter, reported that DoD's hiring initiatives, sparked by his predecessor, were on track and the acquisition workforce will grow from approximately 127,000 to 147,000 by 2015 (DoD, 2010). The goal is to increase the acquisition workforce to a level of beyond the approximately 146,000 recorded for FY 1998. With this goal in mind, the verbiage related to the acquisition workforce in DoD's FY 2012 budget request reinforces the department's commitment to strengthening the acquisition workforce. While the budget states that DoD plans to hold the civilian workforce at FY 2010 levels, it excludes the 10,000 new acquisition workforce members outlined in improvement strategy. This action may impact continuing conversion of contractor filled positions to new DoD civilians. However, DoD vows to continue ensuring that inherently governmental functions are performed by career federal employees.

G. FUNDING IMPROVEMENTS

DoD's acquisition workforce improvement is supported by Congress and the President. Congress provided funding in FY 2008 NDAA for DoD's recent recruiting, training, development, recognition and retention activities. The Defense Acquisition Workforce Development Fund (DAWDF)³¹ in Section 852 of the FY 2008 NDAA provided funding to ensure that the acquisition workforce had the capacity³² to properly perform its mission. November of 2008, Senators Levin and McCain's joint letter to Secretary of Defense, urged the use of this fund for significant acquisition workforce growth. In addition, President Obama endorsed the growth initiative of the acquisition workforce in a memorandum to Federal Agencies in March 2009. The President supported growth within the acquisition workforce to ensure the government had capacity to properly develop and manage its acquisitions.

³¹ 10 U.S.C. 1705(h).

³² Both personnel and skills.

The FY 2012 Budget Estimates for DAWDF³³ operation and maintenance supports efforts to restore the organic defense acquisition workforce. Funding initiatives are broken down into three categories: 1) recruiting and hiring, 2) training and development, and 3) recognition and retention. Funds available to the DAWDF include appropriated funds and funds sourced from other appropriations, based on a percent of expenditures for contract services. DAWDF allocations have enabled increased hiring by 4,883 personnel since inception of the Fund, with 40 percent of those accessions in the Contracting career field and approximately 20 percent in the System Planning, Research, Development and Engineering career field.

DoD's research suggests that approximately 16 percent of acquisition workforce civilians are eligible for full retirement and 18 percent will become eligible in the next five years. Over the next ten years, approximately 50 percent will be eligible to retire. DoD also used DAWDF funds to leverage existing acquisition intern programs and to develop new robust acquisition intern, journeymen, and Highly Qualified Expert (HQE) programs. In addition, DoD has expanded the current Student Career Experience Program (SCEP) participant pool, using the program as a pipeline from which to populate acquisition intern programs and a vehicle through which to increase diversity within the defense acquisition workforce (OUSD(C), 2011).

The 2012 budget submission states, that the defense acquisition workforce has realized a significant increase of 2,772 personnel in FY 2010 with 1,602 interns, 1,137 journeymen, and 33 highly qualified experts. In addition to this, DoD reports that in certain locations with hard-to-fill positions, DAWDF has funded 834 recruiting bonuses. DoD Components have also conducted numerous outreach efforts through job fairs and university visits with 142,035 contacts and attendees (OUSD(C), 2011). Actual DAWDF used by DoD in FY 2010 for recruiting and hiring was \$255 million with \$601 million estimated for FY 2011 and \$587 million for FY 2012.

Budget submission for FY 2012 also states that components have consistently signaled an annual demand for acquisition training that exceeds the Defense Acquisition

³³ Appropriated funds only.

University's (DAU's) current capacity. DoD reports that, approximately 10,000 classroom and 25,000 online training seats per year have been added to DAU's annual training capacity as a result of DAWDF. DAU training enhancement and capacity expansion programs help to better serve the Defense acquisition community's growing training needs. The military departments and defense agencies also funded targeted acquisition and leadership training to better prepare their workforce for the future; enhanced information technology capabilities, enabling the department to quickly analyze, report and react to rapidly changing acquisition career management environments and requirements; and expanded functional skill set development opportunities (OUSD(C), 2011). DoD believes that its strategy of hiring Subject Matter Experts (SMEs) for DAU faculty has significantly increased training capacity. Hiring SMEs allowed for significant increases in course offerings throughout the United States and strategically selected overseas sites. DAWDF funds reportedly allowed DoD to: expand training capacity and classroom graduates by 29,013; support 74,577 web-based graduates through 1,284 course offerings; added 30 new classrooms and six were completely outfitted with 21st century computer technology and equipment; increase number of web-based Continuous Learning Modules from 236 to 245 with 624,859 completions, an increase of 26 percent over FY09 and fund a 4-week contracting course (CON090) which offered 33 classes producing 837 graduates. Actual DAWDF used by DoD in FY 2010 training and development was \$140 million with \$145 million estimated for FY 2011 and \$160 million for FY 2012

The FY 2012 budget also showed support for the DoD's implementation of 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 in major acquisition programs. The strategy targets individuals such as program managers, engineers, senior contracting officers, life cycle logisticians, cost estimators, and other personnel possessing special expertise that is hard to find or retain. To promote retention, plans will invest in retention incentives³⁴ and recognition incentives. The FY 2012 budget

³⁴ Student loan repayment, tuition assistance, retention bonuses.

submission reported that DAWDF has funded retention and recognition efforts for key acquisition workforce employees with “mission critical” skills, competencies, and certifications. According to FY 2012 budget submission, DAWDF has funded: 2,759 tuition assistance incentives; 1,702 student loan repayments; 13 First Duty Station Moves; 162 Permanent Change of Station Moves; two Advanced Academic Degrees, 1,031 courses towards advanced academic degrees; 972 Career Broadening Programs; 89 performance awards; 53 other miscellaneous retention incentives; and 1,593 other miscellaneous recognition incentives (OUSD(C), 2011). Actual DAWDF used by DoD in FY 2010 recognition and retention was \$31 million with \$51 million estimated for FY 2011 and \$55 million for FY 2012

H. SUMMARY

To answer the basic research question, *What workforce issues do DoD’s Acquisition Workforce Improvement Strategies address?*, look back at the words of the Under Secretary of Defense for Acquisition Logistics and Technology, Ashton B. Carter, at the beginning of this section: “*Secretary Gates intends to improve the acquisition process and rebuild and reshape the acquisition workforce.—We must grow and reshape the workforce to meet current needs with special emphasis and focus on improving workforce quality.*” In order to grow the workforce to meet current needs and improve workforce quality, DoD used a comprehensive set of analytical tools to address the following three broad issues: 1) recruiting and hiring, 2) training and development, and 3) recognition and retention. DoD’s Acquisition Workforce Improvement Strategies also addressed the issue of who will be counted as part of acquisition workforce by identifying job categories DoD-wide. The current size is being tracked to meet hiring, recruiting and training goals outlined in the plan.

DoD’s Acquisition Workforce Improvement Strategy benefits from the support of the president and congressional leadership from both sides of the aisle, which is unusual in today’s political climate. Even though politics divides the political parties on many other issues, the three broad issues addressed in the strategy is budgeted for and funded by the DAWDF. Looking at the acquisition workforce growth numbers presented in the

plan, hiring and retention goals seem to be on track to grow the workforce to 147,000 by FY2015. However, the question of right sizing remains unknown. DoD's plan to grow the acquisition workforce to levels above the approximately 146,000 recorded in 1998 does not specifically address why or how this growth will solve the issue of proper workforce size relative to increased workload. In addition, the goal of improving workforce quality and improving acquisition processes will require further study and time to develop and track outcome from strategic changes.

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VI. CONCLUSIONS AND RECOMMENDATIONS

A. OVERVIEW

This Joint Applied Project research paper examines the DoD's FY 2010 Acquisition Workforce Improvement Strategy. The topics discussed here outlined the developments that generated the need for DoD's Acquisition Workforce Improvement Strategy. The strategy represents DoD's efforts to improve its acquisition workforce's ability to manage and oversee over \$350 billion in annual contracts actions. The implementation of DoD strategy meets the letter of higher-level directive intention; however, the true effectiveness of DoD's acquisition workforce improvement will take some time to measure. The public posting of DoD's Acquisition Workforce Improvement Strategy socializes the intent throughout the workforce in order to increase the awareness of initiatives and true state of the acquisition workforce.

While spending and workforce trends sparked the current need for workforce improvement, this is not a new problem. However, DoD's approach to solving the issue can be seen as new and innovative. Furthermore, the president's intent to strengthen the acquisition workforce and corresponding support from both parties in Congress gives DoD improvement strategy a better chance of meeting its goal. The understanding of the department's workforce issues by the executive and legislative branches of government is vital to DoD achieving significantly improvement in the quality and readiness of the defense acquisition workforce. DoD's holistic approach to improving the greater logistics community, virtually accounted for every aspect of the defense acquisition process. One would conclude that evaluating workforce vs. spending trends, procurement profile analysis and human capital planning are likely to pay big workforce improvement dividends.

The goals of DoD Workforce Improvement Strategy are to increase the size of the work force while at the same time improving quality. Strategic human capital planning, talent management, training and development that is supported by an improved workforce management infrastructure are the lynch pins of this strategy. Successful

acquisition outcomes are a direct result of having people with the right skills supporting the acquisition function. DoD's plan supports the long-term maintenance of talented individuals performing critical planning activities for pre and post award contract development. Targeted training and development supports continual improvement of the acquisition workforce across agencies, services and functional areas. At the same time, DoD's improved management infrastructure facilitates standard reporting and policy implementation across services, agency and functional areas.

While the historic impact of over 20 years of acquisition workforce legislation is not addressed specifically, the Department of Defense's Acquisition Workforce Improvement Strategy seeks to correct the imbalance caused by years of inefficient workforce management. The plan effectively attends to performance of critical acquisition functions concerns of Section 820 of FY 2007 NDAA by implementing the five key initiatives and adding two acquisition functions to critical functions list. While DoD failed to include required acquisition workforce planning efforts in its 2008 human capital update, as required by Section 851 of the FY 2008 NDAA, DoD's strategic plan meets the intent of the requirement.

DoD comprehensive set of analytical tools gives it the necessary capability to address issues of section 855 of the FY 2008 NDAA for overall improvement of its acquisition workforce. The requirements of Section 834 of the FY 2009 NDAA for a career path and other improvements for military personnel in the acquisition field have been thoroughly developed in the plan. Recognition of excellence required by Section 301 of the Weapons Systems Acquisition Reform Act of 2009 is well established across DoD. Although it will take some time to determine if DoD's Acquisition Workforce Improvement Strategy actually works, DoD's analytical approach to this problem shows a lot of promise.

DoD's strategy does a good job of addressing how it intends to grow and reshape the acquisition workforce in order to improve acquisition processes. The three broad issues addressed in the strategy are budgeted for and funded by the DAWDF. DoD uses a comprehensive set of analytical tools to addresses the issues of recruiting and hiring; training and development; and recognition and retention. DoD's Acquisition Workforce

Improvement Strategies nails down the issue of who will be counted as part of acquisition workforce by identifying job categories DoD-wide. The current size is being tracked to meet hiring, recruiting and training goals outlined in the plan. DoD has already begun to realize growth from its hiring initiatives; however, the quest to right-size the work force in terms of numbers needed to execute mission is left undefined.

Nevertheless, DoD's Acquisition Workforce Improvement Strategy's initiatives hold great promise for reaching its goals. The plan is not static: it is updated annually to account for changes in the environment. This allows leadership to innovate where necessary to meet goals. The fact that the plan benefits from the support of the President and Congressional leadership from both sides gives it a better chance to succeed.

DoD's assignment of management responsibility across functional areas, services and agencies creates a vertical and horizontal path for reporting and implementation of workforce policy. Managing the acquisition workforce has taken on the characteristics of an enterprise level system of management. Analytical tools used to track and maintain the workforce levels and skill sets are designed to support management functions. Furthermore, increased transparency allows the entire workforce to see how healthy or not so healthy the work force truly is.

With hiring and retention goals seemingly on track, the question of right sizing remains unknown. In addition, the goal of improving workforce quality and improving acquisition processes will require time to occur, then measure and evaluate. It will then take further study to see how the plan impacts overall acquisition quality.

B. RESEARCH QUESTION 1 AND CONCLUSION

What development generated the need for DoD's Workforce Improvement Strategy?

Spending and workforce trends, changes in acquisition profile activities and the need for better human capital management prompted DoD to take a hard look at its acquisition workforce and the root cause of its acquisition problems. Poor human capital management tops the list of issues causing DoD's acquisition management capability

gap. The analysis of the acquisition workforce documented in the department's strategic plan has set the stage for what could be the missing link in acquisition improvement. That link is a deliberate human capital management process. In addition to strategic human capital management, political support from the President and Congress gives the strategy the necessary backing to effect significant improvement in the quality and readiness of the defense acquisition workforce. The baseline drawn in the department's strategic plan gives the department a solid reference from which to measure improvements.

In conclusion, DoD's holistic approach to improving the greater logistics community, virtually accounts for all personnel performing in every aspect of the defense acquisition process. Current analysis of workforce versus spending trends, procurement profile analysis, and human capital planning are likely to pay big acquisition improvement dividends. This analysis links workload trends to human capital requirements for planning current and future staffing needs. DoD realizes that the issues that spawned the need for improvements did not happen overnight and will likely take time to be reversed. DoD's current plans implements a long-term growth and management strategy designed to grow and maintain a 147,000 personnel strong acquisition workforce for the FY2015 target level and beyond. In addition, DoD's set of analytical tools for tracking workforce trends will allow the department to observe, measure, evaluate and manage its workforce's strength and skill set.

C. RESEARCH QUESTION 2 AND CONCLUSION

What are the Goals of DoD Workforce Improvement Strategy?

Revitalization of the acquisition workforce is the main Goal of DoD's Acquisition Workforce Improvement Strategy. The revitalization includes the right-sizing, reshaping, and rebalancing the workforce responsible for managing the acquisition processes. This goal is achieved through strategic human capital planning, talent management, training and development that are supported by an improved workforce management infrastructure. DoD understands that successful acquisition outcomes are a direct result of having people with the right skills supporting the acquisition functions. This understanding is expressed throughout DoD's plan. Maintaining talented individuals

performing critical planning activities in the acquisition process is a key part of DoD's strategy. In addition, targeted training and development also supports critical functions of the acquisition workforce. An improved vertical and horizontal management infrastructure provides input and support the of the Defense Secretary's workforce improvement initiatives.

In conclusion, the implementation of DoD's strategic plan has already begun to reshape the department's acquisition workforce. The revitalization of the acquisition workforce has become a DoD Enterprise issue with focus one size, skills mix and balance. Sourcing the personnel necessary to staff DoD acquisition workforce is not an easy task. To meet this challenge, DoD has employed the use of interns, re-hired annuitants (subject matter experts) and in-sourcing strategies to grow it acquisition workforce. Coupled with targeted technical & management education programs, awards and other incentives, DoD is readily poised to meet its improvement goals.

D. RESEARCH QUESTION 3 AND CONCLUSION

How does the Acquisition Workforce Improvement Strategy address key requirements of National Defense Authorization Act(s) (NDAA)?

The negative effects of over 20 years of acquisition workforce legislation was not specifically addressed in DoD's strategic plan. However, the Defense's Acquisition Workforce Improvement Strategy does seek to correct the imbalance caused by years of inefficient workforce policy. DoD's current improvement strategy addresses most, if not all, of recent legislative concerns and historic legislative implementation miscues, such as the wholesale reduction seen in the late 90s. The plan effectively attends to the concerns of many years of NDAA's by implementing the key initiatives they were required to address.

In conclusion, DoD strategic plan element design to address NDAA requirements must implemented in the same manner across the department in order to impact a department wide improvement. Uniformed deployment of DoD's strategic plan will also help OSD measure the effectiveness of policy across it agencies, services and functional areas. DoD's strategic plan lays the groundwork for implementation of its acquisition

workforce improvement policies. If followed, the strategic plan could also serve as a conduit for uniformed rapid policy implementations as the NDAAs direct workforce changes.

E. RESEARCH QUESTION 4 AND CONCLUSION

What workforce issues does DoD's Acquisition Workforce Improvement Strategies address?

Ashton B. Carter, the Under Secretary of Defense for AL&T stated, "We must grow and reshape the workforce to meet current needs with special emphasis and focus on improving workforce quality." In order to grow the workforce to meet current needs and improve workforce quality, DoD used a comprehensive set of analytical tools to address the following three broad issues: 1) recruiting and hiring, 2) training and development, and 3) recognition and retention. DoD's Acquisition Workforce Improvement Strategies also addressed the issue of who will be counted as part of acquisition workforce by identifying job categories DoD-wide. The current size is being tracked to meet hiring, recruiting and training goals outlined in the plan.

In conclusion, the acquisition workforce growth numbers presented in the plan along with hiring and retention goals seems to put DoD on track to grow the workforce to 147,000 by FY2015. However, the question of right sizing remains unknown. DoD's plan to grow the acquisition workforce to levels above the approximately 146,000 recorded in 1998 does not specifically address why or how this growth will solve the issue of proper workforce size relative to increased workload. In addition, the goal of improving workforce quality and improving acquisition processes is the desired outcome of the strategy. However, there is no data presented to support improvement theory. They have been many policies design to improve the acquisition workforce, such as DAWIA. However, they all seem to have fallen short of improving the overall acquisition management process. A lot of work is still yet to be done, which is evident considering recent Government Accountability Office (GAO) and Commission on Wartime Contracting (CWC) reports to Congress citing the need for improvement.

VII. RECOMMENDATIONS FOR FUTURE RESEARCH

With the help of the RAND Corporation, DoD has developed a set of assessment tools to baseline the current status of its acquisition workforce. These tools provide a comprehensive look at current workforce in order to project future needs. The problem is that none of the tools currently being used draws a correlation between workforce size and workload. More studies need to be conducted to determine how many acquisition personnel truly are needed to manage the over \$367 billion in contract actions recorded for FY2010. Having enough acquisition professionals to successfully execute this large amount of funding, in itself, does not equate to right sizing of the acquisition workforce.

Further research also needs to be conducted to see if targeted hiring, retention and in-sourcing are doing more than just improving workforce numbers. Considering the time it takes to train and season an acquisition professional, the measurement of successful acquisition outcomes, not just dollars, over the long run should be tracked in terms of savings, cost avoidance, reduction of waste and value of delivered product or service to end user. An end-to-end process of tracking would have to be deployed here to ensure that the intent of the requirement at conception is not squandered once received by end-users.

Finally, DoD should include a feedback process as part of its Acquisition Workforce Improvement Strategy to evaluate how well the plan is being implemented and the effectiveness of its policies. In order to truly impact the type of change that this DoD's plan intends, it will have to be flexible enough to adjust the changes in the acquisition environment. Acquisition has taught us the change is inevitable, a plan that is adverse to change is doomed to fail.

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VIII. SUMMARY

The need for workforce improvement is undeniable. Spending, workforce trends and changes in profile of acquisition activity has pushed the current acquisition workforce beyond its limits. It seems that years of acquisition reform have fallen short of intended goals to improve acquisition outcomes. For this reason, the need for better human capital planning has been brought to forefront of acquisition reform. DoD's acquisition workforce improvement goals are built around strategic human capital management, talent management, training, development, and an improved workforce management infrastructure. DoD's strategy has been addressed through key acquisition workforce legislation. Other acquisition workforce improvement issues such as the acquisition workforce size, capability, hiring, and growth trends are well documented in DoD's plan even though the right-sizing remains a question.

DoD represents the largest defense enterprise in the world. The Stockholm International Peace Research Institute reports that America's defense expenditures exceeded \$698 billion (in constant 2009 USD) in 2010. The People's Republic of China, America's largest creditor, was the next highest country in defense spending standing a little beyond \$119 billion (in constant 2009 USD) in 2010. Even in times of budget constraints, the United States is still likely to lead in defense spending considering the nearly six to one margins it has with the nearest country's spending. Only commercial, for profit, industries produce volume at the DoD level of spending (in term of revenues). Walmart tops the 2010 Fortune 500 list with over \$408 billion in revenues. In term of workforce, Walmart's low prices and low wages model is unlikely to be useful for comparison to DoD. With this being the case, workforce improvement could be a challenge when there is not a suitable entity in the marketplace to draw a comparison. If DoD is to truly improve its acquisition processes, it has to be an innovative leader in the world of acquisitions.

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